Results from the 2006 National Survey on Drug Use and Health: National Findings

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Office of Applied Studies

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Highlights

This report presents the first information from the 2006 National Survey on Drug Use and Health (NSDUH), an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The survey is the primary source of information on the use of illicit drugs, alcohol, and tobacco in the civilian, noninstitutionalized population of the United States aged 12 years old or older. The survey interviews approximately 67,500 persons each year. Unless otherwise noted, all comparisons in this report described using terms such as "increased," "decreased," or "more than" are statistically significant at the .05 level.

Illicit Drug Use

- In 2006, an estimated 20.4 million Americans aged 12 or older were current (past month) illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 8.3 percent of the population aged 12 years old or older. Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

- The rate of current illicit drug use among persons aged 12 or older in 2006 (8.3 percent) was similar to the rate in 2005 (8.1 percent).

- Marijuana was the most commonly used illicit drug (14.8 million past month users). Among persons aged 12 or older, the rate of past month marijuana use was the same in 2006 (6.0 percent) as in 2005.

- In 2006, there were 2.4 million current cocaine users aged 12 or older, which was the same as in 2005 but greater than in 2002 when the number was 2.0 million. However, the rate of current cocaine use remained stable between 2002 and 2006.

- Hallucinogens were used in the past month by 1.0 million persons (0.4 percent) aged 12 or older in 2006, including 528,000 (0.2 percent) who had used Ecstasy. These estimates are similar to the corresponding estimates for 2005.

- There were 7.0 million (2.8 percent) persons aged 12 or older who used prescription-type psychotherapeutic drugs nonmedically in the past month. Of these, 5.2 million used pain relievers, an increase from 4.7 million in 2005.

- In 2006, there were an estimated 731,000 current users of methamphetamine aged 12 or older (0.3 percent of the population). These estimates do not differ significantly from estimates for 2002, 2003, 2004, and 2005 and are all based on new survey items added to NSDUH in 2006 to improve the reporting of methamphetamine use. These improved estimates should not be compared with estimates of methamphetamine use shown in prior NSDUH reports.

- Among youths aged 12 to 17, current illicit drug use rates remained stable from 2005 to 2006. However, youth rates declined significantly between 2002 and 2006 for illicit drugs in general (from 11.6 to 9.8 percent) and for several specific drugs, including marijuana, hallucinogens, LSD, Ecstasy, prescription-type drugs used nonmedically, pain relievers, tranquilizers, and the use of illicit drugs other than marijuana.

- The rate of current marijuana use among youths aged 12 to 17 declined from 8.2 percent in 2002 to 6.7 percent in 2006. Among male youths, the rate declined from 9.1 to 6.8 percent, but among female youths the rates in 2002 (7.2 percent) and 2006 (6.4 percent) were not significantly different.

- There were no significant changes in past month use of any drugs among young adults aged 18 to 25 between 2005 and 2006. The rate of past year use increased for Ecstasy (from 3.1 to 3.8 percent) and decreased for inhalants (2.1 to 1.8 percent).

- From 2002 to 2006, the rate of current use of marijuana among young adults aged 18 to 25 declined from 17.3 to 16.3 percent. Past month nonmedical use of prescription-type drugs among young adults increased from 5.4 percent in 2002 to 6.4 percent in 2006. This was primarily due to an increase in the rate of pain reliever use, which was 4.1 percent in 2002 and 4.9 percent in 2006. However, nonmedical use of tranquilizers also increased over the 5-year period (from 1.6 to 2.0 percent).

- Among persons aged 12 or older who used pain relievers nonmedically in the past 12 months, 55.7 percent reported that the source of the drug the most recent time they used was from a friend or relative for free. Another 19.1 percent reported they got the drug from just one doctor. Only 3.9 percent got the pain relievers from a drug dealer or other stranger, and only 0.1 percent reported buying the drug on the Internet. Among those who reported getting the pain reliever from a friend or relative for free, 80.7 percent reported in a follow-up question that the friend or relative had obtained the drugs from just one doctor.

- Among unemployed adults aged 18 or older in 2006, 18.5 percent were current illicit drug users, which was higher than the 8.8 percent of those employed full time and 9.4 percent of those employed part time. However, most drug users were employed. Of the 17.9 million current illicit drug users aged 18 or older in 2006, 13.4 million (74.9 percent) were employed either full or part time.

- In 2006, there were 10.2 million persons aged 12 or older who reported driving under the influence of illicit drugs during the past year. This corresponds to 4.2 percent of the population aged 12 or older, similar to the rate in 2005 (4.3 percent), but lower than the rate in 2002 (4.7 percent). In 2006, the rate was highest among young adults aged 18 to 25 (13.0 percent).

Alcohol Use

- Slightly more than half of Americans aged 12 or older reported being current drinkers of alcohol in the 2006 survey (50.9 percent). This translates to an estimated 125 million people, which is similar to the 2005 estimate of 126 million people (51.8 percent).

- More than one fifth (23.0 percent) of persons aged 12 or older participated in binge drinking (having five or more drinks on the same occasion on at least 1 day in the 30 days prior to the survey) in 2006. This translates to about 57 million people, similar to the estimate in 2005.

- In 2006, heavy drinking was reported by 6.9 percent of the population aged 12 or older, or 17 million people. This rate is similar to the rate of heavy drinking in 2005 (6.6 percent). Heavy drinking is defined as binge drinking on at least 5 days in the past 30 days.

- In 2006, among young adults aged 18 to 25, the rate of binge drinking was 42.2 percent, and the rate of heavy drinking was 15.6 percent. These rates are similar to the rates in 2005.

- The rate of current alcohol use among youths aged 12 to 17 was 16.6 percent in 2006. Youth binge and heavy drinking rates were 10.3 and 2.4 percent, respectively. These rates are essentially the same as the 2005 rates.

- Underage (persons aged 12 to 20) past month and binge drinking rates have remained essentially unchanged since 2002. In 2006, about 10.8 million persons aged 12 to 20 (28.3 percent of this age group) reported drinking alcohol in the past month. Approximately 7.2 million (19.0 percent) were binge drinkers, and 2.4 million (6.2 percent) were heavy drinkers.

- Among persons aged 12 to 20, past month alcohol use rates were 18.6 percent among blacks, 19.7 percent among Asians, 25.3 percent among Hispanics, 27.5 percent among those reporting two or more races, 31.3 percent among American Indians or Alaska Natives, and 32.3 percent among whites. The 2006 rate for American Indians or Alaska Natives is higher than the 2005 rate of 21.7 percent.

- Among pregnant women aged 15 to 44, binge drinking in the first trimester dropped from 10.6 percent in 2003-2004 combined data to 4.6 percent in 2005-2006 combined data.

- In 2006, an estimated 12.4 percent of persons aged 12 or older drove under the influence of alcohol at least once in the past year. This percentage has decreased since 2002, when it was 14.2 percent. The 2006 estimate corresponds to 30.5 million persons.

Tobacco Use

- In 2006, an estimated 72.9 million Americans aged 12 or older were current (past month) users of a tobacco product. This represents 29.6 percent of the population in that age range. In addition, 61.6 million persons (25.0 percent of the population) were current cigarette smokers; 13.7 million (5.6 percent) smoked cigars; 8.2 million (3.3 percent) used smokeless tobacco; and 2.3 million (0.9 percent) smoked tobacco in pipes.

- The rates of current use of cigarettes, smokeless tobacco, cigars, and pipe tobacco were unchanged between 2005 and 2006 among persons aged 12 or older. However, between 2002 and 2006, past month cigarette use decreased from 26.0 to 25.0 percent. Rates of past month use of cigars, smokeless tobacco, and pipe tobacco were similar in 2002 and 2006.

- The rate of past month cigarette use among 12 to 17 year olds declined from 13.0 percent in 2002 to 10.4 percent in 2006. However, past month smokeless tobacco use was higher in 2006 (2.4 percent) than in 2002 (2.0 percent).

- Among pregnant women aged 15 to 44, combined data for 2005 and 2006 indicated that the rate of past month cigarette use was 16.5 percent. The rate was higher among women in that age group who were not pregnant (29.5 percent).

Initiation of Substance Use (Incidence, or First-Time Use)

- The illicit drug use categories with the largest number of recent initiates among persons aged 12 or older were nonmedical use of pain relievers (2.2 million) and marijuana use (2.1 million). These estimates are not significantly different from the numbers in 2005.

- In 2006, there were 783,000 persons aged 12 or older who had used inhalants for the first time within the past 12 months; 77.2 percent were under age 18 when they first used. There was no significant change in the number of inhalant initiates from 2005 to 2006.

- The number of recent new users of methamphetamine taken nonmedically among persons aged 12 or older was 259,000 in 2006. This estimate was not significantly different from the estimates from 2002 to 2005.

- Ecstasy initiation, which had declined from 1.2 million in 2002 to about 600,000 per year during 2004 and 2005, increased to 860,000 in 2006.

- Most (89.2 percent) of the 4.4 million recent alcohol initiates were younger than 21 at the time of initiation.

- The number of persons aged 12 or older who smoked cigarettes for the first time within the past 12 months was 2.4 million in 2006, which was significantly greater than the estimate for 2002 (1.9 million). Most new smokers in 2006 were under age 18 when they first smoked cigarettes (61.2 percent).

Youth Prevention-Related Measures

- Perceived risk is measured by NSDUH as the percentage reporting that there is great risk in the substance use behavior. Among youths aged 12 to 17, there were no changes in the perceived risk of marijuana, cocaine, or heroin between 2005 and 2006. However, between 2002 and 2006, there were increases in the perceived risk of smoking marijuana once a month (from 32.4 to 34.7 percent) and smoking marijuana once or twice a week (from 51.5 to 54.2 percent). On the other hand, the percentage of youths who perceived that trying heroin once or twice is a great risk declined from 58.5 percent in 2002 to 57.2 percent in 2006, and those who perceived that using cocaine once a month is a great risk declined from 50.5 to 49.0 percent. There was also a decrease in the perceived risk of using LSD once or twice a week, from 76.1 percent in 2005 to 74.7 percent in 2006.

- The proportion of youths aged 12 to 17 who reported perceiving great risk from smoking one or more packs of cigarettes per day increased from 63.1 percent in 2002 to 68.7 percent in 2006.

- About half (50.1 percent) of youths aged 12 to 17 reported in 2006 that it would be "fairly easy" or "very easy" for them to obtain marijuana if they wanted some. Around one quarter reported it would be easy to get cocaine (25.9 percent). About one in seven (14.4 percent) indicated that heroin would be "fairly" or "very" easily available, and 14.0 percent reported easy availability for LSD.

- Among youths, the perceived availability decreased between 2002 and 2006 for marijuana (from 55.0 to 50.1 percent), heroin (from 15.8 to 14.4 percent), and LSD (from 19.4 to 14.0 percent). However, the percentage reporting that it would be easy to obtain cocaine showed no decline over this period (25.0 percent in 2002 and 25.9 percent in 2006).

- A majority of youths (90.4 percent) in 2006 reported that their parents would strongly disapprove of their trying marijuana or hashish once or twice. Current marijuana use was much less prevalent among youths who perceived strong parental disapproval for trying marijuana or hashish once or twice than for those who did not (4.6 vs. 26.5 percent).

- In 2006, 11.4 percent of youths reported that they had participated in substance use prevention programs outside of school within the past year. Approximately four fifths (79.4 percent) reported having seen or heard drug or alcohol prevention messages from sources outside of school, lower than in 2005 when the percentage was 81.1 percent. Most (59.8 percent) youths reported in 2006 that they had talked with a parent in the past year about the dangers of drug, tobacco, or alcohol use.

Substance Dependence, Abuse, and Treatment

- In 2006, an estimated 22.6 million persons (9.2 percent of the population aged 12 or older) were classified with substance dependence or abuse in the past year based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV). Of these, 3.2 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.8 million were dependent on or abused illicit drugs but not alcohol, and 15.6 million were dependent on or abused alcohol but not illicit drugs.

- Between 2002 and 2006, there was no change in the number of persons with substance dependence or abuse (22.0 million in 2002, 22.6 million in 2006).

- The specific illicit drugs that had the highest levels of past year dependence or abuse in 2006 were marijuana (4.2 million), followed by cocaine (1.7 million) and pain relievers (1.6 million).

- Adults aged 21 or older who had first used alcohol before age 21 were more likely than adults who had their first drink at age 21 or older to be classified with alcohol dependence or abuse (9.6 vs. 2.4 percent).

- There were 4.0 million persons aged 12 or older (1.6 percent of the population) who received some kind of treatment for a problem related to the use of alcohol or illicit drugs in 2006. More than half (2.2 million) received treatment at a self-help group. There were 1.6 million persons who received treatment at a rehabilitation facility as an outpatient, 1.1 million at a mental health center as an outpatient, 934,000 at a rehabilitation facility as an inpatient, 816,000 at a hospital as an inpatient, 610,000 at a private doctor's office, 420,000 at a prison or jail, and 397,000 at an emergency room. None of these estimates changed significantly between 2005 and 2006.

- More than half (2.5 million) of the 4.0 million persons who received treatment for a substance use problem in the past year received treatment for alcohol use during their most recent treatment. There were 1.2 million persons who received treatment for marijuana use during their most recent treatment. Estimates for other drugs were 928,000 persons for cocaine, 547,000 for pain relievers, 535,000 for stimulants, 466,000 for heroin, and 442,000 for hallucinogens. (Note that respondents could indicate that they received treatment for more than one substance during their most recent treatment.)

- In 2006, the number of persons aged 12 or older needing treatment for an illicit drug or alcohol use problem was 23.6 million (9.6 percent of the population aged 12 or older). Of these, 2.5 million (1.0 percent of persons aged 12 or older and 10.8 percent of those who needed treatment) received treatment at a specialty facility. Thus, there were 21.1 million persons (8.6 percent of the population aged 12 or older) who needed treatment for an illicit drug or alcohol use problem but did not receive treatment at a specialty substance abuse facility in the past year.

- Of the 21.1 million people in 2006 who were classified as needing substance use treatment but did not receive treatment at a specialty facility in the past year, 940,000 persons (4.5 percent) reported that they felt they needed treatment for their illicit drug or alcohol use problem. Of these 940,000 persons who felt they needed treatment, 314,000 (33.5 percent) reported that they made an effort to get treatment, and 625,000 (66.5 percent) reported making no effort to get treatment.

- The number of people who felt they needed treatment and made an effort to get it among those who needed but did not receive treatment was not statistically different in 2006 (314,000) from the number reported in 2005 (296,000).

Prevalence and Treatment of Mental Health Problems

- Serious psychological distress (SPD) is an overall indicator of past year nonspecific psychological distress that is constructed from the K6 scale administered to adults aged 18 or older in NSDUH.

- In 2006, there were an estimated 24.9 million adults aged 18 or older in the United States with SPD in the past year. This represents 11.3 percent of all adults in this country, a rate equal to the rate in 2005.

- Rates of SPD in 2006 were highest for adults aged 18 to 25 (17.7 percent) and lowest for adults aged 50 or older (6.9 percent).

- The prevalence of SPD among women aged 18 or older (13.7 percent) was higher than that among men in that age group (8.7 percent).

- SPD in the past year was associated with past year substance dependence or abuse in 2006. Among adults with SPD in 2006, 22.3 percent (5.6 million) were dependent on or abused illicit drugs or alcohol. The rate among adults without SPD was 7.7 percent (15.0 million).

- Among the 24.9 million adults with SPD in 2006, 10.9 million (44.0 percent) received treatment for a mental health problem in the past year. Among adults with SPD, 39.0 percent received a prescription medication, 27.2 percent received outpatient treatment, and 3.9 percent received inpatient treatment for a mental health problem in the past year.

- Among the 5.6 million adults with both SPD and substance dependence or abuse (i.e., a substance use disorder) in 2006, about half (50.8 percent) received mental health treatment or substance use treatment at a specialty facility; 8.4 percent received both treatment for mental health problems and specialty substance use treatment, 39.6 percent received only treatment for mental health problems, and 2.8 percent received only specialty substance use treatment.

- In 2006, there were 30.4 million adults (13.9 percent of persons aged 18 or older) who had at least one major depressive episode (MDE) in their lifetime, and 15.8 million adults (7.2 percent of persons aged 18 or older) had at least one MDE in the past year.

- Having MDE in the past year was associated with past year substance dependence or abuse. Among adults who had MDE in 2006, 24.3 percent were dependent on or abused alcohol or illicit drugs, while among adults without MDE only 8.1 percent were dependent on or abused alcohol or illicit drugs. Persons with MDE were more likely than those without MDE to be dependent on or abuse illicit drugs (9.4 vs. 2.1 percent) and alcohol (19.3 vs. 7.0 percent).

- Among adults aged 18 or older who had MDE in the past year, 69.1 percent received treatment (i.e., saw or talked to a medical doctor or other professional or used prescription medication) for depression in the same time period.

- Among adults aged 18 or older with MDE in the past year in 2006, women were more likely than men to receive treatment for depression in the past year (73.7 vs. 60.8 percent).

- In 2006, there were 3.2 million youths aged 12 to 17 years (12.8 percent of the population aged 12 to 17) who had at least one MDE in their lifetime and 2.0 million youths (7.9 percent) who had MDE during the past year. These rates are lower than the 2005 estimates of 13.7 percent lifetime and 8.8 percent past year MDE.

- The rate of MDE in the past year was higher for adolescent females (11.8 percent) than for adolescent males (4.2 percent).

- In 2006, one third (34.6 percent) of youths with MDE in the past year had used illicit drugs in the past year, while the rate of illicit drug use among youths who did not report MDE was 18.2 percent. Similarly, the rates of past month daily cigarette use and heavy alcohol use were higher for youths with MDE (5.2 and 4.5 percent, respectively) than for youths who did not report MDE (2.5 and 2.2 percent, respectively).

- In 2006, 38.9 percent of youths aged 12 to 17 with past year MDE received treatment for depression (saw or talked to a medical doctor or other professional or used prescription medication). Among youths with depression, 23.9 percent saw or talked to a medical doctor or other professional only, 2.1 percent used prescription medication only, and 12.7 percent received treatment from both sources for depression in the past year.

- In 2006, there were 5.4 million youths (21.3 percent) who received treatment or counseling for emotional or behavioral problems in the year prior to the interview. Adolescent females were more likely than adolescent males to report past year treatment for mental health problems (23.0 vs. 19.6 percent, respectively).

1. Introduction

This report presents the first information from the 2006 National Survey on Drug Use and Health (NSDUH), an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years old or older. Prior to 2002, the survey name was the National Household Survey on Drug Abuse (NHSDA). This initial report on the 2006 data presents national estimates of rates of use, numbers of users, and other measures related to illicit drugs, alcohol, and tobacco products. Measures related to mental health problems also are presented, including data on depression and on the co-occurrence of substance use and mental health problems. Estimates from NSDUH for States and areas within States will be presented in separate reports.

A major focus of this report is a comparison of substance use prevalence estimates between 2005 and 2006. Trends since 2002 also are discussed for some measures. Because of improvements to the survey in 2002, the 2002 data constitute a new baseline for tracking trends in substance use and other measures. Therefore, estimates from the 2002 through 2006 NSDUHs should not be compared with estimates from the 2001 and earlier surveys in the series to assess changes in substance use and mental health problems over time.

1.1. Summary of NSDUH

NSDUH is the primary source of statistical information on the use of illegal drugs by the U.S. population. Conducted by the Federal Government since 1971, the survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at the respondent's place of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services, and is planned and managed by SAMHSA's Office of Applied Studies (OAS). Data collection is conducted under contract with RTI International, Research Triangle Park, North Carolina.[1] This section briefly describes the survey methodology; a more complete description is provided in Appendix A.

NSDUH collects information from residents of households and noninstitutional group quarters (e.g., shelters, rooming houses, dormitories) and from civilians living on military bases. The survey excludes homeless persons who do not use shelters, military personnel on active duty, and residents of institutional group quarters, such as jails and hospitals. Appendix D describes surveys that cover populations outside the NSDUH target population.

Since 1999, the NSDUH interview has been carried out using computer-assisted interviewing (CAI). Most of the questions are administered with audio computer-assisted self-interviewing (ACASI). ACASI is designed to provide the respondent with a highly private and confidential means of responding to questions to increase the level of honest reporting of illicit drug use and other sensitive behaviors. Less sensitive items are administered by interviewers using computer-assisted personal interviewing (CAPI).

[1] RTI International is a trade name of Research Triangle Institute.

The 2006 NSDUH employed a State-based design with an independent, multistage area probability sample within each State and the District of Columbia. The eight States with the largest population (which together account for 48 percent of the total U.S. population aged 12 or older) were designated as large sample States (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas). For these States, the design provided a sample sufficient to support direct State estimates. For the remaining 42 States and the District of Columbia, smaller, but adequate, samples support State estimates using small area estimation (SAE) techniques. The design oversampled youths and young adults, so that each State's sample was approximately equally distributed among three age groups: 12 to 17 years, 18 to 25 years, and 26 years or older.

Nationally, 137,057 addresses were screened for the 2006 survey, and 67,802 completed interviews were obtained. The survey was conducted from January through December 2006. Weighted response rates for household screening and for interviewing were 90.6 and 74.2 percent, respectively. See Appendix B for more information on NSDUH response rates.

1.2. Trend Measurement

Although the design of the 2002 through 2006 NSDUHs is similar to the design of the 1999 through 2001 surveys, there are important methodological differences that affect the comparability of the 2002-2006 estimates with estimates from prior surveys. In addition to the name change, each NSDUH respondent completing the interview is now given an incentive payment of $30. These changes, implemented in 2002 and continued subsequently, resulted in an improvement in the response rate, but also affected respondents' reporting of items that are the basis of prevalence measures produced each year. Comparability also may be affected by improved data collection quality control procedures that were introduced beginning in 2001 and by the incorporation of new population data from the 2000 decennial census into NSDUH sample weighting procedures. **Analyses of the effects of these factors on NSDUH estimates have shown that 2002 and later data should not be compared with 2001 and earlier data from the survey series to assess changes over time. Appendix C of the 2004 NSDUH report on national findings discusses this issue in more detail (see OAS, 2005b).**

1.3. Change in Methamphetamine Use Estimates

This report includes new estimates of methamphetamine use based on data obtained from survey items added to NSDUH in 2005 and 2006. The new survey items were added to better account for how methamphetamine is supplied and obtained. Unlike other stimulants that are available by prescription, most methamphetamine in the United States is supplied through illicit manufacturing and trafficking rather than through the conventional prescription drug distribution process. Therefore, one concern is that methamphetamine use may have been underestimated in NSDUH due to its inclusion within a set of questions about prescription-type drugs. Specifically, survey respondents who used methamphetamine might not have reported its use when questions about it were asked in the context of other questions about prescription pharmaceuticals.

Section B.4.6 in Appendix B provides a discussion of the new items and the process used to generate the prevalence estimates based on them. The new estimates in this report, discussed in Chapter 2, are generally 15 to 25 percent higher than estimates of methamphetamine use published in prior reports. To assess trends in this report, a statistical adjustment was applied to

2002-2005 methamphetamine data, resulting in estimates comparable with the 2006 estimates. Because of these changes, the methamphetamine use estimates presented here are different from those shown in prior NSDUH reports and should not be compared or combined with them. In addition, because of the differences in measurement, the methamphetamine use estimates are not presented with the estimates for other drugs in the detailed tables posted to the SAMHSA website and in the tables of Appendix G in this report, but are included in a separate set of tables.

It is important to note that only the methamphetamine use estimates have been changed. Estimates for the more general drug use categories that include methamphetamine (i.e., stimulants used nonmedically, prescription psychotherapeutic drugs used nonmedically, use of illicit drugs other than marijuana, and illicit drug use) have not been modified and are comparable with those presented in previous NSDUH reports. However, estimates for these grouped categories of drugs should not be compared or combined with the new methamphetamine use estimates. Similarly, initiation estimates discussed in Chapter 5 do not incorporate the new methamphetamine items. It is expected that the 2007 NSDUH data will fully integrate the new survey items on methamphetamine with existing incidence and prevalence measures for other drugs.

1.4. Format of Report and Explanation of Tables

This report has separate chapters that discuss the national findings on seven topics: use of illicit drugs; use of alcohol; use of tobacco products; initiation of substance use; prevention-related issues; substance dependence, abuse, and treatment; and mental health problems and treatment. A final chapter summarizes the results and discusses key findings in relation to other research and survey results. Technical appendices describe the survey (Appendix A), provide technical details on the statistical methods and measurement (Appendix B), offer key NSDUH definitions (Appendix C), discuss other sources of related data (Appendix D), list the references cited in the report (as well as other relevant references) (Appendix E), and present selected tabulations of estimates (Appendices F and G).

Tables, text, and figures present prevalence measures for the population in terms of both the number of persons and the percentage of the population. Substance use tables show prevalence estimates by lifetime (i.e., ever used), past year, and past month use. Analyses focus primarily on past month use, which also is referred to as "current use." Tables and figures in which estimates are presented by year have footnotes indicating whether the 2006 estimates are significantly different from 2005 or earlier estimates.

Statistical tests have been conducted for all statements appearing in the text of the report that compare estimates between years or subgroups of the population. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level. Statistically significant differences are described using terms such as "higher," "lower," "increased," and "decreased." Statements that use terms such as "similar," "no difference," "same," or "remained steady" to describe the relationship between estimates denote that a difference is not statistically significant. In addition, a set of estimates for survey years or population subgroups may be presented without a statement of comparison, in which case a statistically significant difference between these estimates is not implied and testing was not conducted.

All estimates presented in the report have met the criteria for statistical reliability (see Section B.2.2 of Appendix B). Estimates that do not meet these criteria are suppressed and do not appear in tables, figures, or text. Also, subgroups with suppressed estimates are not included in statistical tests of comparisons. For example, a statement that "whites had the highest prevalence" means that the rate among whites was higher than the rate among all nonsuppressed racial/ethnic subgroups, but not necessarily higher than the rate among a subgroup for which the estimate was suppressed.

Data are presented for racial/ethnic groups based on current 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 basic groups listed in the survey question (white, black or African American, American Indian or Alaska Native, Native Hawaiian, Other Pacific Islander, Asian, Other). Respondents choosing both Native Hawaiian and Other Pacific Islander but no other categories mentioned above are classified in the combined "Native Hawaiian or Other Pacific Islander" category instead of the "two or more race" category. 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.

Data also are presented for four U.S. geographic regions and nine geographic divisions within these regions. These regions and divisions, defined by the U.S. Census Bureau, consist of the following groups of States:

> ***Northeast Region*** - *New England Division:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; *Middle Atlantic Division:* New Jersey, New York, Pennsylvania.
>
> ***Midwest Region*** - *East North Central Division:* Illinois, Indiana, Michigan, Ohio, Wisconsin; *West North Central Division:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.
>
> ***South Region*** - *South Atlantic Division:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; *East South Central Division:* Alabama, Kentucky, Mississippi, Tennessee; *West South Central Division:* Arkansas, Louisiana, Oklahoma, Texas.
>
> ***West Region*** - *Mountain Division:* Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming; *Pacific Division:* Alaska, California, Hawaii, Oregon, Washington.

Geographic comparisons also are made based on county type, a variable that 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 2003 rural-urban continuum codes. These 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. Small metropolitan areas are further classified based on whether they have a population of 250,000 or more. Nonmetropolitan areas are areas outside MSAs. Counties in nonmetropolitan areas are further classified based on the number of people in the county who live in an urbanized area, as defined by the Census Bureau at the subcounty level. "Urbanized" counties have a population of 20,000 or more in urbanized areas, "less urbanized" counties have at least 2,500 but fewer than 20,000 population in urbanized areas, and "completely rural" counties have fewer than 2,500 population in urbanized areas.

1.5. Other NSDUH Reports and Data

Other reports focusing on specific topics of interest will be produced using the 2006 NSDUH data and made available on SAMHSA's website. A report on State-level estimates for 2005-2006 will be available in early 2008.

A comprehensive set of tables, referred to as "detailed tables," is available through the Internet at http://www.oas.samhsa.gov. The tables are organized into sections based primarily on the topic, and most tables are provided in several parts, showing population estimates (e.g., numbers of drug users), rates (e.g., percentages of population using drugs), and standard errors of all nonsuppressed estimates. A small subset of these detailed tables has been selected for inclusion in Appendices F and G of this report. The appendix tables can be mapped back to the detailed tables by using the table number in parentheses in the upper left corner of each table (e.g., Table G.1 in Appendix G is Table 8.1A in the detailed tables). Additional methodological information on NSDUH, including the questionnaire, is available electronically at the same Web address.

Brief descriptive reports and in-depth analytic reports focusing on specific issues or population groups also are produced by OAS. A complete listing of previously published reports from NSDUH and other data sources is available from OAS. Most of these reports also are available through the Internet (http://www.oas.samhsa.gov). In addition, OAS makes public use data files available to researchers through the Substance Abuse and Mental Health Data Archive (SAMHDA, 2007) at http://www.icpsr.umich.edu/SAMHDA/index.html. Currently, files are available from the 1979 to 2005 surveys. The 2006 NSDUH public use file will be available by the end of 2007.

2. Illicit Drug Use

The National Survey on Drug Use and Health (NSDUH) obtains information on nine different categories of illicit drug use: use of marijuana, cocaine, heroin, hallucinogens, and inhalants; and the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives. In these categories, hashish is included with marijuana, and crack is considered a form of cocaine. Several drugs are grouped under the hallucinogens category, including LSD, PCP, peyote, mescaline, mushrooms, and "Ecstasy" (MDMA). Inhalants include a variety of substances, such as nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint, other aerosol sprays, and glue. The four categories of prescription-type drugs (pain relievers, tranquilizers, stimulants, and sedatives) cover numerous pharmaceutical drugs available by prescription and drugs within these groupings that may be manufactured illegally, such as methamphetamine, which is included under stimulants. Respondents are asked to report only "nonmedical" use of these drugs, defined as use without a prescription of the individual's own or simply for the experience or feeling the drugs caused. Use of over-the-counter drugs and legitimate use of prescription drugs are not included. NSDUH reports combine the four prescription-type drug groups into a category referred to as "psychotherapeutics."

Estimates of "illicit drug use" reported from NSDUH reflect the use of any of the nine drug categories listed above. Use of alcohol and tobacco products, while illegal for youths, is not included in these estimates, but is discussed in Chapters 3 and 4.

This chapter includes new estimates of methamphetamine use based on data obtained from survey items added to NSDUH in 2005 and 2006. The new survey items were added to better account for how methamphetamine is supplied and obtained. Unlike other stimulants that are available by prescription, most methamphetamine is supplied through illicit manufacturing and trafficking rather than through the conventional prescription drug distribution process. Therefore, one concern is that methamphetamine use may have been underestimated in NSDUH due to its inclusion within a set of questions about prescription-type drugs. Specifically, respondents who used methamphetamine might not have reported its use when questions about it were asked in the context of other questions about prescription pharmaceuticals. Section B.4.6 in Appendix B provides a discussion of the new items and the process used to generate the adjusted estimates based on them.

The new methamphetamine use estimates in this report are generally 15 to 25 percent higher than estimates of methamphetamine use published in prior reports. Estimates for stimulant use and use of psychotherapeutic drugs do not incorporate data from the new items. To assess trends, a statistical adjustment was applied to the 2002-2005 methamphetamine use data, resulting in estimates comparable with the 2006 estimates. Because of these changes, the methamphetamine use estimates presented here are different from those in prior NSDUH reports and should not be compared or combined with them. In addition, because of the differences in measurement, the methamphetamine use estimates are not presented with the estimates for other drugs in the 2006 detailed tables posted on the Substance Abuse and Mental Health Services Administration (SAMHSA) website or in Appendix G's tables in this report, but they are included in Tables B.6 and B.7 in Section B.4.6 of Appendix B, which also presents further methodological information.

It is important to note that only the methamphetamine use estimates have been changed. Estimates for the more general drug use categories that include methamphetamine use (i.e., stimulants used nonmedically, prescription psychotherapeutic drugs used nonmedically, use of illicit drugs other than marijuana, and illicit drug use) have not been modified and are comparable with those presented in previous NSDUH reports. However, estimates for use of these grouped categories of drugs should not be compared or combined with the new methamphetamine use estimates. It is expected that the 2007 NSDUH data will fully integrate the new survey items on methamphetamine use with existing incidence and prevalence measures for other drugs.

- In 2006, an estimated 20.4 million Americans aged 12 or older were current (past month) illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 8.3 percent of the population aged 12 years old or older.

- The overall rate of current illicit drug use among persons aged 12 or older in 2006 (8.3 percent) was similar to the rate in 2005 (8.1 percent) and has remained stable since 2002 (8.3 percent).

- Marijuana was the most commonly used illicit drug (14.8 million past month users) (Figure 2.1). In 2006, marijuana was used by 72.8 percent of current illicit drug users and was the only drug used by 52.8 percent of them. Illicit drugs other than marijuana were used by 9.6 million persons or 47.2 percent of illicit drug users aged 12 or older. Current use of other drugs but not marijuana was reported by 27.2 percent of illicit drug users, and 20.0 percent used both marijuana and other drugs.

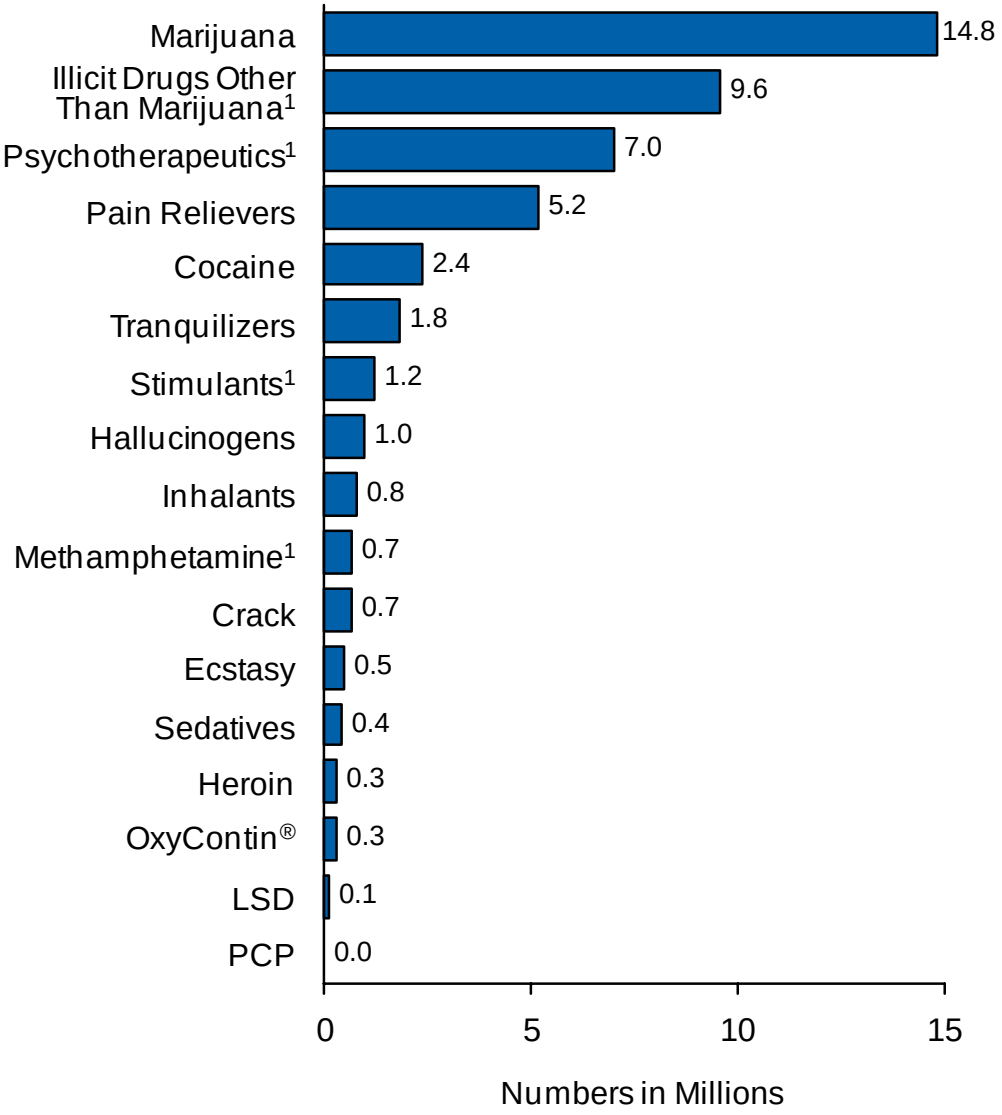
- Among persons aged 12 or older, the overall rate of past month marijuana use in 2006 (6.0 percent) was the same as in 2005 and was similar to the rates in earlier years going back to 2002 (Figure 2.2).

- An estimated 5.2 million persons were current nonmedical users of prescription pain relievers in 2006, which is more than the estimated 4.7 million in 2005. However, the change in the rate of current nonmedical use of pain relievers between 2005 and 2006 (1.9 and 2.1 percent, respectively) was not statistically significant.

- In 2006, there were 2.4 million current cocaine users, the same as in 2005 (2.4 million) but more than in 2002 (2.0 million). However, the rate of current cocaine use remained stable between 2002 and 2006 (Figure 2.2). The number of past month crack users was similar in 2005 and 2006 with 682,000 and 702,000, respectively.

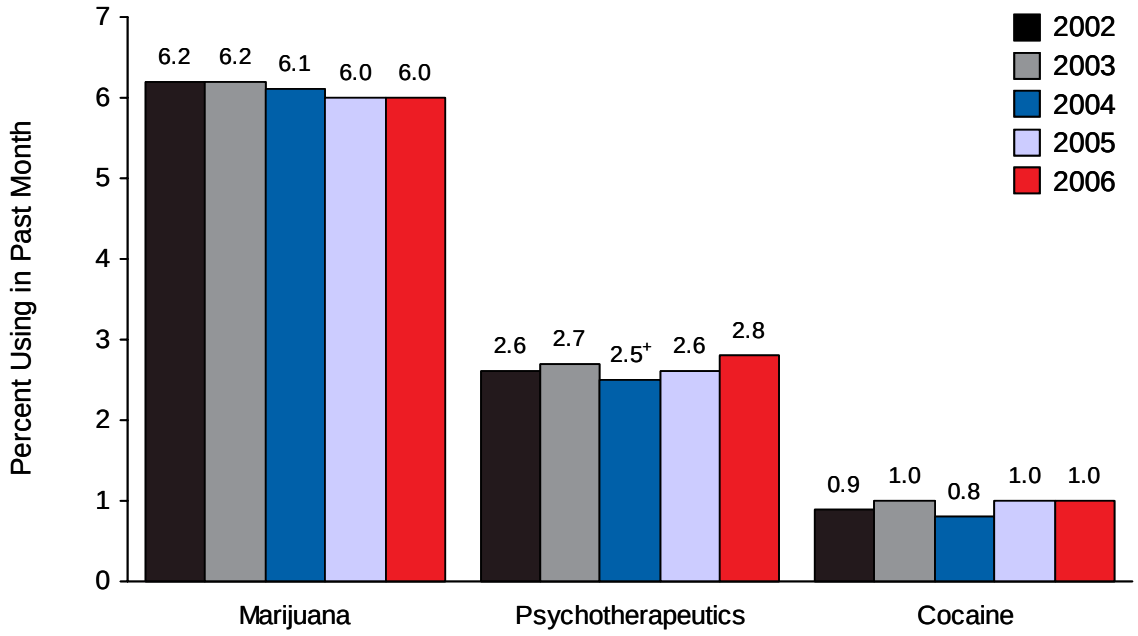
- The number of current heroin users increased from 136,000 in 2005 to 338,000 in 2006, and the corresponding prevalence rate increased from 0.06 to 0.14 percent.

Figure 2.1 Past Month Use of Specific Illicit Drugs among Persons Aged 12 or Older: 2006



[1] Estimates for methamphetamine use incorporate data from new questions added in 2005 and 2006 that are not included in estimates for use of illicit drugs other than marijuana, use of psychotherapeutics, or stimulant use. See the introductory paragraphs of this chapter for further information.

Figure 2.2 Past Month Use of Selected Illicit Drugs among Persons Aged 12 or Older: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Hallucinogens were used in the past month by 1.0 million persons (0.4 percent) in 2006, including 528,000 (0.2 percent) who had used Ecstasy. These estimates are similar to the corresponding estimates for 2005. However, lifetime use of Ecstasy increased from 10.2 million persons in 2002 to 12.3 million in 2006 (4.3 to 5.0 percent of persons aged 12 or older), but past year use of Ecstasy decreased from 3.2 million (1.3 percent) to 2.1 million (0.9 percent) over the same period.

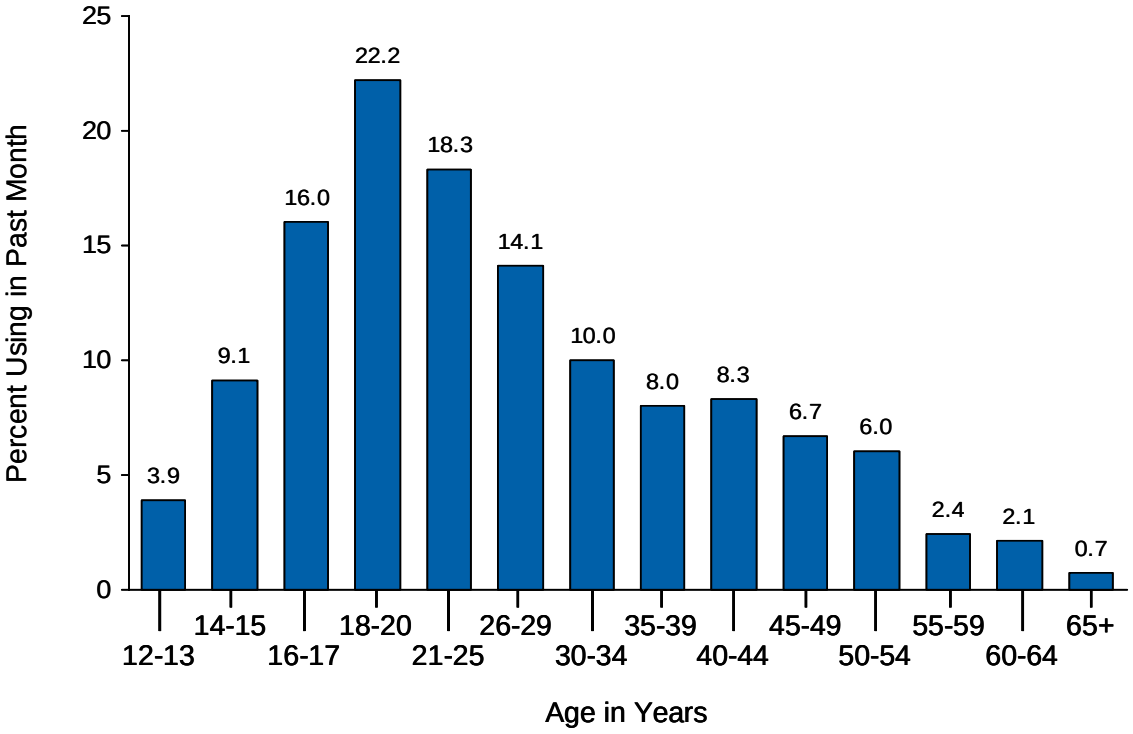
- There were 9.6 million people aged 12 or older (3.9 percent) who were current users of illicit drugs other than marijuana in 2006. Most (7.0 million persons, or 2.8 percent of the population) used psychotherapeutic drugs nonmedically. In addition to the estimated 5.2 million nonmedical users of pain relievers in 2006, 1.8 million used tranquilizers, 1.2 million used stimulants, and 385,000 used sedatives. The numbers of nonmedical users of tranquilizers, stimulants, and sedatives were similar to the corresponding numbers in 2005, and the percentage rates also remained stable.

- In 2006, there were an estimated 731,000 current users of methamphetamine aged 12 or older. This constitutes 0.3 percent of the population. These estimates do not differ significantly from those for 2002, 2003, 2004, and 2005. However, the rate of lifetime methamphetamine use in 2006 (5.8 percent) was higher than that in 2005 (5.2 percent) but lower than that in 2002 (6.5 percent).

Age

- Rates of past month illicit drug use varied with age. Through the adolescent years from 12 to 17, the rates of current illicit drug use increased from 3.9 percent at ages 12 or 13 to 9.1 percent at ages 14 or 15 to 16.0 percent at ages 16 or 17 (Figure 2.3). The highest rate was among persons aged 18 to 20 (22.2 percent). The rate was 18.3 percent among those aged 21 to 25 and declined with increasing age among adults aged 26 or older.

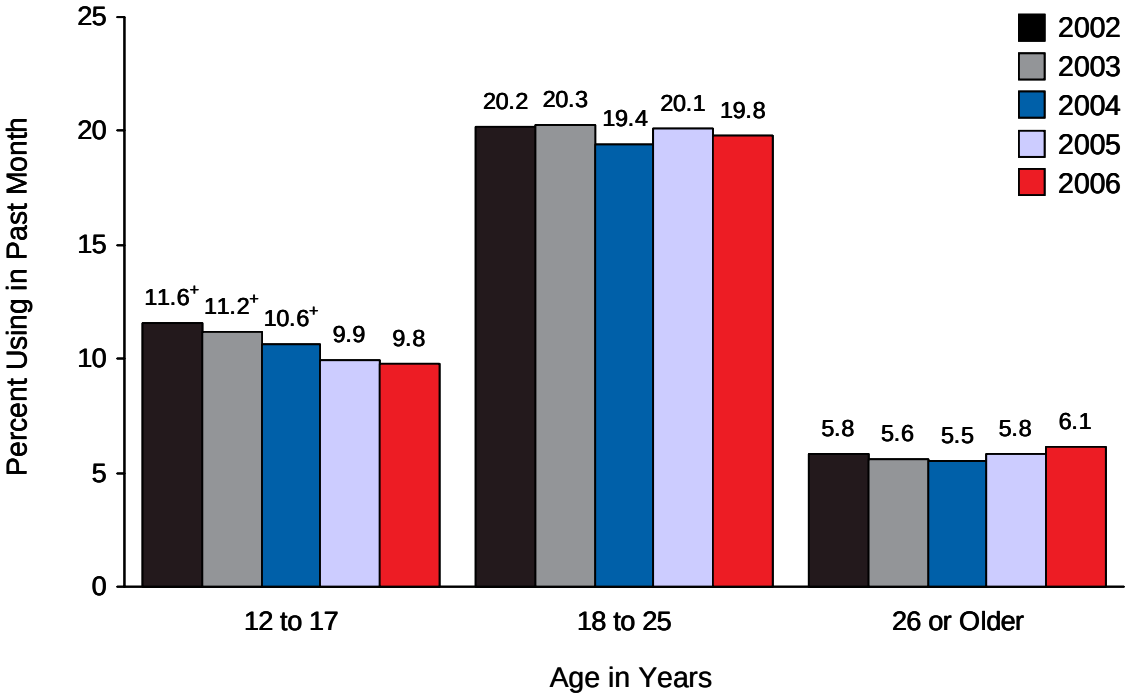
Figure 2.3 Past Month Illicit Drug Use among Persons Aged 12 or Older, by Age: 2006



- Although adults aged 26 or older were less likely to be current drug users than youths aged 12 to 17 or young adults aged 18 to 25 (6.1 vs. 9.8 and 19.8 percent, respectively), there were more drug users aged 26 or older (11.4 million) than in the 12-to-17-year age group (2.5 million) and 18-to-25-year age group (6.5 million) combined.

- Current illicit drug use remained stable from 2005 to 2006 among youths aged 12 to 17, young adults aged 18 to 25, and adults aged 26 or older (Figure 2.4). From 2002 to 2006, however, the rate of illicit drug use among 12 to 17 year olds decreased from 11.6 to 9.8 percent.

Figure 2.4 Past Month Illicit Drug Use among Persons Aged 12 or Older, by Age: 2002-2006



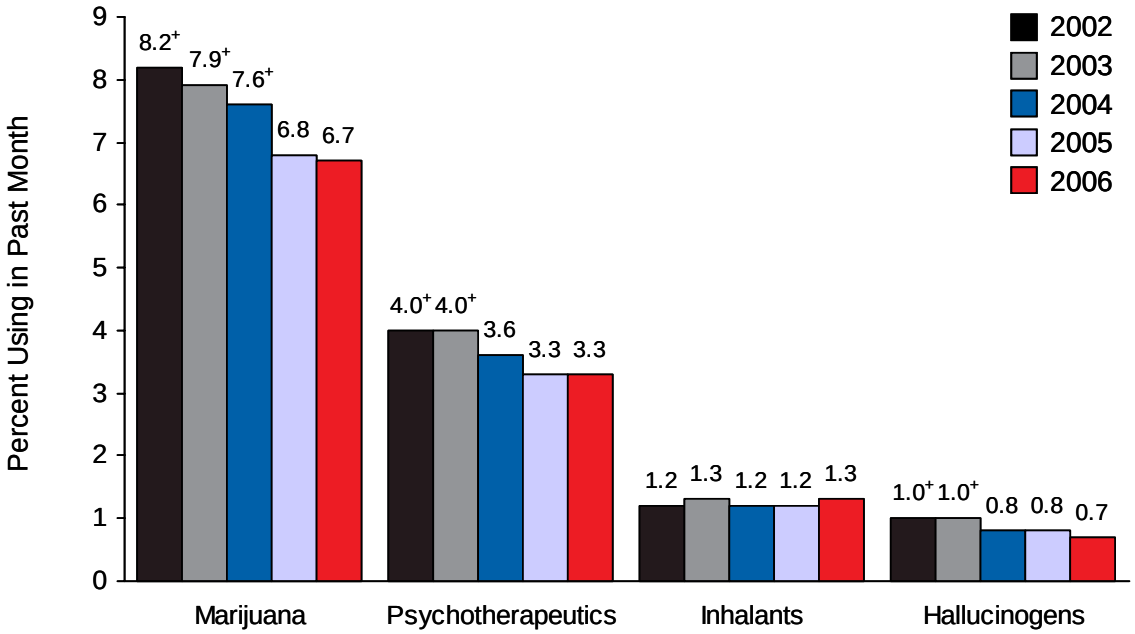
+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Youths Aged 12 to 17

- In 2006, 9.8 percent of youths aged 12 to 17 were current illicit drug users: 6.7 percent used marijuana, 3.3 percent engaged in nonmedical use of prescription-type drugs, 1.3 percent used inhalants, 0.7 percent used hallucinogens, and 0.4 percent used cocaine (Figure 2.5).

- Among youths aged 12 to 17, the types of drugs used in the past month varied by age group. Among 12 or 13 year olds, 2.0 percent used prescription-type drugs nonmedically, 1.2 percent used inhalants, and 0.9 percent used marijuana. Among 14 or 15 year olds, marijuana was the dominant drug used (5.8 percent), followed by prescription-type drugs used nonmedically (3.1 percent), and then by inhalants (1.7 percent). Marijuana also was the most commonly used drug among 16 or 17 year olds (13.0 percent), followed by prescription-type drugs used nonmedically (4.7 percent), and then by hallucinogens (1.3 percent), inhalants (1.1 percent), and cocaine (0.8 percent).

Figure 2.5 Past Month Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Current illicit drug use rates remained stable from 2005 to 2006 among youths aged 12 to 17. However, rates of current use declined significantly from 2002 to 2006 for any illicit drug and several specific drugs (including marijuana, hallucinogens, LSD, Ecstasy, prescription-type drugs used nonmedically, pain relievers, tranquilizers, and the use of illicit drugs other than marijuana) (Figures 2.4 and 2.5). For any illicit drug use, the rates were 11.6 percent in 2002, 11.2 percent in 2003, 10.6 percent in 2004, 9.9 percent in 2005, and 9.8 percent in 2006.

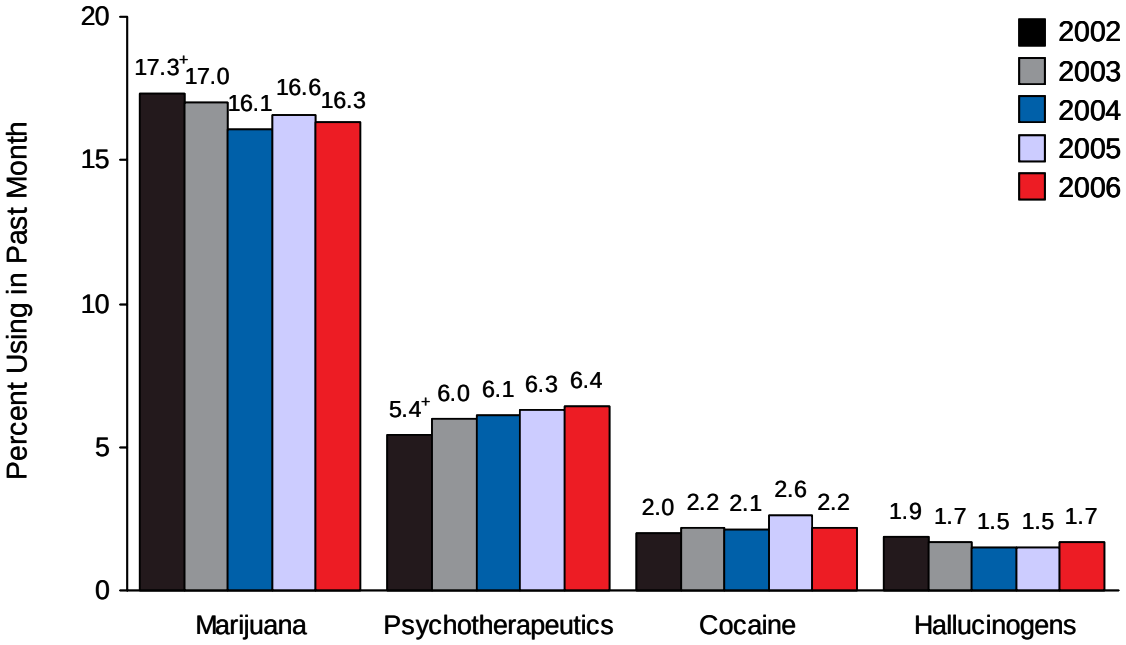
- The rate of current marijuana use among youths aged 12 to 17 declined from 8.2 percent in 2002 to 6.7 percent in 2006. Significant declines were also evident between 2002 and 2006 for past year use (from 15.8 to 13.2 percent) and lifetime use (from 20.6 to 17.3 percent).

- Prevalence rates among 12 to 17 year olds also were lower in 2006 than in 2002 for current use of illicit drugs other than marijuana; nonmedical use of psychotherapeutics, pain relievers, and tranquilizers; and use of hallucinogens, LSD, and Ecstasy. The rate for illicit drugs other than marijuana declined from 5.7 percent in 2002 to 4.9 percent in 2006; nonmedical use of psychotherapeutic drugs decreased from 4.0 to 3.3 percent; nonmedical use of pain relievers declined from 3.2 to 2.7 percent; and nonmedical use of tranquilizers decreased from 0.8 to 0.5 percent. Adolescents' current use of hallucinogens declined from 1.0 percent in 2002 to 0.7 percent in 2006, reflecting decreases in current use of Ecstasy (from 0.5 to 0.3 percent) and LSD (from 0.2 to 0.1 percent).

Young Adults Aged 18 to 25

- Rates of current use of illicit drugs were higher for young adults aged 18 to 25 (19.8 percent) than for youths aged 12 to 17 and adults aged 26 or older, with 16.3 percent using marijuana, 6.4 percent using prescription-type drugs nonmedically, 2.2 percent using cocaine, and 1.7 percent using hallucinogens (Figure 2.6).

Figure 2.6 Past Month Use of Selected Illicit Drugs among Young Adults Aged 18 to 25: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- There were no significant changes in past month use of any drugs among young adults aged 18 to 25 between 2005 and 2006. The rate of past year use increased for Ecstasy (from 3.1 to 3.8 percent) and decreased for inhalants (2.1 to 1.8 percent).

- From 2002 to 2006, the rate of current use of marijuana among young adults aged 18 to 25 declined from 17.3 to 16.3 percent. Past month nonmedical use of prescription-type drugs among young adults increased from 5.4 percent in 2002 to 6.4 percent in 2006. This was primarily due to an increase in the rate of pain reliever use, which was 4.1 percent in 2002 and 4.9 percent in 2006. However, nonmedical use of tranquilizers also increased over the 5-year period (from 1.6 to 2.0 percent).

- Among young adults aged 18 to 25, lifetime use of hallucinogens decreased from 24.2 percent in 2002 to 20.2 percent in 2006. Similarly, past year use of hallucinogens decreased between 2002 and 2006 (8.4 and 6.6 percent, respectively). Lifetime and past year nonmedical use of psychotherapeutic drugs increased between 2002 and 2006 (27.7 vs. 30.3 percent for lifetime use and 14.2 vs. 15.5 percent for past year use), with increases in the rates of pain reliever and tranquilizer use.

Adults Aged 26 or Older

- Among adults aged 26 or older, 6.1 percent reported current illicit drug use in 2006 (Figure 2.4). In this age group, 4.2 percent used marijuana, and 2.2 percent used prescription-type drugs nonmedically. Less than 1 percent used cocaine (0.8 percent), hallucinogens (0.1 percent), and inhalants (0.2 percent). The only significant change between 2005 and 2006 in the rates of past month use among adults in this age group involved heroin, which increased from 0.03 to 0.14 percent. Lifetime nonmedical use of OxyContin® among adults aged 26 or older increased from 0.9 percent in 2005 to 1.1 percent in 2006, and past year use of stimulants and heroin also increased (stimulants, from 0.6 to 0.9 percent; heroin, from 0.1 to 0.2 percent).

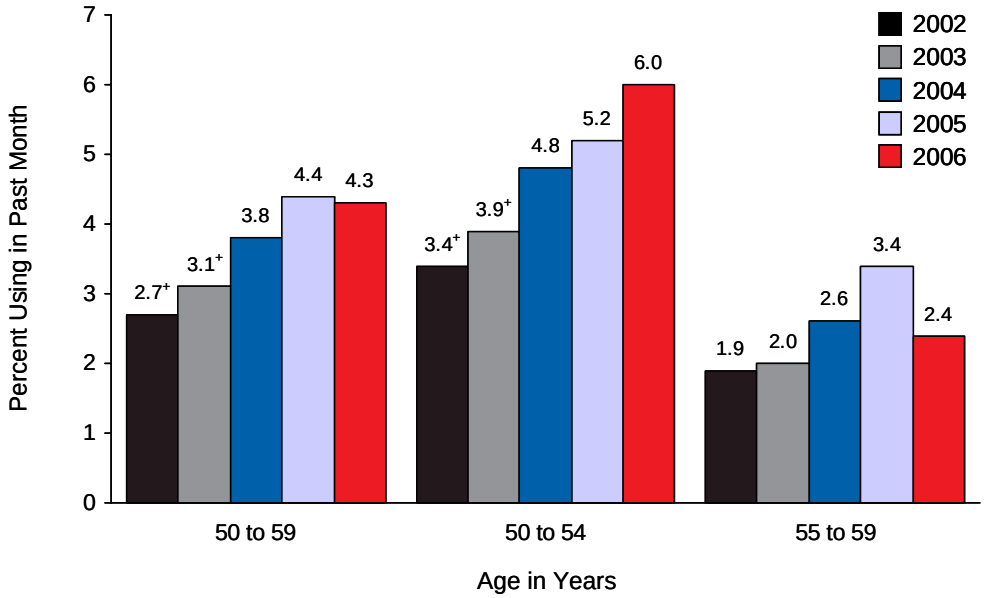
- Among adults aged 50 to 59, the rate of current illicit drug use increased between 2002 and 2005, then remained unchanged in 2006 (Figure 2.7). For those aged 50 to 54, the rate increased from 3.4 in 2002 to 6.0 percent in 2006. Among those aged 55 to 59, current illicit drug use showed a mixed trend with no significant difference between the rates in 2002 and 2006. These patterns and trends may partially reflect the aging into these age groups of the baby boom cohort, whose lifetime rates of illicit drug use are higher than those of older cohorts.

Gender

- As in prior years, males were more likely than females among persons aged 12 or older to be current illicit drug users in 2006 (10.5 vs. 6.2 percent, respectively). The rate of past month marijuana use for males was about twice as high as the rate for females (8.1 vs. 4.1 percent) (Figure 2.8). However, males and females had similar rates of past month use of stimulants (0.5 percent for both males and females), Ecstasy (0.2 percent for both), sedatives (0.1 and 0.2 percent, respectively), OxyContin® (0.1 percent for both), LSD (0.1 and less than 0.1 percent), and PCP (less than 0.1 percent for both).

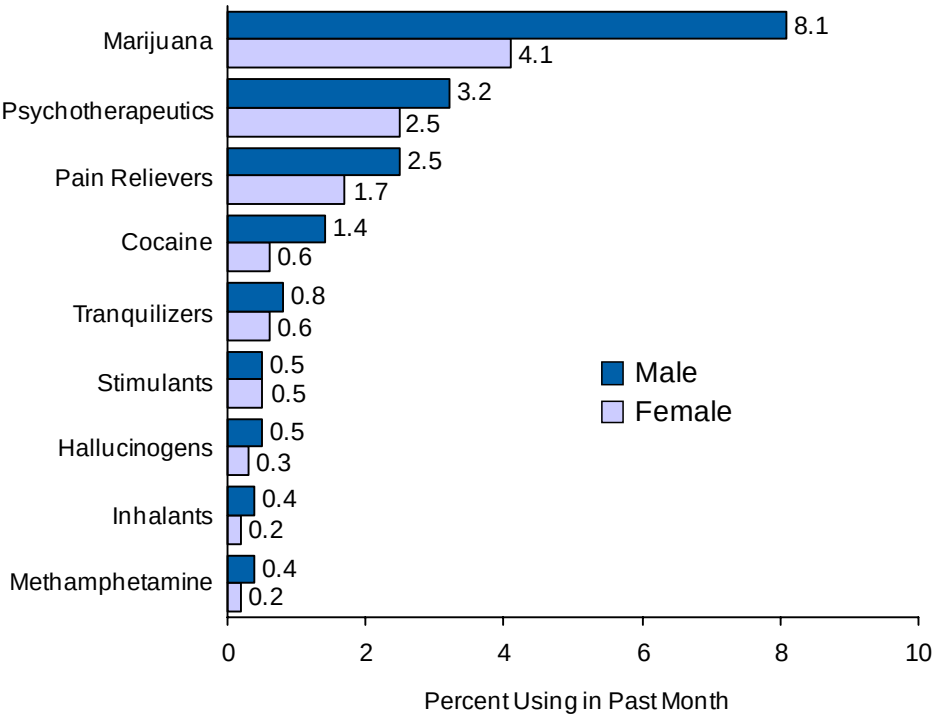
- From 2005 to 2006, the rate of past month nonmedical use of prescription-type psychotherapeutic drugs increased from 2.8 to 3.2 percent among males aged 12 or older, mirroring an increase in the nonmedical use of pain relievers (from 2.1 to 2.5 percent). The rate of current heroin use also increased among males (from 0.1 to 0.2 percent). There were no significant changes from 2005 to 2006 in the rate of past month drug use among females aged 12 or older.

Figure 2.7 Past Month Illicit Drug Use among Adults Aged 50 to 59: 2002-2006



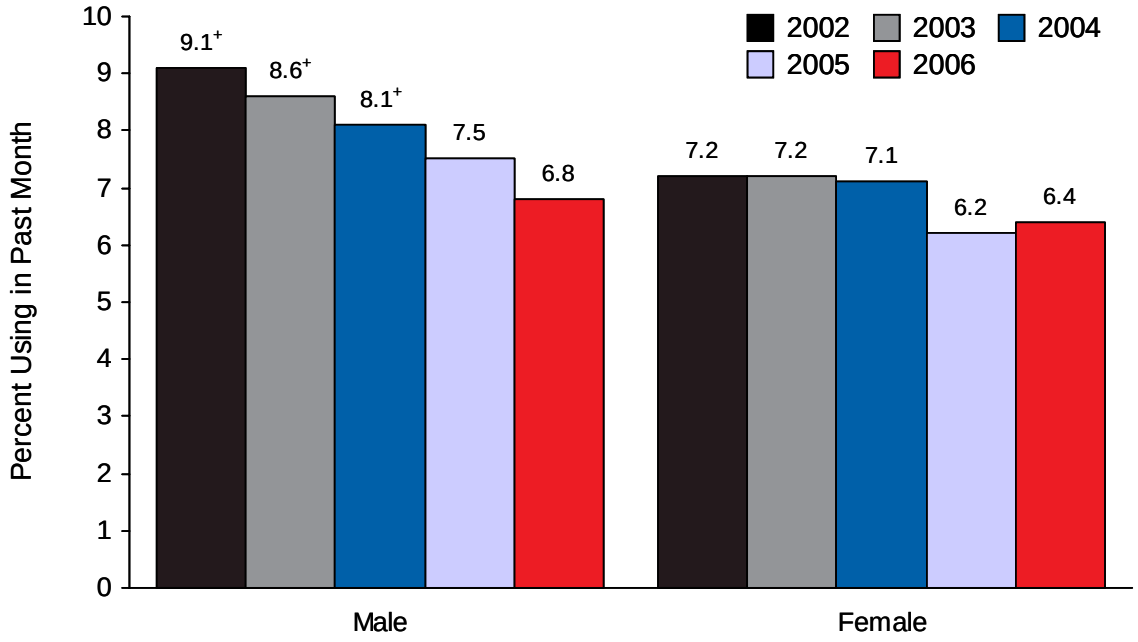
+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Figure 2.8 Past Month Use of Selected Drugs among Persons Aged 12 or Older, by Gender: 2006



- Among youths aged 12 to 17, the rate of current illicit drug use was similar for boys (9.8 percent) and girls (9.7 percent). In 2006, male and female adolescents had similar rates of current marijuana use (6.8 and 6.4 percent) (Figure 2.9) and nonmedical use of prescription-type psychotherapeutics (3.1 and 3.5 percent, respectively).

Figure 2.9 Past Month Marijuana Use among Youths Aged 12 to 17, by Gender: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Past month marijuana use among male youths aged 12 to 17 declined gradually from 9.1 percent in 2002 to 6.8 percent in 2006. Among female youths, the trend was less clear with the rates in 2006 (6.4 percent) and 2002 (7.2 percent) not being significantly different.

Pregnant Women

- Among pregnant women aged 15 to 44 years, 4.0 percent reported using illicit drugs in the past month based on combined 2005 and 2006 NSDUH data. This rate was significantly lower than the rate among women aged 15 to 44 who were not pregnant (10.0 percent). The 2003-2004 combined rate of current illicit drug use among pregnant women (4.6 percent) was not significantly different from the 2005-2006 combined rate.

Race/Ethnicity

- Current illicit drug use varied by race/ethnicity in 2006. Among persons aged 12 or older, the rate was lowest among Asians (3.6 percent). Rates were 13.7 percent for American Indians or Alaska Natives, 9.8 percent for blacks, 8.9 percent for persons reporting two or more races, 8.5 percent for whites, 7.5 percent for Native Hawaiians or Other Pacific Islanders, and 6.9 percent for Hispanics.

- Among youths aged 12 to 17 in 2006, the rate of current illicit drug use among American Indians or Alaska Natives was about twice the overall rate among youths (18.7 vs. 9.8 percent, respectively). The rates were 11.8 percent among youths reporting two or more races, 10.2 percent among blacks, 10.0 percent among whites, 8.9 percent among Hispanics, and 6.7 percent among Asians.

- There were no statistically significant changes between 2005 and 2006 in the rate of current illicit drug use for any racial/ethnic subgroup among persons aged 12 or older or among youths aged 12 to 17. Among young adults aged 18 to 25 who reported two or more races, the rate of current illicit drug use decreased from 31.8 percent in 2005 to 22.4 percent in 2006. In that 18-to-25-year age group, 28.5 percent of American Indians or Alaska Natives, 22.7 percent of whites, 17.3 percent of blacks, 13.9 percent of Hispanics, and 9.0 percent of Asians were current illicit drug users in 2006.

Education

- Illicit drug use in 2006 varied by educational status. Among adults aged 18 or older, the rate of current illicit drug use was lower for college graduates (5.9 percent) than for those who did not graduate from high school (9.2 percent), high school graduates (8.6 percent), and those with some college (9.1 percent). However, adults who had graduated from college were more likely to have tried illicit drugs in their lifetime when compared with adults who had not completed high school (50.1 vs. 37.2 percent). Among college graduates, the rate of current illicit drug use increased from 5.0 percent in 2005 to 5.9 percent in 2006.

College Students

- In the college-aged population (persons aged 18 to 22 years old), the rate of current use of illicit drugs was lower among full-time college students (19.2 percent) than among other persons aged 18 to 22 years, which includes part-time college students, students in other grades, and nonstudents (22.6 percent). Current illicit drug use among college students and other 18 to 22 year olds did not change between 2005 and 2006.

- There was a significant decrease in current use of crack among persons aged 18 to 22 who were not full-time college students, from 0.6 percent in 2005 to 0.2 percent in 2006. The rate was unchanged among full-time college students (0.1 percent in both 2005 and 2006).

Employment

- Current illicit drug use differed by employment status in 2006. Among adults aged 18 or older, the rate of drug use was higher for unemployed persons (18.5 percent) than for those who were employed full time (8.8 percent) or part time (9.4 percent). These rates were all similar to the corresponding rates in 2005.

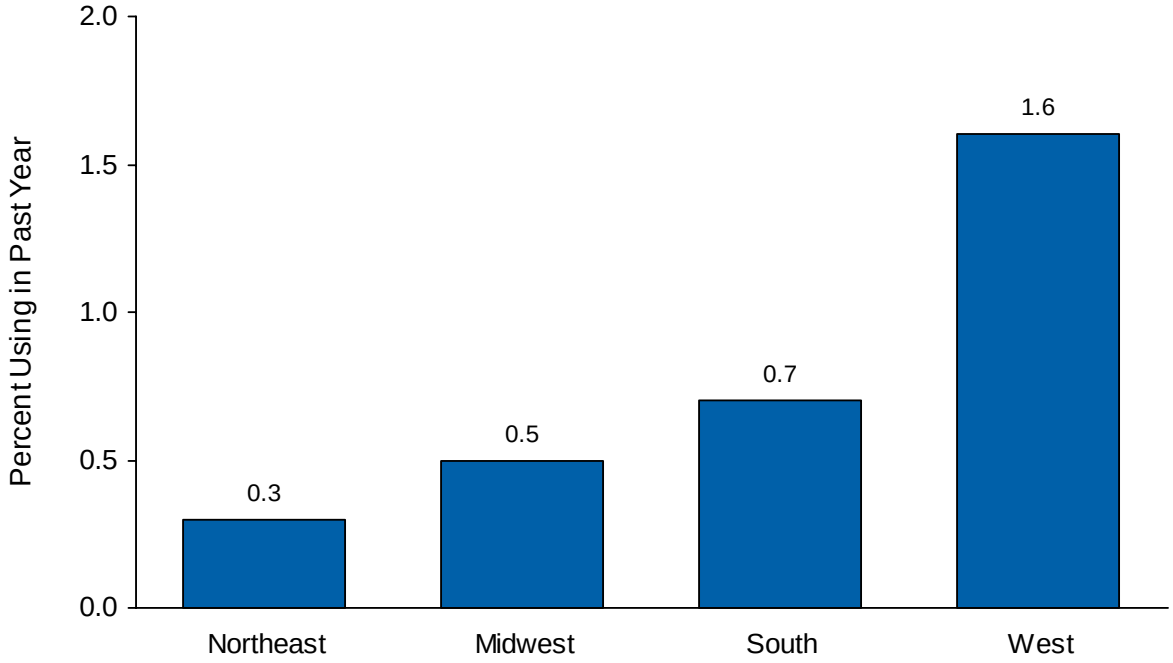
- Although the rate of past month illicit drug use was higher among unemployed persons compared with those from other employment groups, most drug users were employed. Of the 17.9 million current illicit drug users aged 18 or older in 2006, 13.4 million (74.9 percent) were employed either full or part time.

Geographic Area

- Among persons aged 12 or older, the rate of current illicit drug use in 2006 was 9.5 percent in the West, 8.9 percent in the Northeast, 7.9 percent in the Midwest, and 7.4 percent in the South.

- Past year methamphetamine use was higher in the West (1.6 percent) than in the Northeast (0.3 percent), Midwest (0.5 percent) or South (0.7 percent) in 2006 (Figure 2.10). The rates of past year use in 2006 were similar to those in 2002 in each region.

Figure 2.10 Past Year Methamphetamine Use among Persons Aged 12 or Older, by Geographic Region: 2006

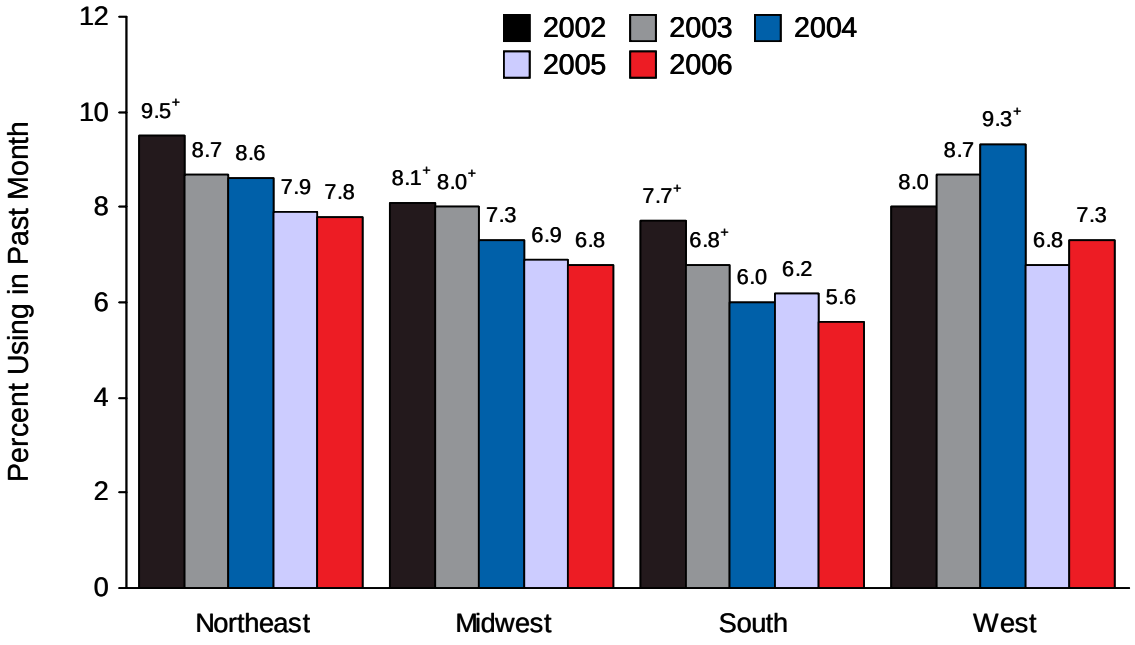


- Among youths aged 12 to 17, there was evidence of regional differences in the trends of marijuana use between 2002 and 2006 (Figure 2.11). Current marijuana use rates declined in the Northeast, Midwest, and South between 2002 and 2006. In the West, the rates were steady between 2002 and 2004 (8.0 percent in 2002, 8.7 percent in 2003, and 9.3 percent in 2004) and then declined to 6.8 percent in 2005 and remained steady at 7.3 percent in 2006.

- The rate of current illicit drug use in metropolitan areas was higher than the rate in nonmetropolitan areas in 2006. The rates were 8.7 percent in large metropolitan counties, 8.3 percent in small metropolitan counties, and 6.8 percent in nonmetropolitan counties as a group. Within nonmetropolitan areas, counties that were urbanized had a rate of 7.1 percent, less urbanized counties had a rate of 6.5 percent, while completely rural counties had a rate of 7.8 percent. The rates in 2005 were similar to those in 2006.

- The rate of current illicit drug use among the population aged 12 or older in completely rural counties in 2006 (7.8 percent) was similar to that observed in 2002 (6.7 percent) and 2005 (5.1 percent) but higher than the rate in 2003 (3.1 percent) and 2004 (4.6 percent).

Figure 2.11 Past Month Marijuana Use among Youths Aged 12 to 17, by Geographic Region: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Criminal Justice Populations

- In 2006, there were an estimated 1.6 million adults aged 18 or older on parole or other supervised release from prison during the past year. Over one fourth of these (29.7 percent) were current illicit drug users, higher than the 7.9 percent among adults not on parole or supervised release.

- Among the 4.6 million adults on probation at some time in the past year, 31.9 percent reported current illicit drug use in 2006. This was higher than the rate of 7.6 percent among adults not on probation in 2006.

Frequency of Use

- In 2006, among past year marijuana users aged 12 or older, 12.3 percent used marijuana on 300 or more days within the past 12 months. This translates into 3.1 million using marijuana on a daily or almost daily basis over a 12-month period, similar to the estimate in 2005. Among past month marijuana users aged 12 or older, 34.4 percent (5.1 million) used the drug on 20 or more days in the past month.

Association with Cigarette and Alcohol Use

- In 2006, the rate of current illicit drug use was almost 9 times higher among youths aged 12 to 17 who smoked cigarettes in the past month (47.8 percent) than it was among youths who did not smoke cigarettes in the past month (5.4 percent).

- Past month illicit drug use also was associated with the level of past month alcohol use. Among youths aged 12 to 17 in 2006 who were heavy drinkers (i.e., drank five or more drinks on the same occasion [i.e., at the same time or within a couple of hours of each other] on each of 5 or more days in the past 30 days), 57.6 percent also were current illicit drug users, which was higher than among nondrinkers (4.8 percent).

Driving Under the Influence of Illicit Drugs

- In 2006, there were 10.2 million persons aged 12 or older who reported driving under the influence of illicit drugs during the past year. This corresponds to 4.2 percent of the population aged 12 or older, similar to the rate in 2005 (4.3 percent), but lower than the rate in 2002 (4.7 percent). In 2006, the rate was highest among young adults aged 18 to 25 (13.0 percent).

Source of Prescription Drugs

- Nonmedical users of prescription-type psychotherapeutic drugs are asked questions regarding how they obtained the drugs they recently used nonmedically. In both 2005 and 2006, over half of the nonmedical users of prescription-type pain relievers, tranquilizers, stimulants, and sedatives said they obtained the drugs they used most recently "from a friend or relative for free." A follow-up question added in 2006 asked these respondents where their friend or relative had obtained the drugs.

- Among persons aged 12 or older who used pain relievers nonmedically in the past 12 months, 55.7 percent reported in 2006 that they got the pain relievers they most recently used from a friend or relative for free. Another 9.3 percent bought the drugs from a friend or family member. Around one fifth (19.1 percent) reported they got the drugs from just one doctor. Only 3.9 percent got the pain relievers from a drug dealer or other stranger, and only 0.1 percent reported buying the drug on the Internet.

- In 80.7 percent of the cases where nonmedical users of prescription pain relievers obtained the drugs from a friend or relative for free, the individuals indicated that their friend or relative had obtained the drugs from just one doctor. Only 1.6 percent reported that the friend or relative had bought the drug from a drug dealer or other stranger.

- In 2006, over half (53.6 percent) of past year methamphetamine users reported that they obtained the methamphetamine they used most recently from a friend or relative for free. Another 21.4 percent bought it from a friend or relative. Around one in five users (21.1 percent) bought it from a drug dealer or other stranger.

3. Alcohol Use

The National Survey on Drug Use and Health (NSDUH) includes questions about the recency and frequency of consumption of alcoholic beverages, such as beer, wine, whiskey, brandy, and mixed drinks. An extensive list of examples of the kinds of beverages covered is given to respondents prior to the question administration. A "drink" is defined as a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. Times when the respondent only had a sip or two from a drink are not considered to be consumption. For this report, estimates for the prevalence of alcohol use are reported primarily at three levels defined for both males and females and for all ages as follows:

> Current (past month) use - At least one drink in the past 30 days (includes binge and heavy use).
>
> Binge use - Five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days (includes heavy use).
>
> Heavy use - Five or more drinks on the same occasion on each of 5 or more days in the past 30 days.

- Slightly more than half of Americans aged 12 or older reported being current drinkers of alcohol in the 2006 survey (50.9 percent). This translates to an estimated 125 million people, which is similar to the 2005 estimate of 126 million people (51.8 percent).

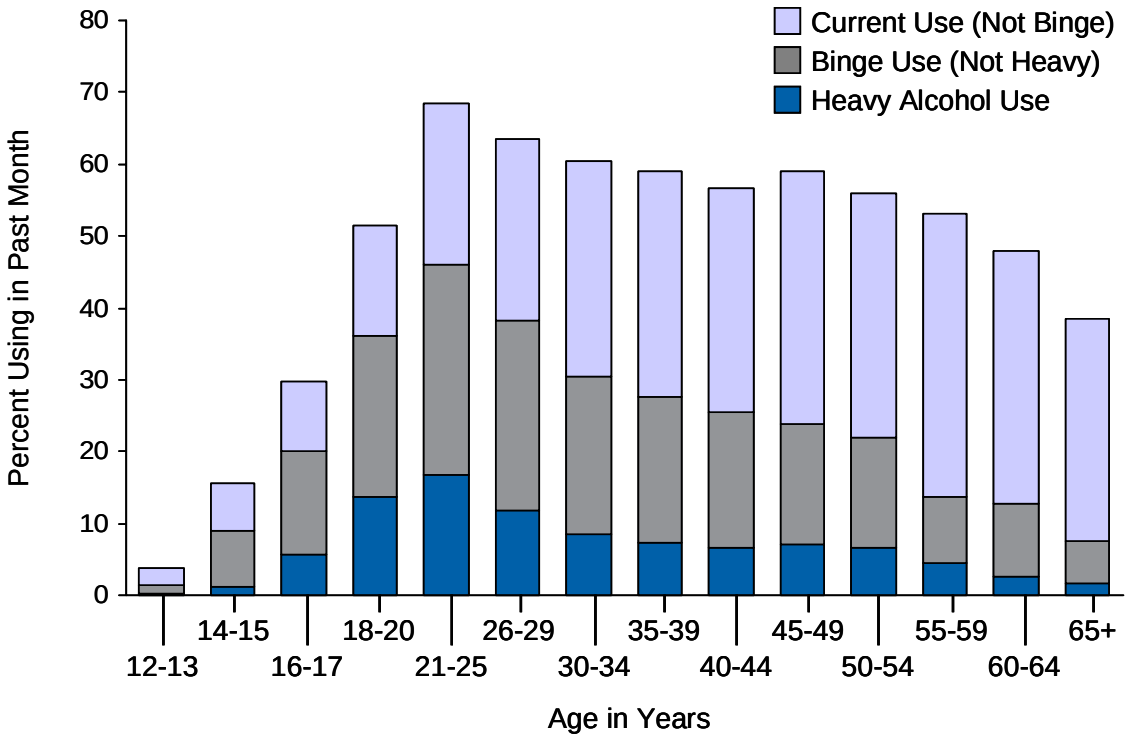
- More than one fifth (23.0 percent) of persons aged 12 or older participated in binge drinking at least once in the 30 days prior to the survey in 2006. This translates to about 57 million people. The rate in 2006 is similar to the rate in 2005 (22.7 percent).

- In 2006, heavy drinking was reported by 6.9 percent of the population aged 12 or older, or 17 million people. This percentage is similar to the rate of heavy drinking in 2005 (6.6 percent).

Age

- In 2006, rates of current alcohol use were 3.9 percent among persons aged 12 or 13, 15.6 percent of persons aged 14 or 15, 29.7 percent of 16 or 17 year olds, 51.6 percent of those aged 18 to 20, and 68.6 percent of 21 to 25 year olds (Figure 3.1). Among older age groups, the prevalence of alcohol use decreased with increasing age, from 63.5 percent among 26 to 29 year olds to 48.0 percent among 60 to 64 year olds and 38.4 percent among people aged 65 or older.

Figure 3.1 Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Age: 2006



- Rates of binge alcohol use in 2006 were 1.5 percent among 12 or 13 year olds, 8.9 percent among 14 or 15 year olds, 20.0 percent among 16 or 17 year olds, 36.2 percent among persons aged 18 to 20, and 46.1 percent among those aged 21 to 25. The rate peaked at ages 21 to 23 (49.3 percent at age 21, 48.9 percent at age 22, and 47.2 percent at age 23), then decreased beyond young adulthood from 34.2 percent of 26 to 34 year olds to 18.4 percent of persons aged 35 or older.

- The rate of binge drinking was 42.2 percent for young adults aged 18 to 25. Heavy alcohol use was reported by 15.6 percent of persons aged 18 to 25. These rates are similar to the rates in 2005 (41.9 and 15.3 percent, respectively).

- Persons aged 65 or older had lower rates of binge drinking (7.6 percent) than adults in other age groups. The rate of heavy drinking among persons aged 65 or older was 1.6 percent.

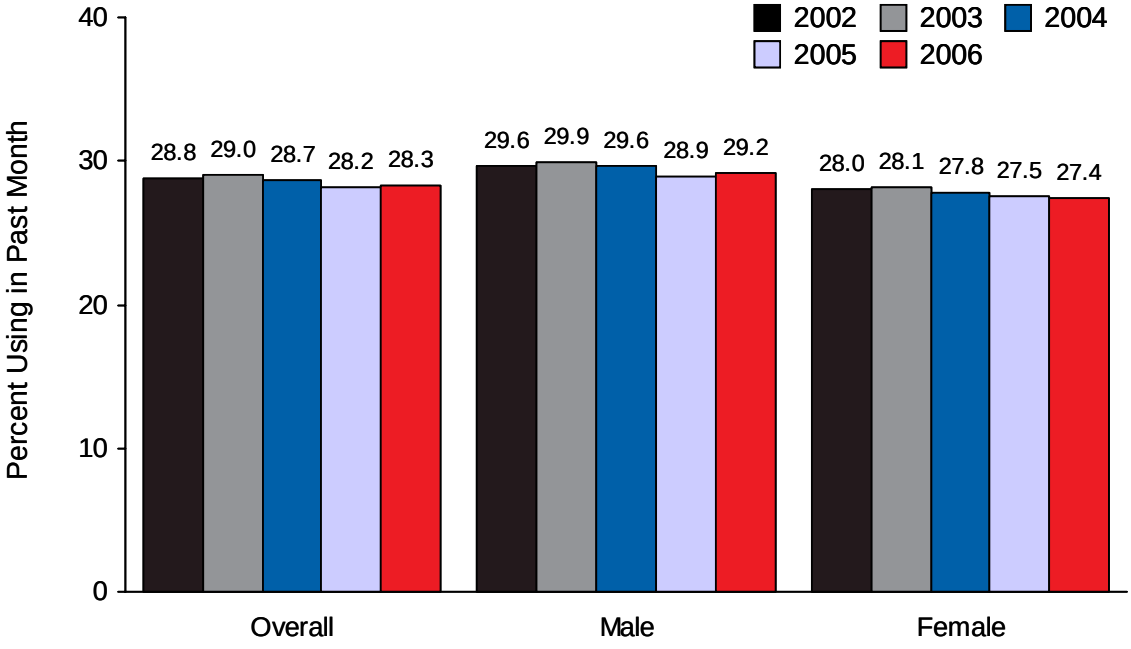
- The rate of current alcohol use among youths aged 12 to 17 was 16.6 percent in 2006. Youth binge and heavy drinking rates were 10.3 and 2.4 percent, respectively. These rates are essentially the same as the 2005 rates (16.5 percent, 9.9 percent, and 2.4 percent, respectively).

Underage Alcohol Use

- In 2006, about 10.8 million persons aged 12 to 20 (28.3 percent of this age group) reported drinking alcohol in the past month. Approximately 7.2 million (19.0 percent) were binge drinkers, and 2.4 million (6.2 percent) were heavy drinkers. These figures have remained essentially the same since the 2002 survey.

- More males than females aged 12 to 20 reported current alcohol use (29.2 vs. 27.4 percent, respectively), binge drinking (21.3 vs. 16.5 percent), and heavy drinking (7.9 vs. 4.3 percent) in 2006 (Figure 3.2).

Figure 3.2 Current Alcohol Use among Persons Aged 12 to 20, by Gender: 2002-2006



[+] Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Among persons aged 12 to 20, past month alcohol use rates were 18.6 percent among blacks, 19.7 percent among Asians, 25.3 percent among Hispanics, 27.5 percent among those reporting two or more races, 31.3 percent among American Indians or Alaska Natives, and 32.3 percent among whites. The 2006 rate for American Indians or Alaska Natives is higher than the 2005 rate of 21.7 percent.

- Among persons aged 12 to 20, binge drinking was reported by 23.6 percent of American Indians or Alaska Natives, 22.7 percent of whites, 20.7 percent of persons reporting two or more races, and 16.5 percent of Hispanics, but only by 11.8 percent of Asians and 8.6 percent of blacks. The 2006 rate among Asians is higher than the 2005 rate of 7.4 percent.

- Across geographic regions in 2006, underage current alcohol use rates were higher in the Northeast (32.0 percent) and Midwest (29.7 percent) than in the South (25.8 percent). The rate in the West (28.1 percent) was similar to rates in the South and Midwest regions, but significantly lower than the rate in the Northeast.

- In 2006, underage current alcohol use rates were similar in small metropolitan areas (28.9 percent), large metropolitan areas (27.8 percent), and nonmetropolitan areas (29.1 percent). The rate in completely rural nonmetropolitan areas was 28.2 percent.

Gender

- In 2006, 57.0 percent of males aged 12 or older were current drinkers, higher than the rate for females (45.2 percent). However, among youths aged 12 to 17, the percentage of males who were current drinkers (16.3 percent) was similar to the rate for females (17.0 percent).

- Among adults aged 18 to 25, an estimated 57.9 percent of females and 65.9 percent of males reported current drinking in 2006. The 2006 rate among females aged 18 to 25 is higher than the 2005 rate of 55.4 percent.

Pregnant Women

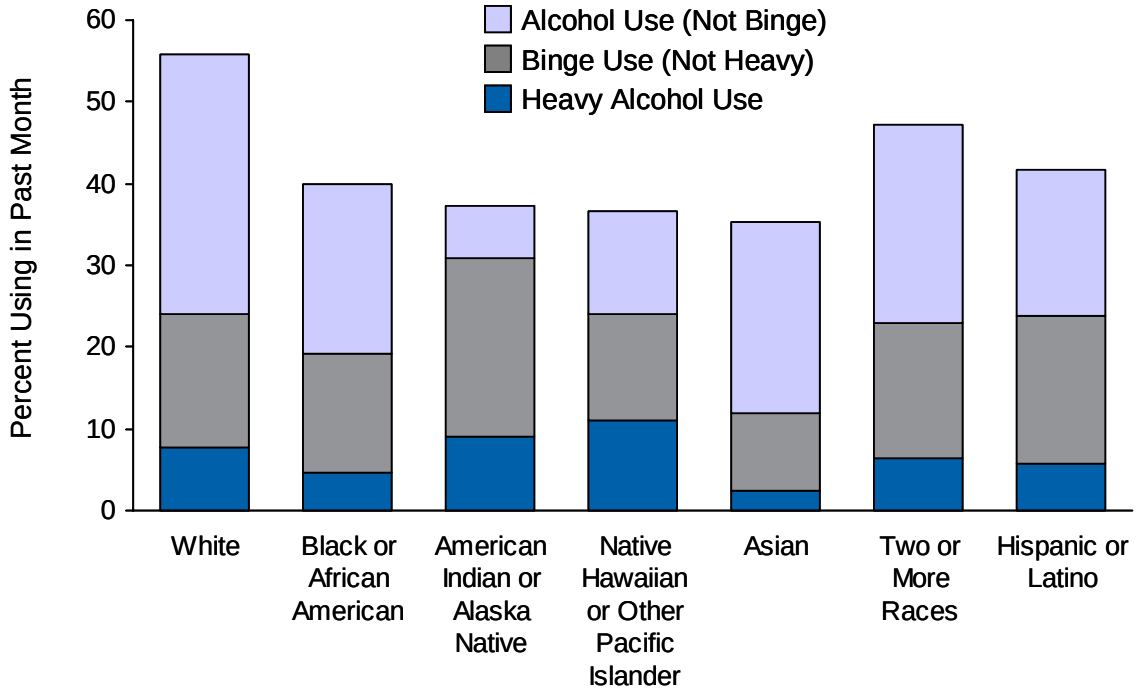
- Among pregnant women aged 15 to 44, an estimated 11.8 percent reported current alcohol use, 2.9 percent reported binge drinking, and 0.7 percent reported heavy drinking. These rates were significantly lower than the rates for nonpregnant women in the same age group (53.0 percent, 23.6 percent, and 5.4 percent, respectively). Binge drinking during the first trimester of pregnancy dropped from 10.6 percent in combined 2003–2004 data to 4.6 percent in combined 2005-2006 data. All of the current estimates for pregnant women are based on data averaged over 2005 and 2006.

Race/Ethnicity

- Among persons aged 12 or older, whites in 2006 were more likely than other racial/ethnic groups to report current use of alcohol (55.8 percent) (Figure 3.3). The rates were 47.1 percent for persons reporting two or more races, 41.8 percent for Hispanics, 40.0 percent for blacks, 37.2 percent for American Indians or Alaska Natives, 36.7 percent for Native Hawaiians or Other Pacific Islanders, and 35.4 percent for Asians.

- The rate of binge alcohol use was lowest among Asians (11.8 percent). Rates for other racial/ethnic groups were 19.1 percent for blacks, 22.8 percent for persons reporting two or more races, 23.9 percent for Hispanics, 24.1 percent for whites, 24.1 percent for Native Hawaiians or Other Pacific Islanders, and 31.0 percent for American Indians or Alaska Natives.

Figure 3.3 Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Race/Ethnicity: 2006



- Among youths aged 12 to 17 in 2006, Asians and blacks had the lowest rates of past month alcohol use. Only 7.6 percent of Asian youths and 10.5 percent of black youths were current drinkers, while 15.3 percent of Hispanic youths, 16.2 percent of those reporting two or more races, 19.2 percent of white youths, and 20.5 percent of American Indian or Alaska Native youths were current drinkers.

Education

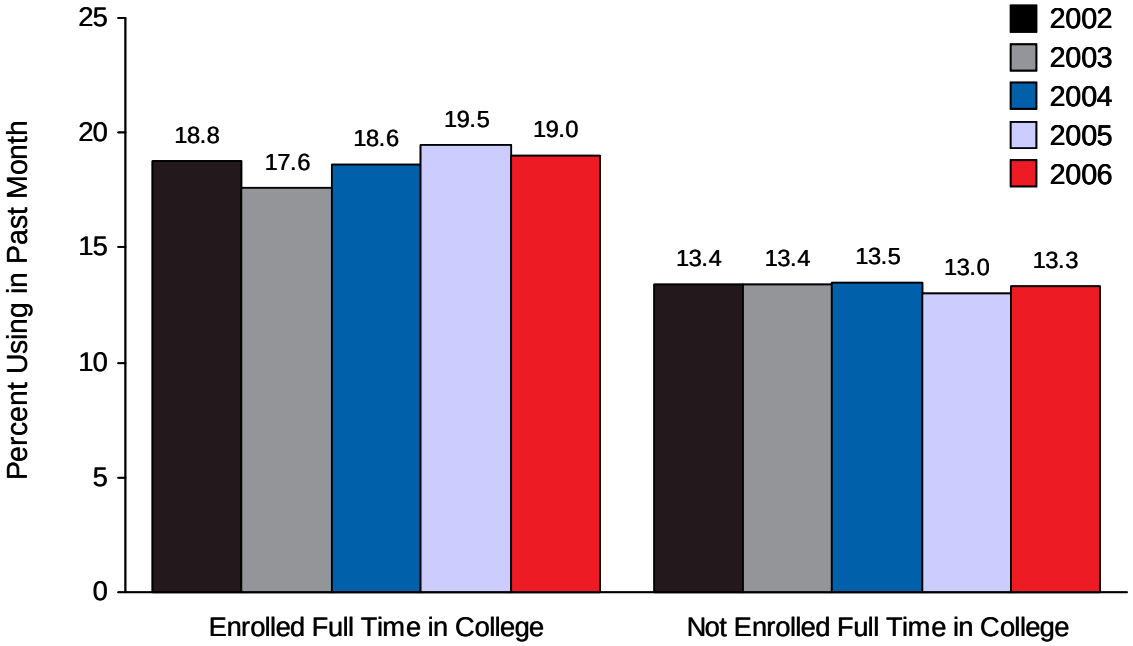
- Among adults aged 18 or older, the rate of past month alcohol use increased with increasing levels of education. Among adults with less than a high school education, 36.5 percent were current drinkers in 2006, significantly lower than the 67.3 percent of college graduates who were current drinkers. However, among adults aged 26 or older, binge and heavy alcohol use rates were lower among college graduates (19.1 and 5.4 percent, respectively) than among those who had not completed college (22.3 vs. 6.2 percent, respectively).

College Students

- Young adults aged 18 to 22 enrolled full time in college were more likely than their peers not enrolled full time (i.e., part-time college students and persons not currently enrolled in college) to use alcohol in the past month, binge drink, and drink heavily. Past month alcohol use was reported by 66.4 percent of full-time college students compared with 54.1 percent of persons aged 18 to 22 who were not enrolled full time. Binge and heavy use rates for college students were 45.5 and 19.0 percent, respectively, compared with 38.4 and 13.3 percent, respectively, for 18 to 22 year olds not enrolled full time in college.

- The pattern of higher rates of current alcohol use, binge alcohol use, and heavy alcohol use among full-time college students compared with rates for others aged 18 to 22 has remained consistent since 2002 (Figure 3.4).

Figure 3.4 Heavy Alcohol Use among Adults Aged 18 to 22, by College Enrollment: 2002-2006



[+] Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Employment

- Rates of current alcohol use were 62.0 percent for full-time employed adults aged 18 or older in 2006, higher than the rate for unemployed adults (52.1 percent). However, the pattern was different for binge and heavy alcohol use. Rates of binge and heavy use for unemployed persons were 34.2 and 12.2 percent, respectively, while these rates were 29.7 and 8.9 percent for full-time employed persons.

- Most binge and heavy alcohol users were employed in 2006. Among 54.0 million adult binge drinkers, 42.9 million (79.4 percent) were employed either full or part time. Among 16.3 million heavy drinkers, 12.9 million (79.2 percent) were employed.

Geographic Area

- The rate of past month alcohol use for people aged 12 or older in 2006 was lower in the South (46.9 percent) than in the Northeast (56.3 percent), Midwest (53.5 percent), or West (50.4 percent).

- Among people aged 12 or older, the rate of past month alcohol use in large metropolitan areas (53.5 percent) was higher than the 49.6 percent in small metropolitan areas and 45.0 percent in nonmetropolitan areas. Binge drinking was equally prevalent in small metropolitan areas (22.6 percent), large metropolitan areas (23.4 percent), and nonmetropolitan areas (22.2 percent). The rate of heavy alcohol use in large metropolitan areas increased from 6.1 percent in 2005 to 6.7 percent in 2006. The rates in small metropolitan areas and nonmetropolitan areas in 2006 were both 7.1 percent.

- The rates of binge alcohol use among youths aged 12 to 17 were 11.2 percent in nonmetropolitan areas, 9.8 percent in small metropolitan areas, and 10.3 percent in large metropolitan areas, where the rate increased from 9.3 percent in 2005. In completely rural counties of nonmetropolitan areas, 12.2 percent of youths reported binge drinking in 2006.

Association with Illicit Drug and Tobacco Use

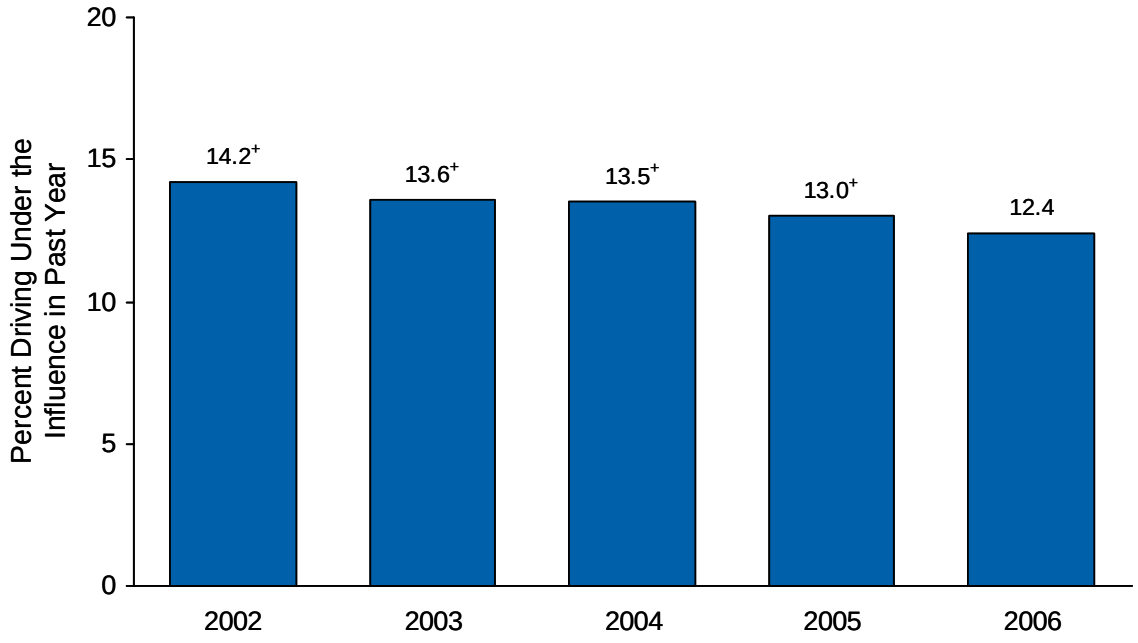
- The level of alcohol use was associated with illicit drug use in 2006. Among the 16.9 million heavy drinkers aged 12 or older, 32.6 percent were current illicit drug users. Persons who were not current alcohol users were less likely to have used illicit drugs in the past month (3.4 percent) than those who reported (a) current use of alcohol but did not meet the criteria for binge or heavy use (6.4 percent), (b) binge use but did not meet the criteria for heavy use (16.0 percent), or (c) heavy use of alcohol (32.6 percent).

- Alcohol consumption levels also were associated with tobacco use. Among heavy alcohol users aged 12 or older, 58.3 percent smoked cigarettes in the past month, while only 20.4 percent of non-binge current drinkers and 17.2 percent of persons who did not drink alcohol in the past month were current smokers. Smokeless tobacco use and cigar use also were more prevalent among heavy drinkers (11.4 and 18.7 percent, respectively) than among non-binge drinkers (2.1 and 4.6 percent) and nondrinkers (2.2 and 2.1 percent).

Driving Under the Influence of Alcohol

- In 2006, an estimated 12.4 percent of persons aged 12 or older drove under the influence of alcohol at least once in the past year (Figure 3.5). This percentage has dropped since 2002, when it was 14.2 percent, and is significantly lower than 2005, when it was 13.0 percent. The 2006 estimate corresponds to 30.5 million persons.

Figure 3.5 Driving Under the Influence of Alcohol in the Past Year among Persons Aged 12 or Older: 2002-2006

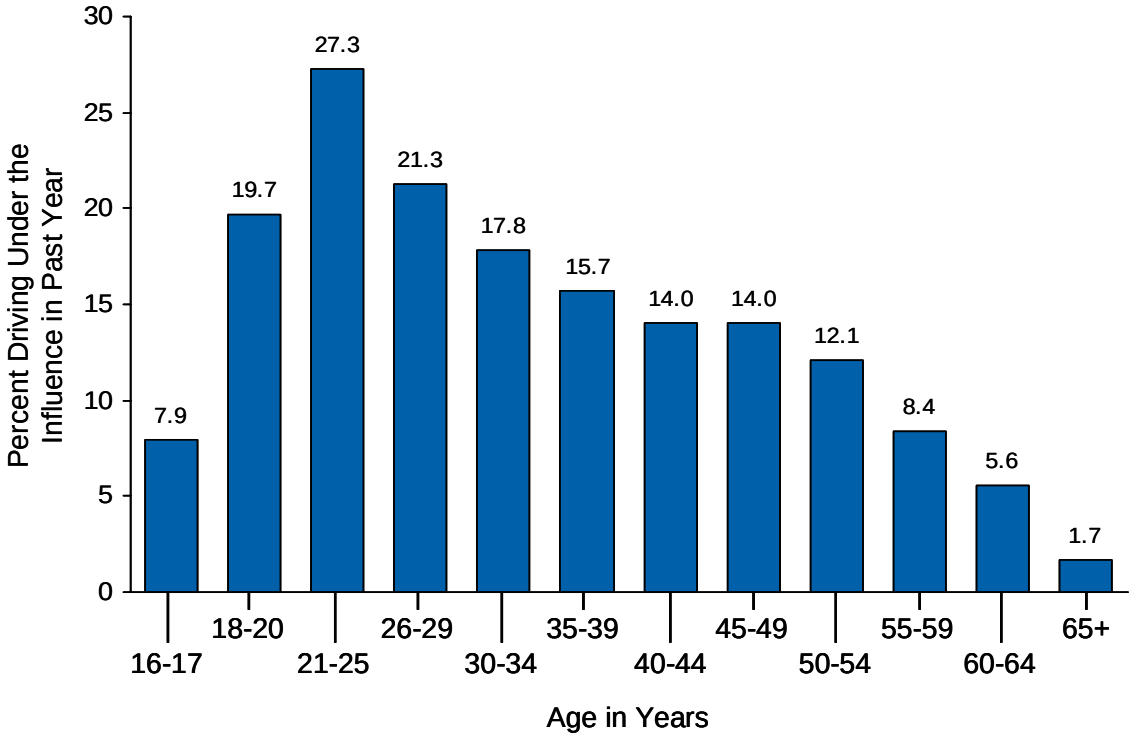


+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Driving under the influence of alcohol was associated with age in 2006. An estimated 7.9 percent of 16 or 17 year olds, 19.7 percent of 18 to 20 year olds, and 27.3 percent of 21 to 25 year olds reported driving under the influence of alcohol in the past year (Figure 3.6). Beyond age 25, these rates showed a general decline with increasing age.

- Among persons aged 12 or older, males were nearly twice as likely as females (16.3 vs. 8.6 percent) to drive under the influence of alcohol in the past year.

Figure 3.6 Driving Under the Influence of Alcohol in the Past Year among Persons Aged 16 or Older, by Age: 2006



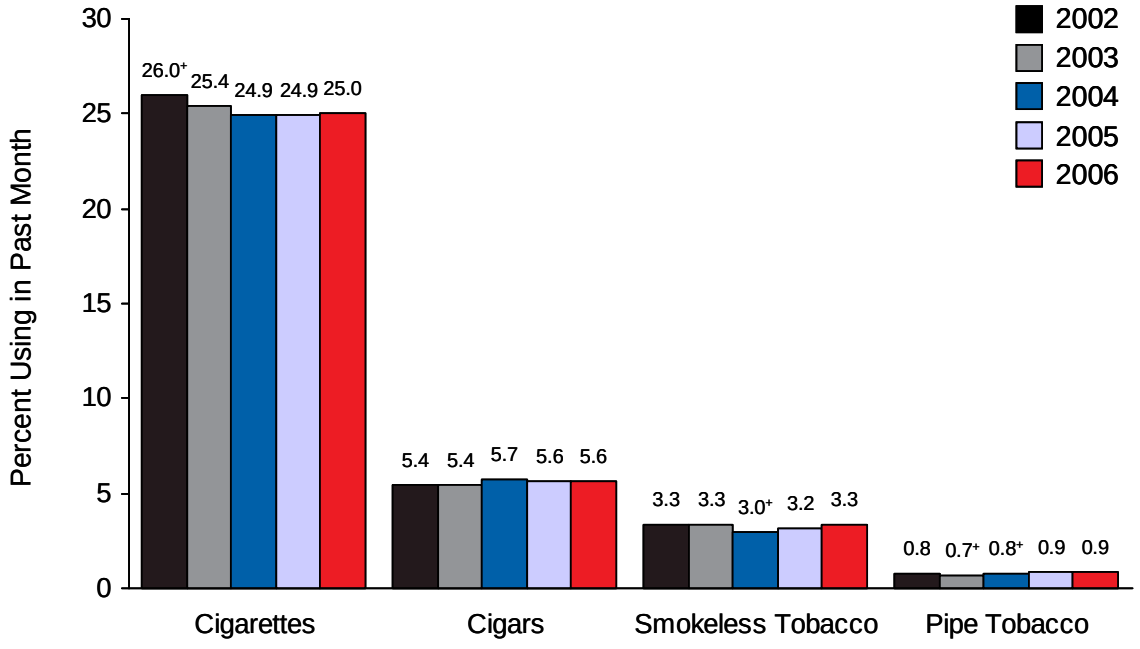
4. Tobacco Use

The National Survey on Drug Use and Health (NSDUH) includes a series of questions about the use of tobacco products, including cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. Cigarette use is defined as smoking "part or all of a cigarette." For analytic purposes, data for chewing tobacco and snuff are combined as "smokeless tobacco."

- In 2006, an estimated 72.9 million Americans aged 12 or older were current (past month) users of a tobacco product. This represents 29.6 percent of the population in that age range. In addition, 61.6 million persons (25.0 percent of the population) were current cigarette smokers; 13.7 million (5.6 percent) smoked cigars; 8.2 million (3.3 percent) used smokeless tobacco; and 2.3 million (0.9 percent) smoked tobacco in pipes (Figure 4.1).

- The rates of current use of cigarettes, smokeless tobacco, cigars, and pipe tobacco were unchanged between 2005 and 2006. However, between 2002 and 2006, past month cigarette use decreased from 26.0 to 25.0 percent. Rates of past month use of cigars, smokeless tobacco, and pipe tobacco were similar in 2002 and 2006.

Figure 4.1 Past Month Tobacco Use among Persons Aged 12 or Older: 2002-2006



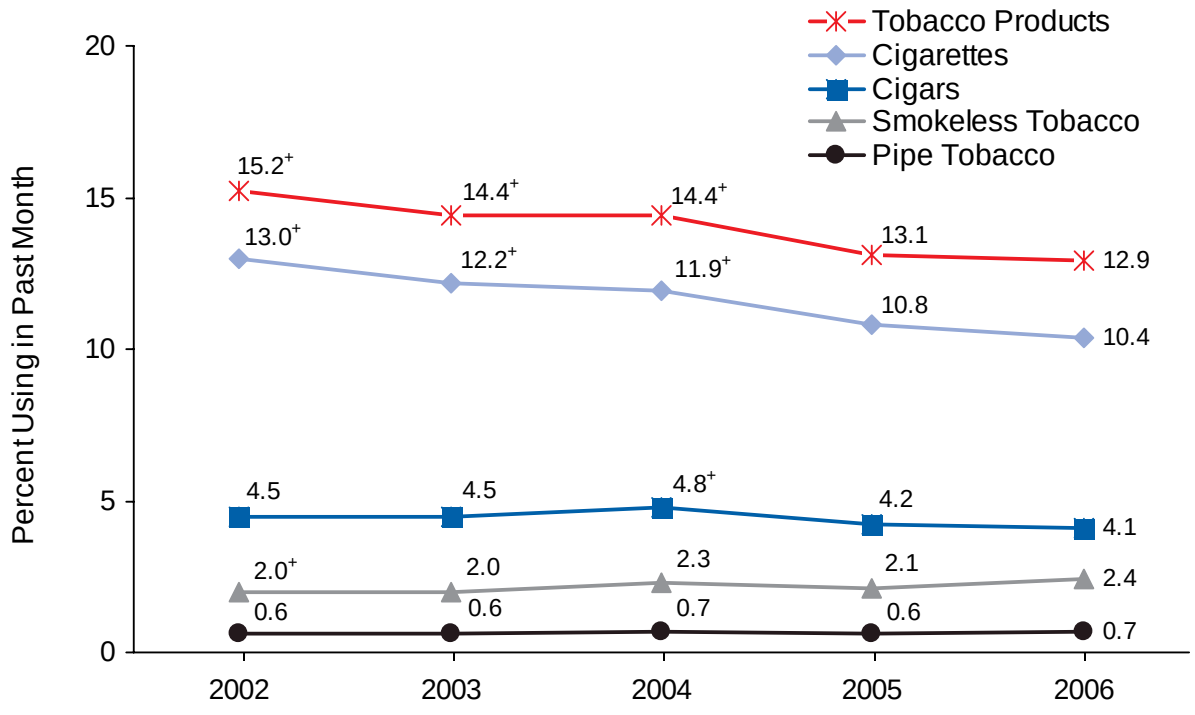
+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Age

- Young adults aged 18 to 25 had the highest rate of current use of a tobacco product (43.9 percent) and of each specific product compared with youths aged 12 to 17 and adults aged 26 or older. In 2006, the rates of past month use among young adults were 38.4 percent for cigarettes, 12.1 percent for cigars, 5.2 percent for smokeless tobacco, and 1.3 percent for pipe tobacco. The rate of current use of a tobacco product by young adults decreased from 2002 to 2006 (45.3 vs. 43.9 percent), as did the rate of cigarette use (40.8 vs. 38.4 percent). However, the rate of current use of cigars by young adults was higher in 2006 than in 2002 (12.1 vs. 11.0 percent).

- Among youths aged 12 to 17 in 2006, 3.3 million (12.9 percent) used a tobacco product in the past month, and 2.6 million (10.4 percent) used cigarettes (Figure 4.2). The rate of past month cigarette use among 12 to 17 year olds declined from 13.0 percent in 2002 to 10.4 percent in 2006. Past month use of smokeless tobacco, however, was higher in 2006 (2.4 percent) than in 2002 (2.0 percent).

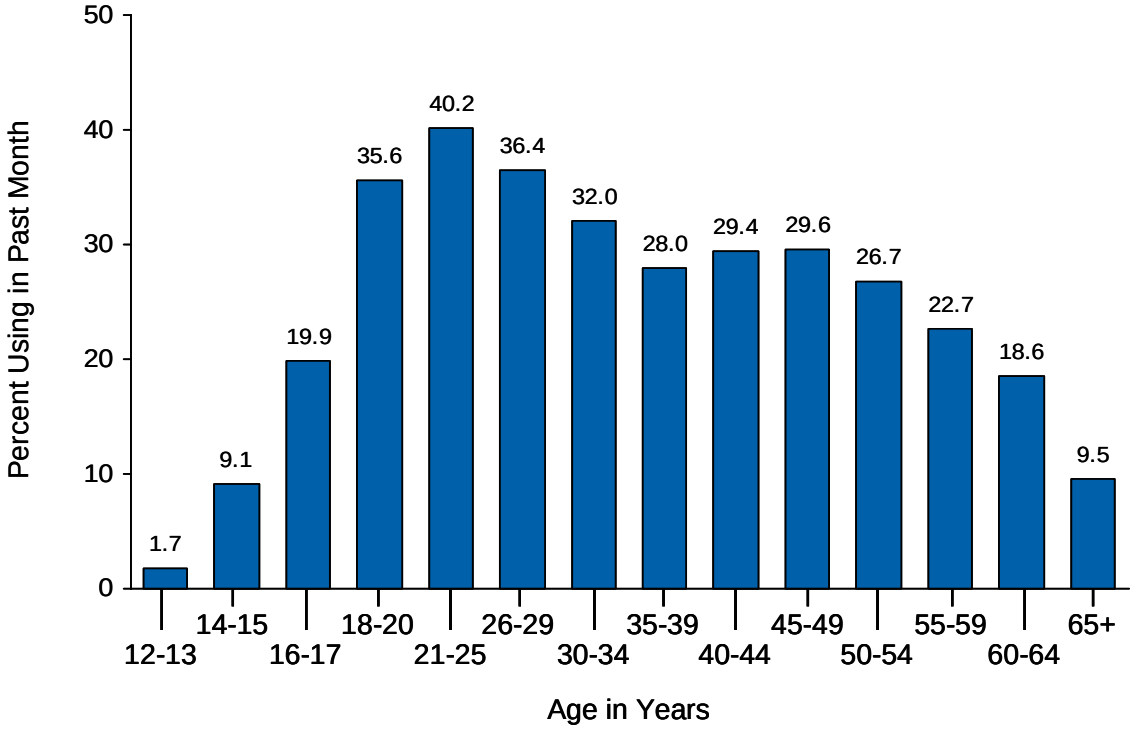
Figure 4.2 Past Month Tobacco Use among Youths Aged 12 to 17: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- In 2006, 1.7 percent of 12 or 13 year olds, 9.1 percent of 14 or 15 year olds, and 19.9 percent of 16 or 17 year olds were current cigarette smokers (Figure 4.3). The percentage of past month cigarette smokers among 12 or 13 year olds was lower in 2006 than in 2005 (1.7 vs. 2.4 percent). Across age groups, current cigarette use peaked at 40.2 percent among young adults aged 21 to 25. Less than a quarter (22.5 percent) of persons in the 35 or older age group in 2006 smoked cigarettes in the past month.

Figure 4.3 Past Month Cigarette Use among Persons Aged 12 or Older, by Age: 2006

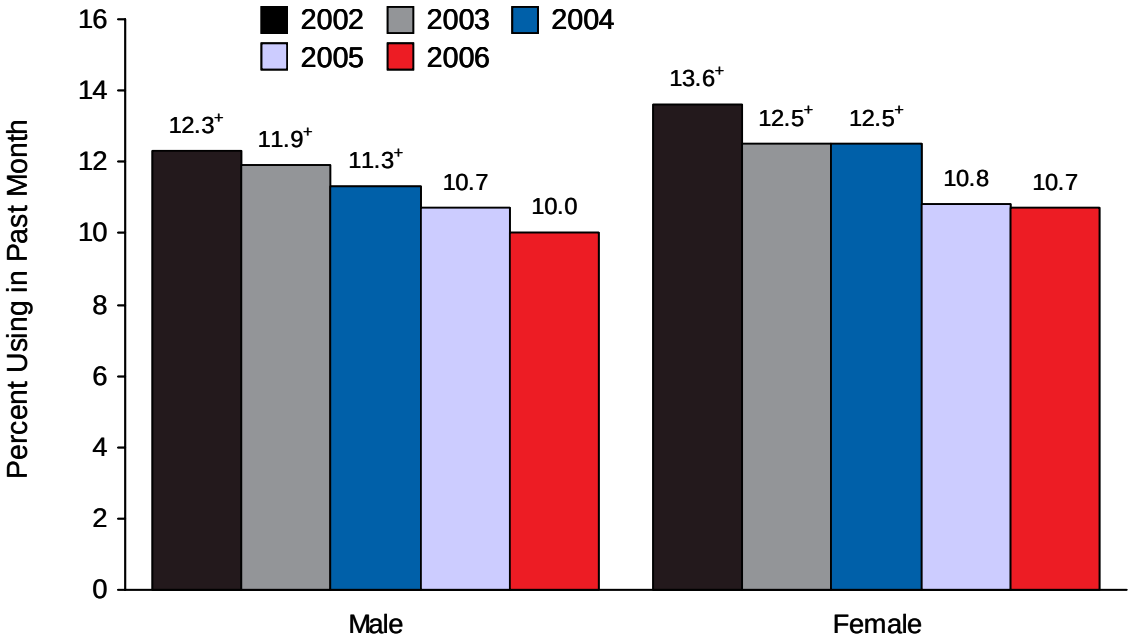


Gender

- In 2006, current use of a tobacco product among persons aged 12 or older was reported by a higher percentage of males (36.4 percent) than females (23.3 percent). Males also had higher rates of past month use than females of each specific tobacco product: cigarette smoking (27.8 percent of males vs. 22.4 percent of females), cigar smoking (9.3 vs. 2.1 percent), use of smokeless tobacco (6.6 vs. 0.3 percent), and use of pipe tobacco (1.7 vs. 0.2 percent).

- Among youths aged 12 to 17, the rate of current cigarette smoking in 2006 did not differ significantly for females (10.7 percent) and males (10.0 percent). The rate for both males and females declined between 2002 and 2006 (12.3 percent for males in 2002; 13.6 percent for females in 2002) (Figure 4.4).

Figure 4.4 Past Month Cigarette Use among Youths Aged 12 to 17, by Gender: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Pregnant Women

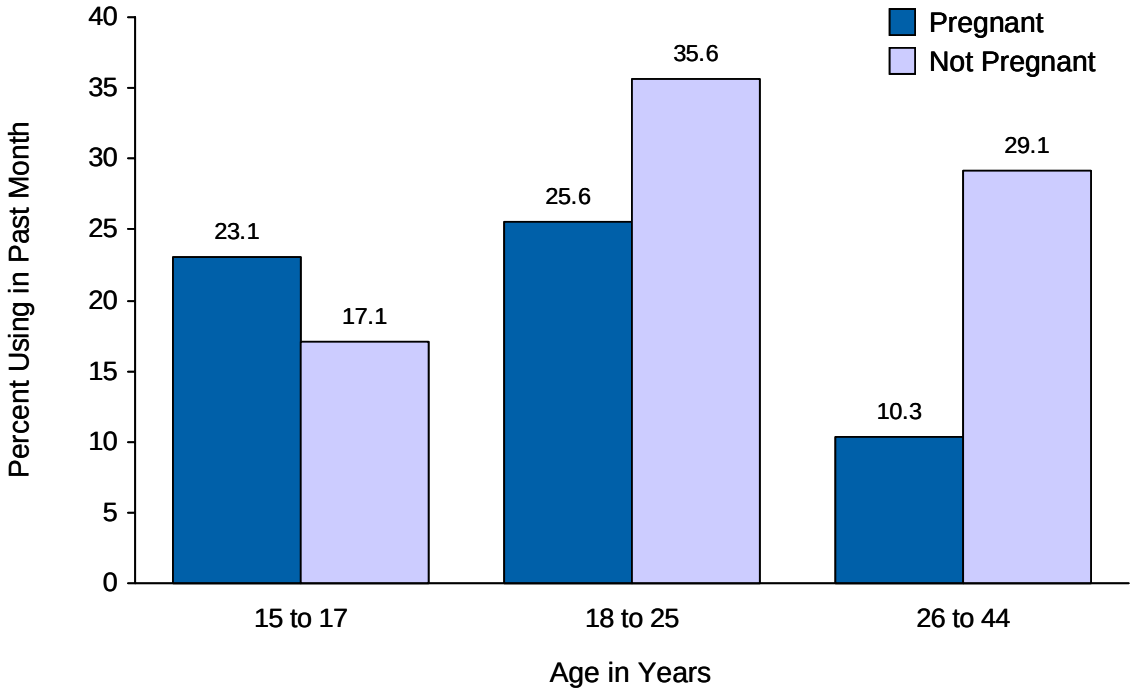
- Among women aged 15 to 44, combined data for 2005 and 2006 indicated that the rate of past month cigarette use was lower among those who were pregnant (16.5 percent) than it was among those who were not pregnant (29.5 percent).

- Looking at combined 2005-2006 data, rates of past month cigarette smoking were lower for pregnant women than nonpregnant women among those aged 26 to 44 (10.3 vs. 29.1 percent) and among those aged 18 to 25 (25.6 vs. 35.6 percent) (Figure 4.5). However, among those aged 15 to 17, the rate of cigarette smoking for pregnant women was higher than for nonpregnant women (23.1 vs. 17.1 percent), although the difference was not significant. Similar patterns were observed in the combined 2003-2004 data.

Race/Ethnicity

- In 2006, the prevalence of current use of a tobacco product among persons aged 12 or older was 16.0 percent for Asians, 24.4 percent for Hispanics, 29.1 percent for blacks, 31.4 percent for whites, 34.2 percent for persons who reported two or more races, and 42.3 percent for American Indians or Alaska Natives. There were no statistically significant changes in past month tobacco use between 2005 and 2006 for any of these racial/ethnic groups.

Figure 4.5 Past Month Cigarette Use among Women Aged 15 to 44, by Age and Pregnancy Status: 2005-2006 Combined



- In 2006, current cigarette smoking among youths aged 12 to 17 and young adults aged 18 to 25 was more prevalent among whites than blacks (12.4 vs. 6.0 percent for youths and 44.4 vs. 27.5 percent for young adults). Among adults aged 26 or older, however, whites and blacks used cigarettes at about the same rate (24.9 and 27.2 percent, respectively). The rates for Hispanics were 8.2 percent among youths, 28.8 percent among young adults, and 23.6 percent among those aged 26 or older.

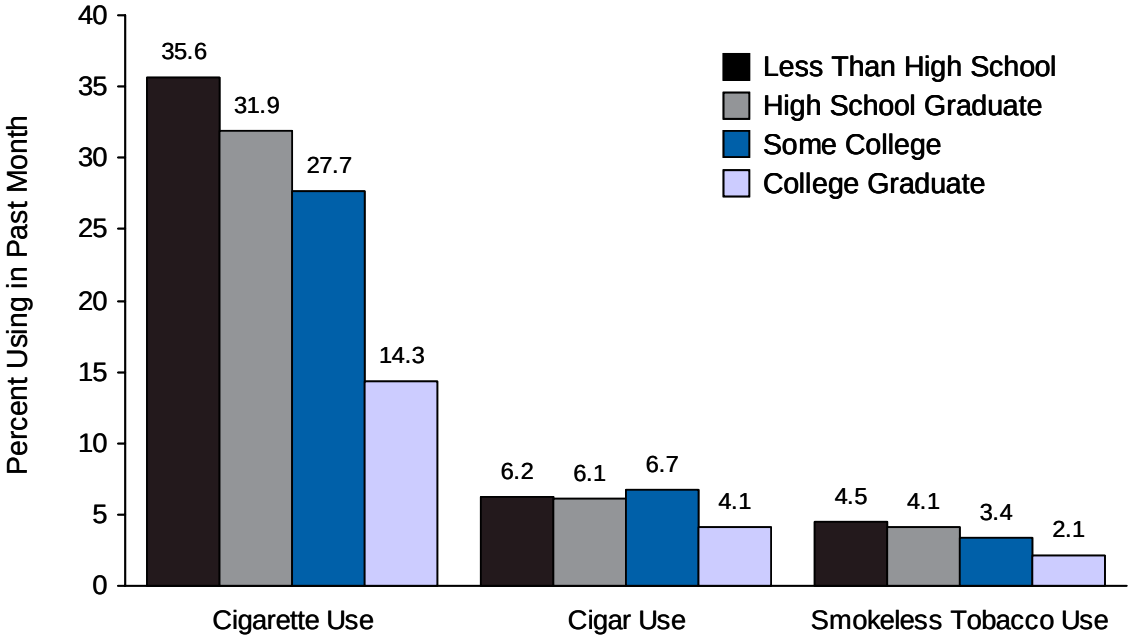
- Current use of smokeless tobacco decreased from 8.1 percent in 2005 to 3.2 percent in 2006 among American Indians or Alaska Natives aged 12 to 17. In the same age group, past month use of smokeless tobacco among blacks increased from 0.1 to 0.5 percent.

Education

- Cigarette smoking in the past month was less prevalent among adults with more education. Among adults aged 18 or older, current cigarette use in 2006 was reported by 35.6 percent of those who had not completed high school, 31.9 percent of high school graduates who did not attend college, 27.7 percent of persons with some college, and 14.3 percent of college graduates (Figure 4.6). Past month cigarette smoking among young adults aged 18 to 25 who had some college decreased from 36.1 percent in 2005 to 33.8 percent in 2006.

- In 2006, the use of smokeless tobacco in the past month was reported by 4.5 percent of persons aged 18 or older who had not completed high school, 4.1 percent of those who completed high school but did not attend college, and 3.4 percent of those who attended some college. The prevalence among college graduates, 2.1 percent, was lower than among the other groups.

Figure 4.6 Past Month Tobacco Use among Persons Aged 18 or Older, by Education: 2006



College Students

- Among young adults 18 to 22 years old, full-time college students were less likely to be current cigarette smokers than their peers who were not enrolled full time in college. Cigarette use in the past month in 2006 was reported by 28.4 percent of full-time college students, less than the rate of 43.5 percent for those not enrolled full time.

- In 2006, past month cigar smoking was equally common among male full-time college students aged 18 to 22 (19.0 percent) as among males in the same age group who were not enrolled full time in college (20.3 percent).

- Among full-time college students aged 19, current cigarette smoking increased from 24.4 percent in 2005 to 28.8 percent in 2006; however, it decreased for students aged 20 (from 32.3 to 27.2 percent) and 21 (from 36.3 to 30.2 percent). Past month cigarette smoking also declined from 32.9 to 23.5 percent among Hispanic full-time students aged 18 to 22. Use of any tobacco product and of the individual products remained stable for persons aged 18 to 22 who were not enrolled as full-time college students.

Employment

- In 2006, current cigarette smoking was more common among unemployed adults aged 18 or older than among adults who were working full time or part time (47.8 vs. 28.8 and 25.4 percent, respectively). Cigar smoking followed a similar pattern, with 11.3 percent of unemployed adults reporting past month use compared with 6.8 percent of full-time workers and 5.6 percent of part-time workers.

- Current use of smokeless tobacco was higher among adults aged 18 or older who were employed full time (4.6 percent) than among adults who were employed part time (1.9 percent) and the "other" employment category, which includes persons not in the labor force (2.0 percent). The rate among unemployed adults was 3.4 percent.

Geographic Area

- In 2006, current cigarette smoking among persons aged 12 or older was lowest in the West (21.2 percent) and Northeast (23.0 percent) and higher in the Midwest (27.4 percent) and South (27.0 percent). Use of smokeless tobacco was higher in the South and Midwest (4.3 and 3.8 percent, respectively) than in the West and Northeast (2.7 and 1.8 percent, respectively), with the lowest rate occurring in the Northeast. Cigar smoking was highest in the Midwest (6.5 percent).

- In the West, the prevalence of current smokeless tobacco use among persons aged 12 or older increased from 2.0 percent in 2005 to 2.7 percent in 2006; this increase also occurred both among youths aged 12 to 17 (from 1.0 to 1.8 percent) and adults aged 18 or older (from 2.2 to 2.8 percent). In the South, current cigarette smoking among adults aged 26 or older increased from 25.0 percent in 2005 to 27.1 percent in 2006.

- Among persons aged 12 or older, the rate of current cigarette use was associated with county type in 2006. The rates of cigarette smoking were 30.1 percent in completely rural counties, 29.3 percent in less urbanized nonmetropolitan areas, 26.6 percent in urbanized nonmetropolitan areas, 26.3 percent in small metropolitan areas, and 23.3 percent in large metropolitan areas.

- In completely rural nonmetropolitan counties, current cigarette use among persons aged 12 or older increased from 23.3 percent in 2005 to 30.1 percent in 2006, a rate similar to those observed in 2002 and 2003 (31.8 and 28.0, respectively). This pattern was largely attributable to persons aged 18 or older, whose rate of current smoking increased from 24.2 percent in 2005 to 32.2 percent in 2006, similar to the rate in 2002 (33.2 percent). Among rural youths aged 12 to 17, the percentage of current cigarette smokers in 2006 was lower than it was in 2002 (12.0 vs. 20.4 percent).

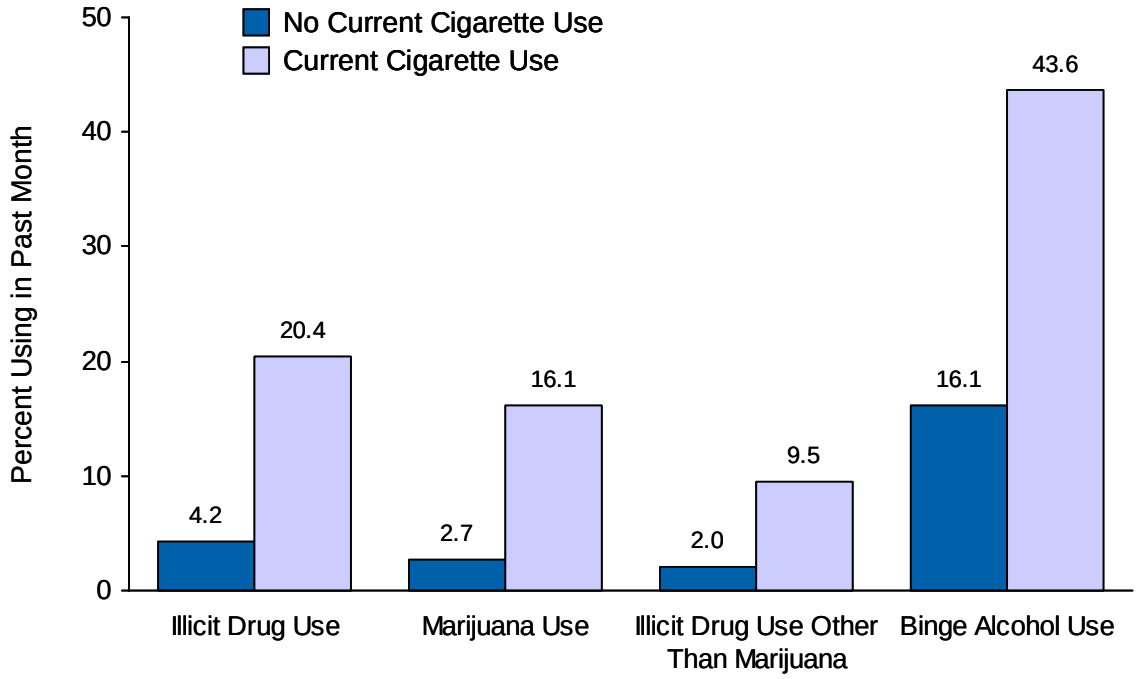
- Use of smokeless tobacco in the past month among persons aged 12 or older was lowest in large metropolitan areas (2.0 percent). In small metropolitan areas, the rate was 3.7 percent; in nonmetropolitan areas, it was 7.1 percent; and in completely rural nonmetropolitan counties, the rate was 10.0 percent.

Association with Illicit Drug and Alcohol Use

- Use of illicit drugs and alcohol was more common among current cigarette smokers than among nonsmokers in 2006, as in 2002 through 2005. Among persons aged 12 or older, 20.4 percent of past month cigarette smokers reported current use of an illicit drug compared with 4.2 percent of persons who were not current cigarette smokers (Figure 4.7). Past month alcohol use was reported by 66.3 percent of current cigarette smokers compared with 45.8 percent of those who did not use cigarettes in the past month. The association also was found with binge drinking (43.6 percent of current cigarette users vs. 16.1 percent of current nonusers) and heavy drinking (16.0 vs. 3.8 percent, respectively).

- Use of tobacco products other than cigarettes was higher among current cigarette smokers than among current nonsmokers. Smokeless tobacco use in the past month was reported by 5.0 percent of current cigarette smokers compared with 2.8 percent of nonsmokers. Moreover, 12.5 percent of current cigarette smokers also smoked cigars in the past month compared with 3.3 percent of those who did not smoke cigarettes, and 2.1 percent of current cigarette smokers also used pipes in the past month compared with 0.6 percent of those who did not smoke cigarettes.

Figure 4.7 Past Month Illicit Drug Use and Binge Alcohol Use among Persons Aged 12 or Older, by Current Cigarette Use: 2006



5. Initiation of Substance Use

Information on substance use initiation, also known as incidence or first-time use, is important for policymakers and researchers. Measures of initiation are often leading indicators of emerging patterns of substance use. They provide valuable information that can be used in the assessment of the effectiveness of current prevention programs and in focusing prevention efforts.

With its large sample size and oversampling of youths aged 12 to 17 and young adults aged 18 to 25, the National Survey on Drug Use and Health (NSDUH) provides a variety of estimates related to substance use initiation based on questions on age and month at first use. Using this information, along with the interview date and the respondent's date of birth, a date of first use is determined for each substance used by a respondent. Estimates of the number of initiates, rates of initiation, and average age at first use can be constructed for specific time periods. For example, estimates for calendar years as far back as 1965 have been tabulated from 2002-2004 NSDUH data to show long-term trends in initiation. However, methodological assessments of these long-term trend estimates of initiation have suggested that they are biased due to suspected recall errors that seem to increase with the length of recall (Gfroerer, Hughes, Chromy, Heller, & Packer, 2004). Evidence of forward and backward telescoping, where respondents shift their reported age at first use either closer to their current age or further from the interview date, also has been found (Golub, Johnson, & Labouvie, 2000; Johnson & Schultz, 2005).

Because of concerns about the validity of trend estimates of incidence based on long recall periods, an alternative approach to estimating incidence was developed and presented for the first time in the 2004 NSDUH national findings report (Office of Applied Studies [OAS], 2005b) and has continued in subsequent NSDUH reports, including the present one. The new estimates describe initiation of substance use in the 12 months prior to the interview date, and individuals who initiated use within the past 12 months are defined as recent or past year initiates. Estimates for each year are produced independently based on the data from the survey conducted that year. This approach should improve the comparability of estimates across years. Although it will not eliminate reporting biases, the approach should minimize recall bias because the estimates are based on a more recent time period than the previously produced calendar year estimates. The more recent time period also provides more timely information on incidence. Finally, an advantage of this approach is that initiation estimates can be analyzed in conjunction with past year prevalence estimates because they reflect the same time period. For example, this approach allows the estimation of initiates as a proportion of past year users. For specific substances, initiation prior to age 12 is not well covered, and initiation prior to age 11 is not included at all. This problem primarily affects estimates of initiation for cigarettes, alcohol, and inhalants because they tend to be initiated at a younger age than other substances.

As a measure of central tendency, means are heavily influenced by the presence of extreme values in the data. Thus, for the purposes of this report and unless specified otherwise, the mean age at initiation pertains to persons aged 12 to 49. This constraint was implemented so that the mean age estimates reported would not be influenced by those few respondents who were past year initiates at age 50 or older. This should increase the utility of these results to

health researchers and analysts by providing a better picture of the substance use initiation behaviors among the civilian, noninstitutionalized population in the United States. Note that this constraint only affects estimates of mean age at initiation; other estimates in this chapter, including the number and prevalence of past year initiates, are among all persons aged 12 or older.

See Section B.4.1 in Appendix B for further discussion of the methods and bias in initiation estimates. The Substance Abuse and Mental Health Services Administration (SAMHSA) continues to study the advantages and disadvantages of alternative methods of estimating incidence.

Illicit Drugs

- In 2006, an estimated 2.8 million persons aged 12 or older used an illicit drug for the first time within the past 12 months; this averages to nearly 8,000 initiates per day. This estimate was not significantly different from the number in 2005 (2.9 million). More than half of initiates (57.8 percent) were younger than age 18 when they first used, and about half of new users (53.2 percent) were female. The average age at initiation among persons aged 12 to 49 was 19.0 years.

- The specific drug categories with the largest number of recent initiates among persons aged 12 or older were nonmedical use of pain relievers (2.2 million) and marijuana use (2.1 million), followed by nonmedical use of tranquilizers (1.1 million), cocaine (1.0 million), Ecstasy (0.9 million), stimulants (0.8 million), and inhalants (0.8 million) (Figure 5.1).

- Among persons aged 12 to 49, the average age at first use of inhalants in 2006 was 15.7 years; it was 17.4 years for marijuana, 20.3 years for cocaine, 20.6 years for Ecstasy, 21.9 years for pain relievers, and 26.5 for sedatives (Figure 5.2).

Marijuana

- In 2006, there were 2.1 million persons who had used marijuana for the first time within the past 12 months; this averages to approximately 6,000 initiates per day. This estimate was about the same as the number in 2005 (2.1 million), 2004 (2.1 million), 2003 (2.0 million), and 2002 (2.2 million) (Figure 5.3).

- Most (63.3 percent) of the 2.1 million recent marijuana initiates were younger than age 18 when they first used. Among youths aged 12 to 17, an estimated 4.7 percent had used marijuana for the first time within the past year, similar to the rate in 2005 (4.5 percent).

- As a percentage of those aged 12 to 17 who had not used marijuana prior to the past year, youth marijuana initiation in 2006 (5.4 percent) was similar to the rate in 2005 (5.2 percent).

Figure 5.1 Past Year Initiates for Specific Illicit Drugs among Persons Aged 12 or Older: 2006

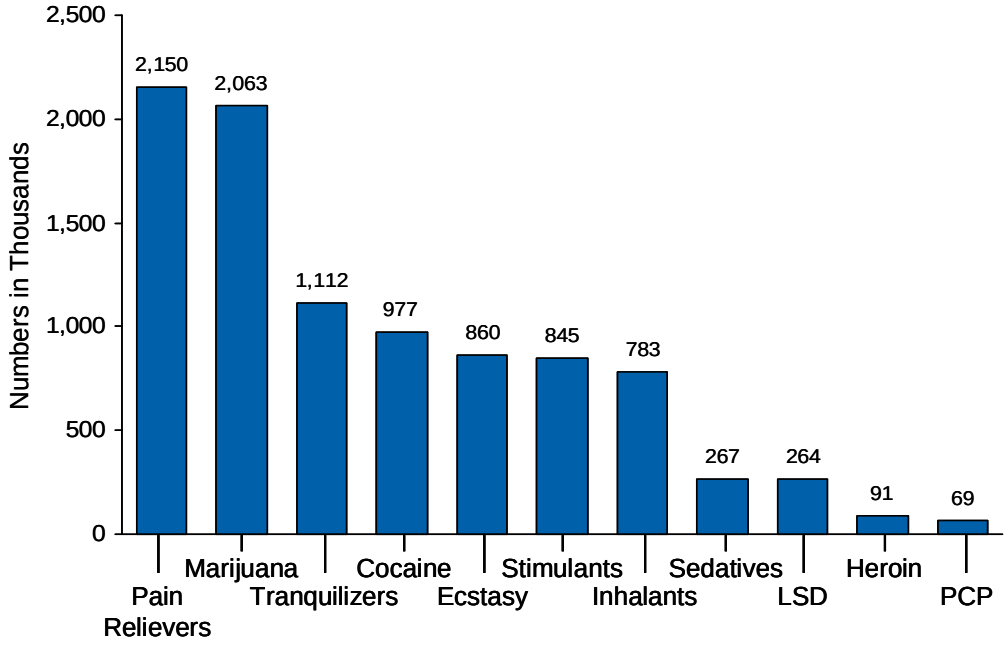


Figure 5.2 Mean Age at First Use for Specific Illicit Drugs among Past Year Initiates Aged 12 to 49: 2006

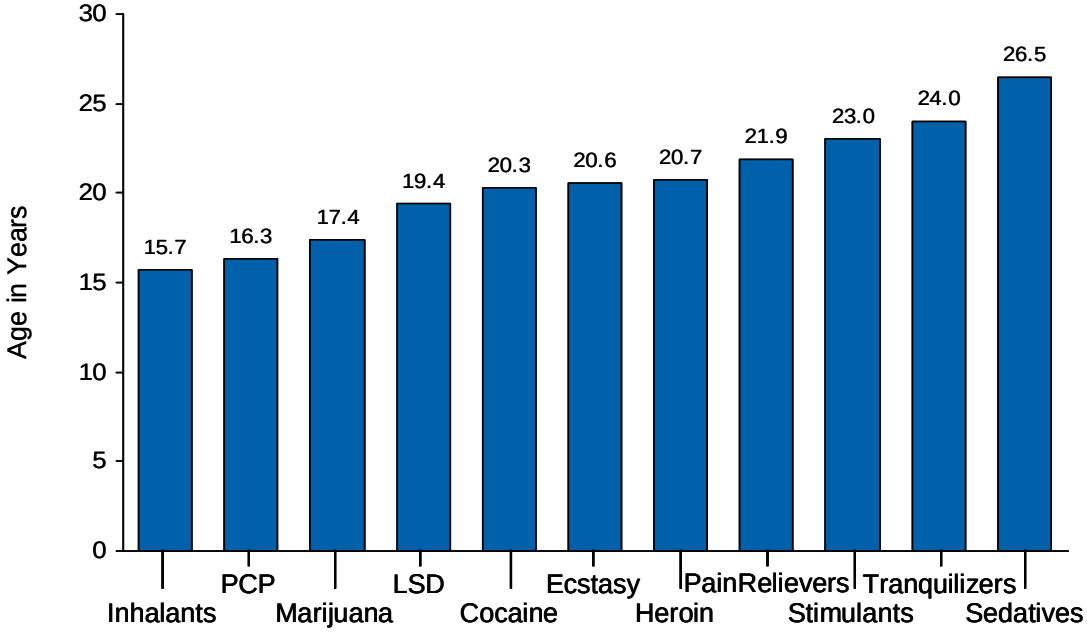
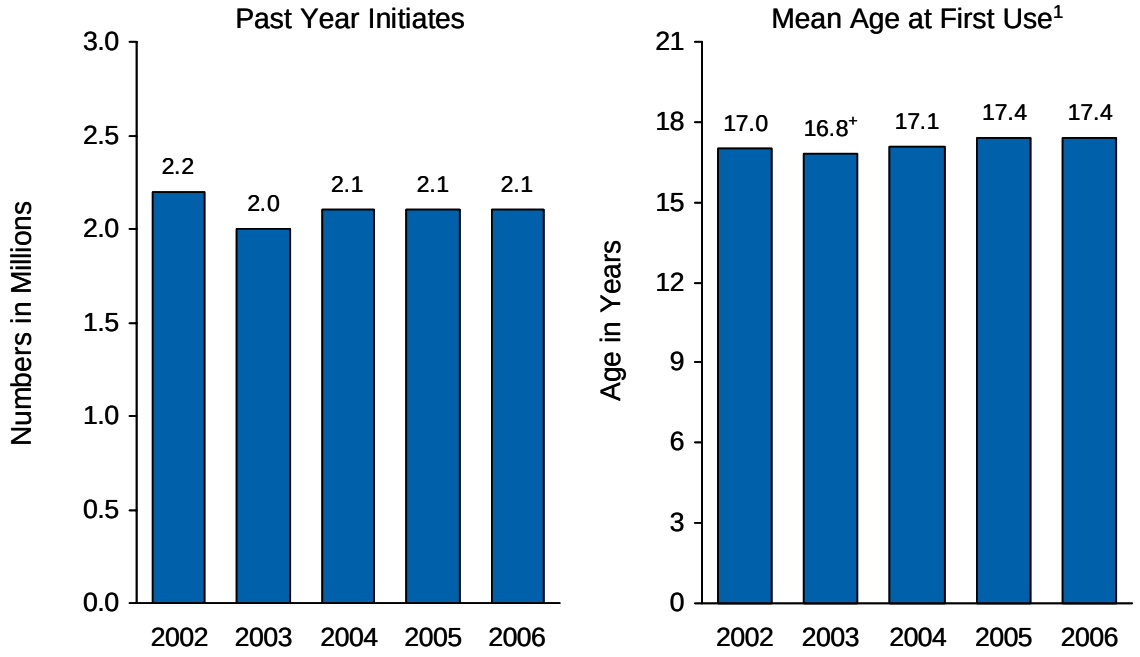


Figure 5.3 Past Year Marijuana Initiates among Persons Aged 12 or Older and Mean Age at First Use of Marijuana among Past Year Marijuana Initiates Aged 12 to 49: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.
[1] Mean-age-at-first-use estimates are for recent initiates aged 12 to 49.

- In 2006, the average age at first marijuana use among recent initiates aged 12 to 49 was 17.4 years, the same as the average in 2005 (Figure 5.3). Among recent initiates aged 12 or older who initiated use prior to the age of 21, the mean ages at first use were 15.9 years in 2002, 15.9 years in 2003, 16.0 years in 2004, 16.0 years in 2005, and 16.1 years in 2006.

Cocaine

- In 2006, there were 977,000 persons aged 12 or older who had used cocaine for the first time within the past 12 months; this averages to approximately 2,700 initiates per day. This estimate was not significantly different from the number in 2005 (872,000).

- Most (66.1 percent) of the 1.0 million recent cocaine initiates were 18 or older when they first used. The average age at first use among recent initiates aged 12 to 49 was 20.3 years, which was slightly higher than the average age in 2005 (19.7 years), although this difference in the average was not statistically significant.

Heroin

- In 2006, there were 91,000 persons aged 12 or older who had used heroin for the first time within the past 12 months. The average age at first use among recent initiates aged 12 to 49 was 20.7 years in 2006. There were no significant changes in the number of initiates or in the average age at first use from 2005 to 2006.

Hallucinogens

- In 2006, there were 1.1 million persons aged 12 or older who had used hallucinogens for the first time within the past 12 months. This estimate was not significantly different from the estimate in 2005 (953,000), but it was higher than the estimates in 2004 (934,000) and 2003 (886,000).

- There was no significant change between 2005 and 2006 in the number of past year initiates of LSD.

- There was an increase in the past year initiates of Ecstasy between 2005 and 2006. The number of Ecstasy initiates in the past year was 1.2 million in 2002, 642,000 in 2003, 607,000 in 2004, 615,000 in 2005, and 860,000 in 2006 (Figure 5.4). Most (70.1 percent) of the recent Ecstasy initiates in 2006 were aged 18 or older at the time they first used Ecstasy. The corresponding figure was 65.9 percent in 2005. Among past year initiates aged 12 to 49, the average age at initiation of Ecstasy in 2006 was 20.6 years, similar to the average age in 2005 (20.7 years).

Inhalants

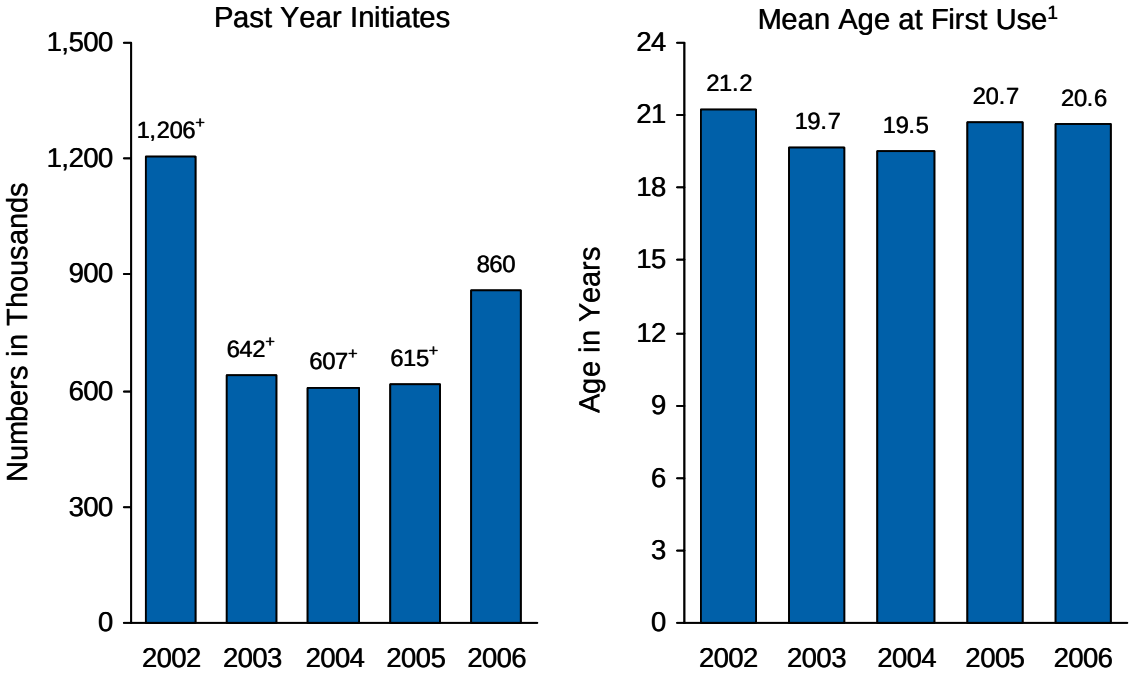
- In 2006, there were 783,000 persons aged 12 or older who had used inhalants for the first time within the past 12 months; 77.2 percent were under age 18 when they first used. The average age at first use among recent initiates aged 12 to 49 was 15.7 years in 2006. There was no significant change in the number of inhalant initiates or the average age at first use from 2005 to 2006.

Psychotherapeutics

- Psychotherapeutics include the nonmedical use of any prescription-type pain relievers, tranquilizers, stimulants, or sedatives. Over-the-counter substances are not included. In 2006, there were 2.6 million persons aged 12 or older who used psychotherapeutics nonmedically for the first time within the past year. The numbers of new users of specific psychotherapeutics in 2006 were 2.2 million for pain relievers, 1.1 million for tranquilizers, 845,000 for stimulants, and 267,000 for sedatives. There was a significant increase in the number of past year initiates of stimulants from 2005 (647,000) to 2006, but there were no significant changes in the estimates for the remaining psychotherapeutics.

- The average age at first nonmedical use of psychotherapeutics among recent initiates aged 12 to 49 was 22.9 years. For specific drug classes, the average ages were 21.9 years for pain relievers, 23.0 years for stimulants, 24.0 years for tranquilizers, and 26.5 years for sedatives.

Figure 5.4 Past Year Ecstasy Initiates among Persons Aged 12 or Older and Mean Age at First Use of Ecstasy among Past Year Ecstasy Initiates Aged 12 to 49: 2002-2006

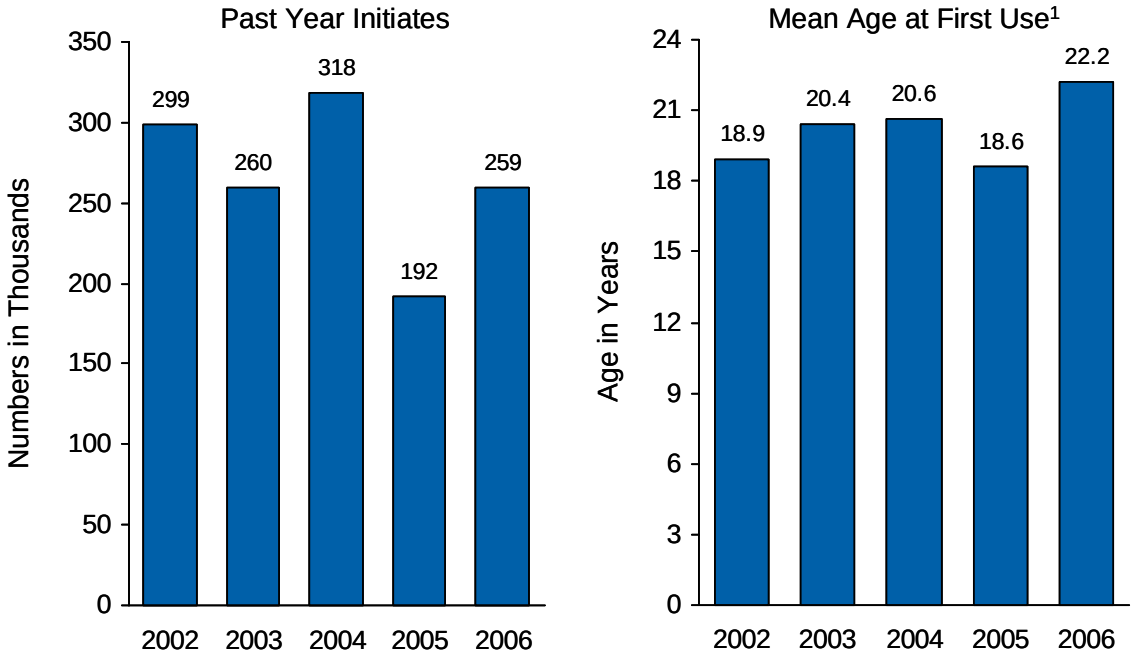


+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.
[1] Mean-age-at-first-use estimates are for recent initiates aged 12 to 49.

- In 2006, the number of new nonmedical users of OxyContin® aged 12 or older was 533,000, with an average age at first use of 22.6 years among those aged 12 to 49. These estimates are similar to those for 2005 (526,000 and 23.2 years, respectively).

- The number of recent new users of methamphetamine taken nonmedically among persons aged 12 or older was 259,000 in 2006 (Figure 5.5). This estimate was not significantly different from the estimate in each year between 2002 and 2005, although there was a decline in methamphetamine initiates from 318,000 in 2004 to 192,000 in 2005. The average age of new methamphetamine users aged 12 to 49 was 18.9 years in 2002, 20.4 years in 2003, 20.6 years in 2004, 18.6 years in 2005, and 22.2 years in 2006. The difference in the 2006 estimate of this average age was not significantly different from the estimate in each year between 2002 and 2005.

Figure 5.5 Past Year Methamphetamine Initiates among Persons Aged 12 or Older and Mean Age at First Use of Methamphetamine among Past Year Methamphetamine Initiates Aged 12 to 49: 2002-2006



[+] Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.
[1] Mean-age-at-first-use estimates are for recent initiates aged 12 to 49.

Alcohol

- In 2006, there were 4.4 million persons aged 12 or older who had used alcohol for the first time within the past 12 months; this averages to approximately 12,000 initiates per day. The number of alcohol initiates was significantly greater than in 2002 (3.9 million) and 2003 (4.1 million), but similar to the numbers in 2004 (4.4 million) and 2005 (4.3 million).

- Most (89.2 percent) of the 4.4 million recent alcohol initiates were younger than 21 at the time of initiation.

- In 2006, the average age at first alcohol use among recent initiates aged 12 to 49 was 16.6 years, similar to the corresponding 2005 estimate (16.4 years). The mean age at first use among recent initiates aged 12 or older who initiated use prior to the age of 21 was 15.8 years. This is significantly higher than the 2005 estimate (15.6 years).

Tobacco

- The number of persons aged 12 or older who smoked cigarettes for the first time within the past 12 months was 2.4 million in 2006, which was similar to the estimate in 2005 (2.3 million) but significantly greater than the estimate for 2002 (1.9 million) (Figure 5.6). Most new smokers in 2006 were under age 18 when they first smoked cigarettes (61.2 percent).

- In 2006, among recent initiates aged 12 to 49, the average age of first cigarette use was 17.1 years, similar to the average in 2005 (17.3 years).

- Of those aged 12 or older who had not smoked cigarettes prior to the past year, the past year initiation rate for cigarettes was 2.9 percent in 2006, similar to the rate in 2005 (2.7 percent). Among youths aged 12 to 17 years, incidence showed no significant changes between 2002 (6.7 percent) and 2006 (6.6 percent). This pattern was observed for both male and female youths (Figure 5.7).

- In 2006, the number of persons who had started smoking cigarettes daily within the past 12 months was 1.1 million. This estimate is similar to the estimates for 2002 (1.0 million), 2003 (1.1 million), 2004 (1.1 million), and 2005 (1.0 million). Of these new daily smokers in 2006, 44.2 percent, or 0.5 million (an average of about 1,300 initiates per day), were younger than age 18 when they started smoking daily.

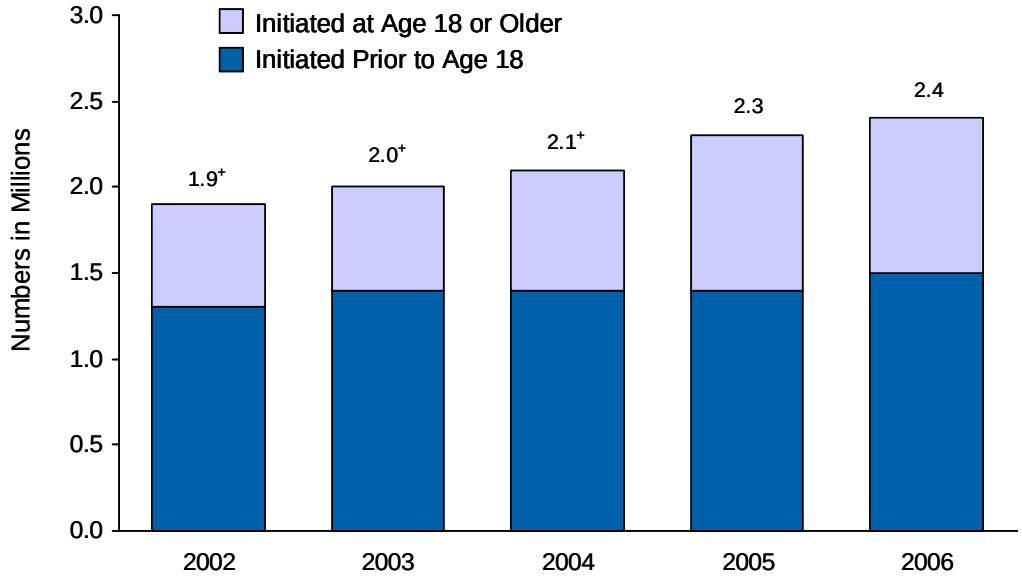
- The average age of first daily smoking among new daily smokers aged 12 to 49 in 2006 was 18.9 years. This was not significantly different from the average in 2005 (19.7 years).

- In 2006, there were 3.1 million persons aged 12 or older who had used cigars for the first time in the past 12 months, similar to the number in 2005 (3.3 million). However, this estimate reflects a significant increase in the number of initiates from 2003 (2.7 million). Among past year cigar initiates aged 12 to 49, the average age at first use was lower in 2006 (19.9 years) than in 2005 (21.2 years).

- The number of persons aged 12 or older initiating use of smokeless tobacco in the past year was higher in 2006 (1.3 million) than in 2005 (1.1 million) and more than 30 percent higher than in 2002 (951,000). More than three quarters (77.8 percent) of new initiates in 2006 were male, and about half (49.3 percent) were under age 18 when they first used.

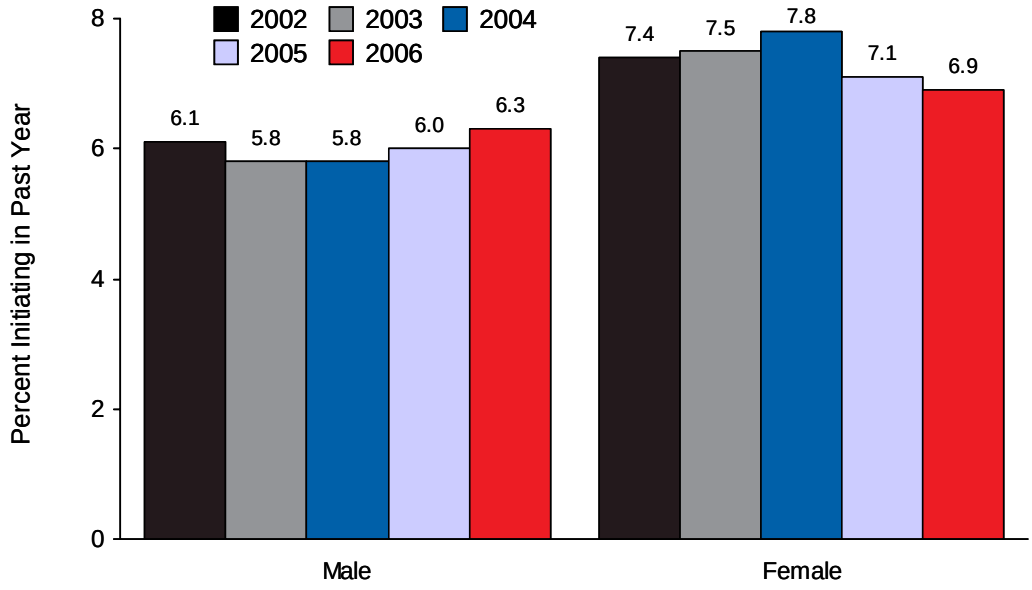
- The average age at first smokeless tobacco use among recent initiates aged 12 to 49 in 2006 was 19.0 years. Averages were 18.5 years for males and 20.9 years for females.

Figure 5.6 Past Year Cigarette Initiates among Persons Aged 12 or Older, by Age at First Use: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Figure 5.7 Past Year Cigarette Initiation among Youths Aged 12 to 17 Who Had Never Smoked, by Gender: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

6. Youth Prevention-Related Measures

The National Survey on Drug Use and Health (NSDUH) includes questions for youths aged 12 to 17 about a number of risk and protective factors that may affect the likelihood that they will engage in substance use. Risk factors are individual characteristics and environmental influences associated with an increased vulnerability to the initiation, continuation, or escalation of substance use. Protective factors include individual resilience and other circumstances that appear to reduce the likelihood of substance use. Risk and protective factors include variables that operate at different stages of development and reflect different domains of influence, including the individual, family, peer, school, community, and societal levels (Hawkins, Catalano, & Miller, 1992). Interventions to prevent substance use generally are designed to ameliorate the influence of risk factors and enhance the effectiveness of protective factors.

This chapter presents findings for youth prevention-related measures collected in the 2006 NSDUH and compares these with findings from previous years. Included are measures of perceived risk from substance use (cigarettes, alcohol, and illicit drugs), perceived availability of substances, perceived parental disapproval of substance use, feelings about peer substance use, involvement in fighting and delinquent behavior, participation in religious and other activities, exposure to substance use prevention messages and programs, and parental involvement.

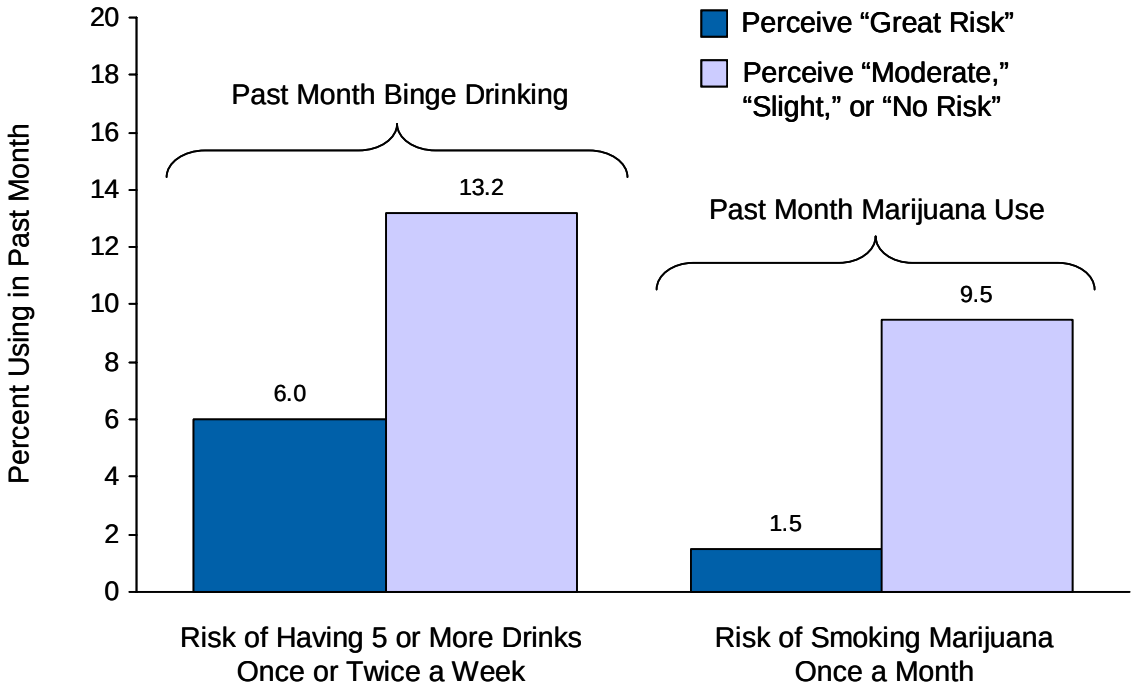
In this chapter, rates of substance use are compared for persons responding differently to questions reflecting risk or protective factors, such as the perceived risk of harm from using a substance. Because the NSDUH data for an individual are collected at only one point in time, it is not possible to determine causal connections from these data. However, a number of research studies of youths have shown that reducing risk factors and increasing protective factors can reduce rates of substance use (Botvin, Botvin, & Ruchlin, 1998). This report shows that marijuana use, cigarette use, and alcohol use among youths aged 12 to 17 decreased between 2002 and 2006, yet corresponding changes in individual risk and protective factors for the same period may or may not have occurred. There can be many reasons for this, such as the lack of or a weak causal connection, a lagged relationship between the occurrence of a risk factor and the change in drug use behavior, or that individual use is typically the result of multiple simultaneous risk factors rather than a single factor (Newcomb, Maddahian, & Bentler, 1986).

Perceptions of Risk

One factor that can influence whether youths will use tobacco, alcohol, or illicit drugs is the extent to which youths believe these substances might cause them harm. NSDUH respondents were asked how much they thought people risk harming themselves physically and in other ways when they use various substances. Response choices for these items were "great risk," "moderate risk," "slight risk," or "no risk."

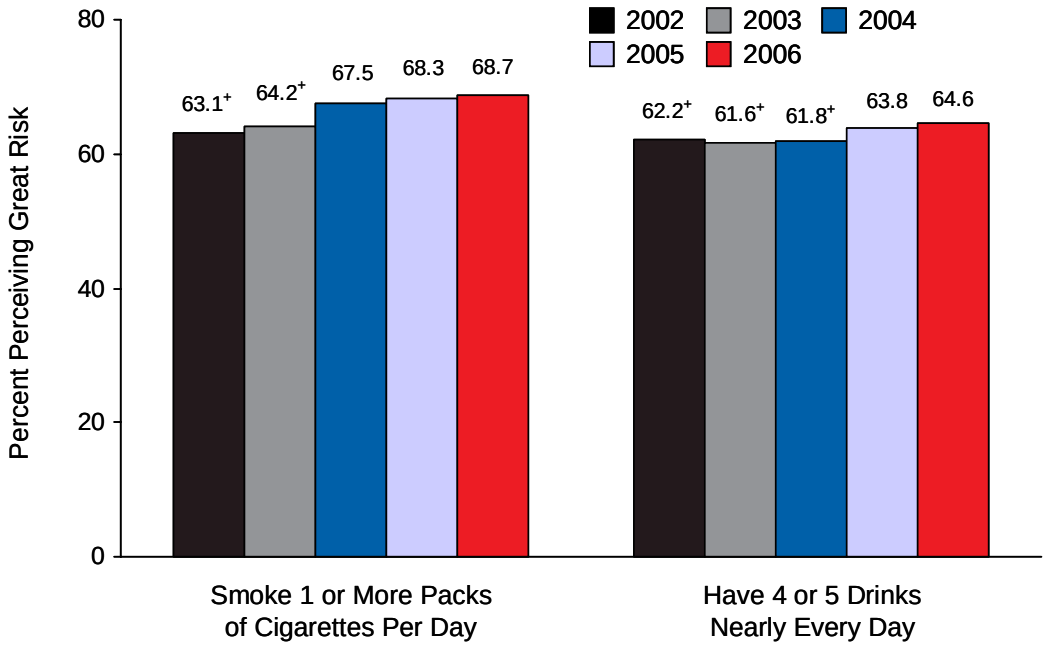
- The percentages of youths reporting binge alcohol use and use of cigarettes and marijuana in the past month were lower among those who perceived great risk in using these substances than among those who did not perceive great risk. For example, in 2006, 6.0 percent of youths aged 12 to 17 who perceived great risk from "having 5 or more drinks of an alcoholic beverage once or twice a week" reported binge drinking in the past month (consumption of five or more drinks of an alcoholic beverage on a single occasion on at least 1 day in the past 30 days); by contrast, past month binge drinking was reported by 13.2 percent of youths who saw moderate, slight, or no risk from having five or more drinks of an alcoholic beverage once or twice a week (Figure 6.1). Past month marijuana use was reported by 1.5 percent of youths who saw great risk in smoking marijuana once a month compared with 9.5 percent of youths who saw moderate, slight, or no risk.

Figure 6.1 Past Month Binge Drinking and Marijuana Use among Youths Aged 12 to 17, by Perceptions of Risk: 2006



- Increases in the perceived risk of using a substance often are associated with decreases in the rate of use of that substance. Looking over the 5-year period, the proportion of youths aged 12 to 17 who reported perceiving great risk from smoking one or more packs of cigarettes per day increased from 63.1 percent in 2002 to 68.7 percent in 2006 (Figure 6.2). The rate of past month cigarette smoking among youths aged 12 to 17 dropped from 13.0 to 10.4 percent during the same period.

Figure 6.2 Perceived Great Risk of Cigarette and Alcohol Use among Youths Aged 12 to 17: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

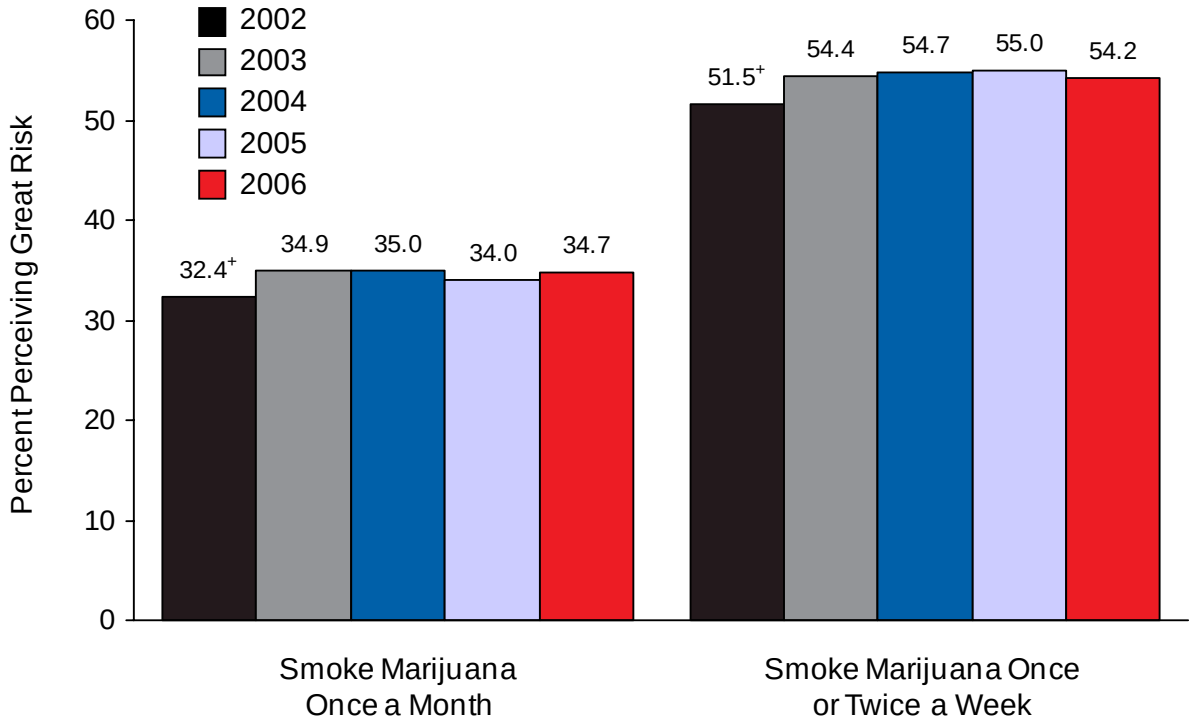
- The percentage of youths aged 12 to 17 indicating great risk in having four or five drinks nearly every day increased from 62.2 percent in 2002 to 64.6 percent in 2006 (Figure 6.2). However, the rates of past month heavy alcohol use among youths aged 12 to 17 were about the same in 2002 (2.5 percent) and 2006 (2.4 percent).

- The percentage of youths aged 12 to 17 perceiving great risk in having five or more drinks of an alcoholic beverage once or twice a week was stable between 2002 and 2006 (38.2 percent in 2002 and 39.4 percent in 2006) with the exception of a significant increase between 2004 (38.1 percent) and 2006. The rates of past month binge alcohol use among youths remained unchanged (10.7 percent in 2002 and 10.3 percent in 2006).

- The percentage of youths aged 12 to 17 indicating great risk in smoking marijuana once a month increased from 32.4 percent in 2002 to 34.7 percent in 2006 (Figure 6.3). The percentage of youths aged 12 to 17 perceiving great risk in smoking marijuana once or twice a week also increased from 51.5 percent in 2002 to 54.2 percent in 2006.

- Coincident with the increase in the perceived great risk of marijuana use, the prevalence of lifetime, past year, and past month marijuana use among youths aged 12 to 17 decreased between 2002 and 2006. During this period, lifetime use of marijuana dropped from 20.6 to 17.3 percent, past year use declined from 15.8 to 13.2 percent, and past month use fell from 8.2 to 6.7 percent.

Figure 6.3 Perceived Great Risk of Marijuana Use among Youths Aged 12 to 17: 2002-2006



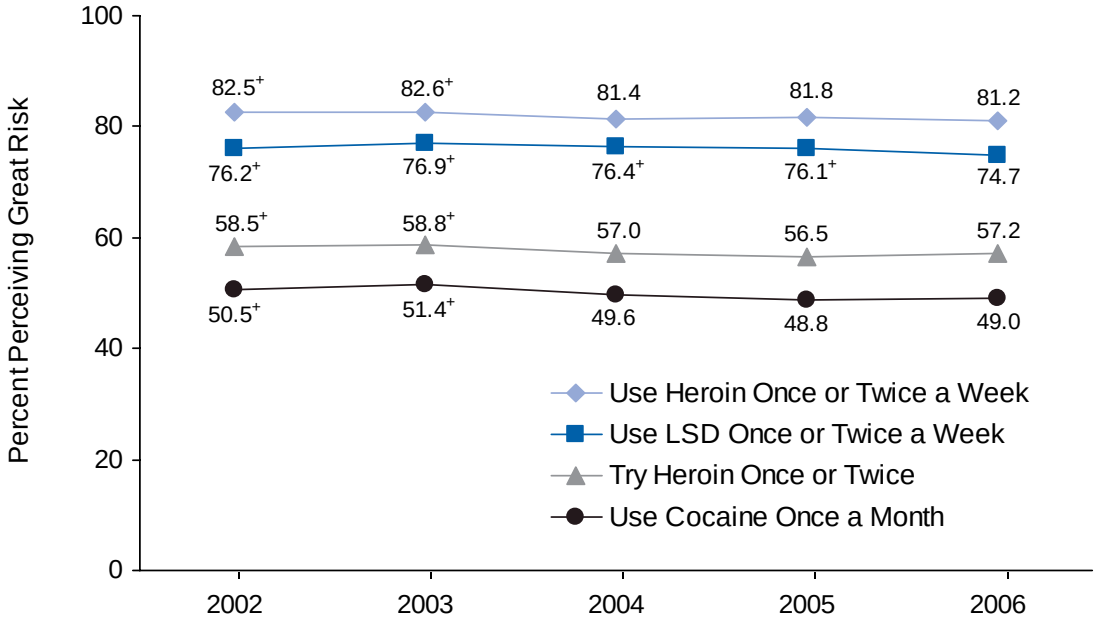
+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Between 2002 and 2006, the percentage of youths aged 12 to 17 perceiving great risk declined for the following substance use patterns: trying heroin once or twice (from 58.5 to 57.2 percent), using heroin once or twice a week (from 82.5 to 81.2 percent), using cocaine once a month (from 50.5 to 49.0 percent), and using LSD once or twice a week (from 76.2 to 74.7 percent) (Figure 6.4). Over the same period, however, the percentage of youths aged 12 to 17 indicating great risk for using cocaine once or twice a week (79.8 percent in 2002 and 79.2 percent in 2006) and for trying LSD once or twice (52.6 percent in 2002 and 51.6 percent in 2006) remained unchanged.

Perceived Availability

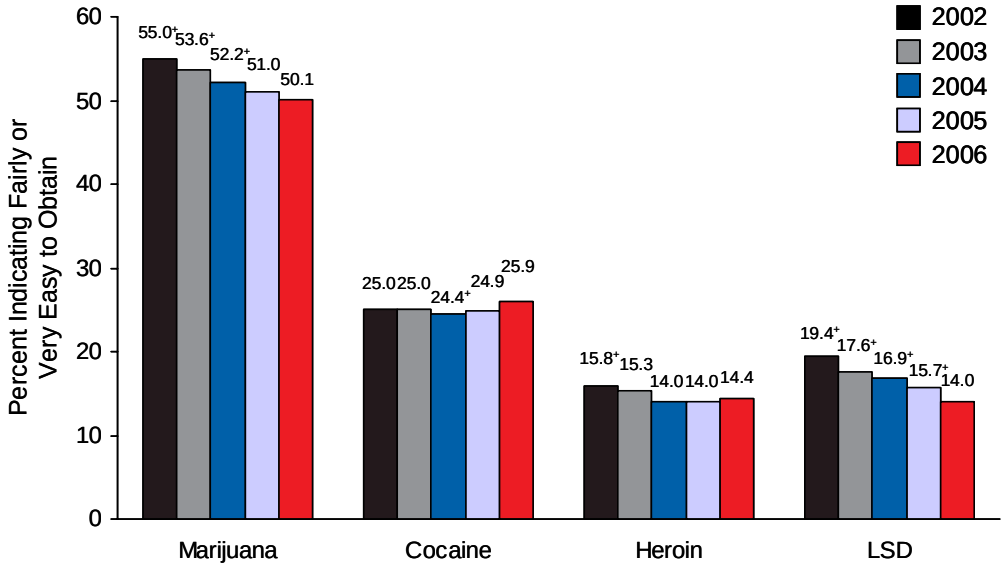
- In 2006, about half (50.1 percent) of the youths aged 12 to 17 reported that it would be "fairly easy" or "very easy" for them to obtain marijuana if they wanted some (Figure 6.5). Around one quarter reported it would be easy to get cocaine (25.9 percent). One in seven (14.0 percent) indicated that LSD would be "fairly" or "very" easily available, and 14.4 percent reported so for heroin. Between 2002 and 2006, the perceived availability of substances decreased among youths aged 12 to 17 for marijuana (from 55.0 to 50.1 percent), LSD (from 19.4 to 14.0 percent), and heroin (from 15.8 to 14.4 percent).

Figure 6.4 Perceived Great Risk of Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Figure 6.5 Perceived Availability of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2006



+ Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- The percentage of youths who reported that illicit drugs would be easy to obtain was associated with age, with perceived availability increasing with age. For example, in 2006, 20.7 percent of those aged 12 or 13 said it would be fairly or very easy to obtain marijuana compared with 52.9 percent of those aged 14 or 15 and 73.9 percent of those aged 16 or 17.

- In 2006, 15.3 percent of youths aged 12 to 17 indicated that they had been approached by someone selling drugs in the past month. This was down from the 16.7 percent reported in 2002.

Perceived Parental Disapproval of Substance Use

- Most youths aged 12 to 17 believed their parents would "strongly disapprove" of their using substances. In 2006, 91.4 percent of youths aged 12 to 17 reported that their parents would strongly disapprove of their smoking one or more packs of cigarettes per day. A majority of youths (90.4 percent) reported that their parents would strongly disapprove of their trying marijuana or hashish once or twice, and 89.6 percent reported their parents would strongly disapprove of their having one or two drinks of an alcoholic beverage nearly every day. These rates of perceived parental disapproval in using substances in 2006 were similar to those reported in 2005.

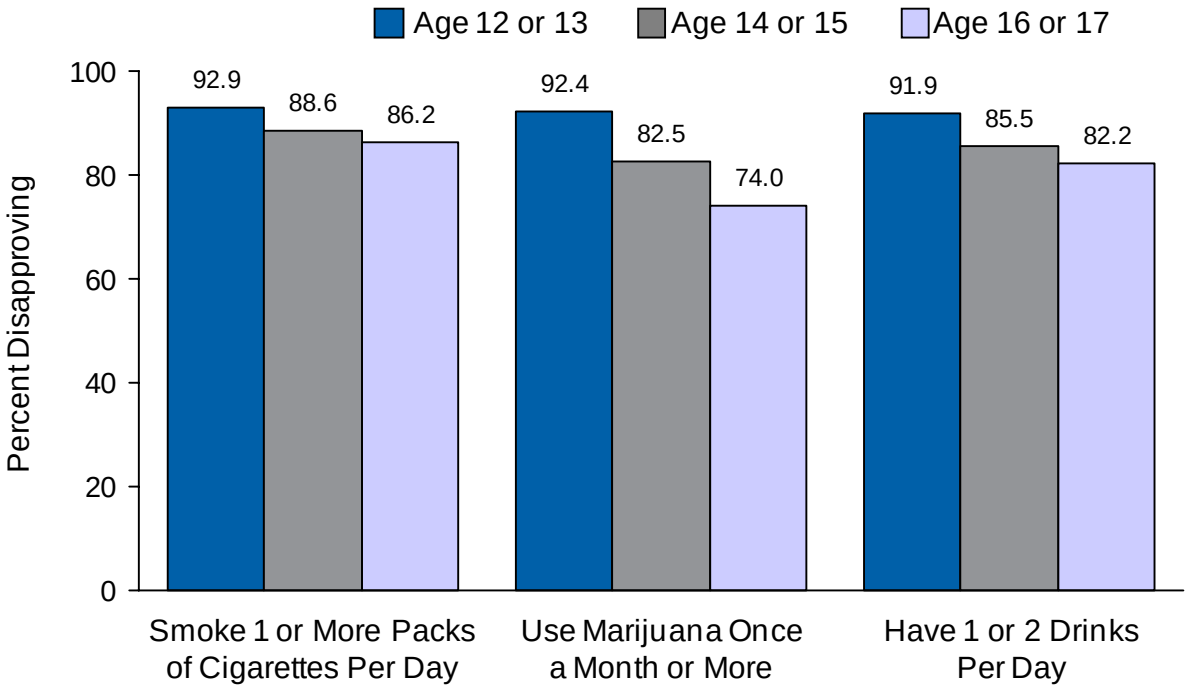
- Youths aged 12 to 17 who believed their parents would strongly disapprove of their using a particular substance were less likely to use that substance than were youths who believed their parents would somewhat disapprove or neither approve nor disapprove. For example, in 2006, past month cigarette use was reported by 7.4 percent of youths who perceived strong parental disapproval of their smoking one or more packs of cigarettes per day compared with 42.1 percent of youths who believed their parents would not strongly disapprove. Current marijuana use also was much less prevalent among youths who perceived strong parental disapproval for trying marijuana or hashish once or twice than among those who did not (4.6 vs. 26.5 percent, respectively).

Feelings about Peer Substance Use

- A majority of youths aged 12 to 17 reported that they disapprove of their peers using substances. In 2006, 89.1 percent of youths "strongly" or "somewhat" disapproved of their peers smoking one or more packs of cigarettes per day, and 82.8 percent strongly or somewhat disapproved of peers using marijuana or hashish once a month or more. These rates were higher than those reported in 2005 (88.2 and 81.4 percent, respectively). In 2006, 81.7 percent of youths strongly or somewhat disapproved of peers trying marijuana or hashish once or twice, and 86.4 percent of youths strongly or somewhat disapproved of peers having one or two drinks of an alcoholic beverage nearly every day. Both estimates were similar to those reported in 2005 (80.8 and 85.6 percent, respectively).

- The percentage strongly or somewhat disapproving of peers' substance use generally decreased with age. In 2006, disapproval of peers using marijuana once a month or more, for example, was reported by 92.4 percent of youths aged 12 or 13, 82.5 percent of those aged 14 or 15, and 74.0 percent of those aged 16 or 17 (Figure 6.6).

Figure 6.6 Disapproval of Peer Substance Use among Youths Aged 12 to 17, by Age: 2006



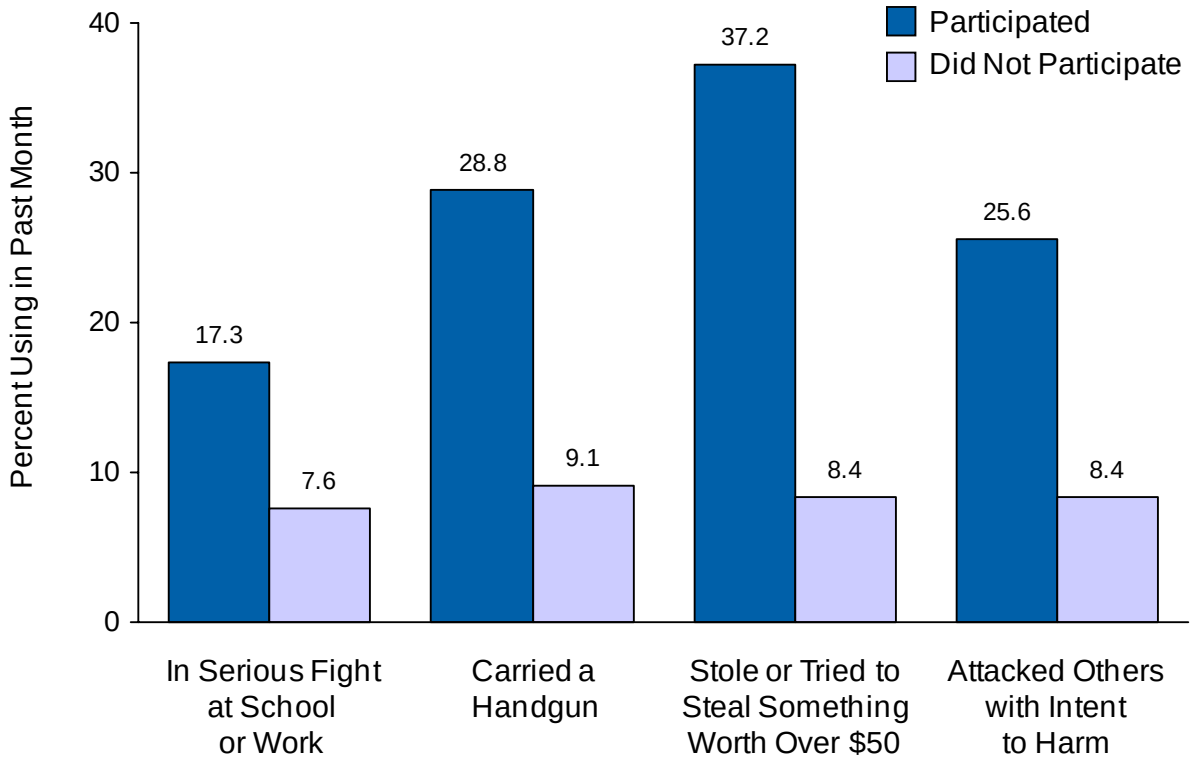
- In 2006, past month marijuana use was reported by 2.5 percent of youths aged 12 to 17 who strongly or somewhat disapproved of their peers using marijuana once a month or more compared with 26.4 percent of youths who reported that they neither approve nor disapprove of such behavior from their peers.

Fighting and Delinquent Behavior

- In 2006, 22.6 percent of youths aged 12 to 17 reported that, in the past year, they had gotten into a serious fight at school or at work; 17.0 percent had taken part in a group-against-group fight; 3.2 percent had carried a handgun at least once; 3.3 percent had sold illegal drugs; 4.8 percent had, at least once, stolen or tried to steal something worth more than $50 (increased from 4.2 percent in 2005); and 7.9 percent had, in at least one instance, attacked others with the intent to harm or seriously hurt them.

- Youths aged 12 to 17 who had engaged in fighting or other delinquent behaviors were more likely than other youths to have used illicit drugs in the lifetime, past year, and past month. For example, in 2006, past month illicit drug use was reported by 17.3 percent of youths who had gotten into serious fights at school or work in the past year compared with 7.6 percent of those who had not engaged in fighting, and by 37.2 percent of those who had stolen or tried to steal something worth over $50 in the past year compared with 8.4 percent of those who had not engaged in such theft (Figure 6.7).

Figure 6.7 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Participation in Fighting and Delinquent Behavior in the Past Year: 2006



Religious Beliefs and Participation in Activities

- In 2006, 31.7 percent of youths aged 12 to 17 reported that they had attended religious services 25 or more times in the past year; 77.0 percent expressed agreement with the statement that religious beliefs are a very important part of their lives; 68.3 percent agreed with the statement that religious beliefs influence how they make decisions in life; and 35.1 percent agreed with the statement that it is important for their friends to share their religious beliefs. Findings for these measures remained unchanged from 2005 to 2006. Lifetime, past year, and past month use of illicit drugs, cigarettes, and alcohol (including binge alcohol) were lower among youths who agreed with these statements than among those who disagreed. For example, past month illicit drug use was reported by 7.6 percent of those who agreed that religious beliefs are a very important part of life compared with 17.1 percent of those who disagreed with that statement.

Exposure to Substance Use Prevention Messages and Programs

- In 2006, approximately one in eight youths aged 12 to 17 (11.4 percent) reported that they had participated in drug, tobacco, or alcohol prevention programs outside of school in the past year. However, the prevalence of past month use of illicit drugs, marijuana, cigarettes, or binge alcohol was not significantly lower among those who participated in these prevention programs outside of school (8.9 percent, 6.1 percent, 8.9 percent, and 9.8 percent, respectively) than among those who did not (9.9 percent, 6.7 percent, 10.6 percent, and 10.4 percent, respectively).

- In 2006, 79.4 percent of youths aged 12 to 17 reported having seen or heard drug or alcohol prevention messages from sources outside of school, which declined from 81.1 percent in 2005. The prevalence of past month use of illicit drugs, marijuana, cigarettes, or binge alcohol was lower among those who reported having such exposure (9.2 percent, 6.2 percent, 9.5 percent, and 10.0 percent, respectively) than among those who reported having no such exposure (12.0 percent, 8.5 percent, 13.8 percent, and 11.5 percent, respectively).

- In 2006, 59.8 percent of youths aged 12 to 17 reported that they had talked at least once in the past year with at least one of their parents about the dangers of drug, tobacco, or alcohol use, which was the same as in 2005. Among youths who reported having had such conversations with their parents, rates of past month use of illicit drugs, cigarettes, and alcohol (including binge alcohol) were lower than among youths who did not talk about substance abuse. That is, past month use of illicit drugs was reported by 8.6 percent of youths who had talked with their parents about drug, tobacco, or alcohol use compared with 11.3 percent of those who had not. Past month cigarette use was lower among youths who had talked with their parents (9.4 percent) than among those who had not (11.8 percent), and past month binge drinking was lower among youths who had talked with their parents (9.3 percent) than among those who had not (11.8 percent).

Parental Involvement

- Youths aged 12 to 17 were asked a number of questions related to the extent of support, oversight, and control that they perceived their parents exercised over them in the year prior to the survey. In 2006, among youths aged 12 to 17 enrolled in school in the past year, 79.5 percent reported that in the past year their parents always or sometimes checked on whether or not they had completed their homework, 79.8 percent reported that their parents always or sometimes provided help with their homework, and 69.1 percent reported that their parents limited the amount of time that they spent out with friends on school nights. Also in 2006, among youths aged 12 to 17, 87.5 percent reported that in the past year their parents made them always or sometimes do chores around the house, 39.4 percent reported that their parents limited the amount of time that they watched television, and 86.6 percent reported that their parents always or sometimes let them know that they had done a good job. All of these percentages were similar to those reported in 2005. In addition, among youths aged 12 to 17 in 2006, 86.0 percent reported that their parents let them know they were proud of something they had done, which increased from the 84.8 percent in 2005.

- In 2006, past month use of illicit drugs, cigarettes, and alcohol (including binge alcohol) was lower among youths aged 12 to 17 who reported that their parents always or sometimes engaged in monitoring behaviors than among youths whose parents "seldom" or "never" engaged in such behaviors. For example, the rate of past month use of any illicit drug was 8.1 percent for youths whose parents always or sometimes helped with homework compared with 16.9 percent among youths who indicated that their parents seldom or never helped. Rates for current cigarette smoking were 8.9 and 17.4 percent for the two groups of youths, respectively, and rates of past month binge alcohol use were 9.0 versus 17.0 percent correspondingly.

7. Substance Dependence, Abuse, and Treatment

The National Survey on Drug Use and Health (NSDUH) includes a series of questions to assess the prevalence of substance use disorders (i.e., dependence on or abuse of a substance) in the past 12 months. Substances include alcohol and illicit drugs, such as marijuana, cocaine, heroin, hallucinogens, and inhalants, and the nonmedical use of prescription-type psychotherapeutic drugs. These questions are used to classify persons as dependent on or abusing specific substances based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) (American Psychiatric Association [APA], 1994).

The questions related to dependence ask about health and emotional problems associated with substance use, unsuccessful attempts to cut down on use, tolerance, withdrawal, reducing other activities to use substances, spending a lot of time engaging in activities related to substance use, or using the substance in greater quantities or for a longer time than intended. The questions on abuse ask about problems at work, home, and school; problems with family or friends; physical danger; and trouble with the law due to substance use. Dependence is considered to be a more severe substance use problem than abuse because it involves the psychological and physiological effects of tolerance and withdrawal. Although individuals may meet the criteria specified for both dependence and abuse, persons meeting the criteria for both are classified as having dependence, but not abuse. Persons defined with abuse in this report do not meet the criteria for dependence.

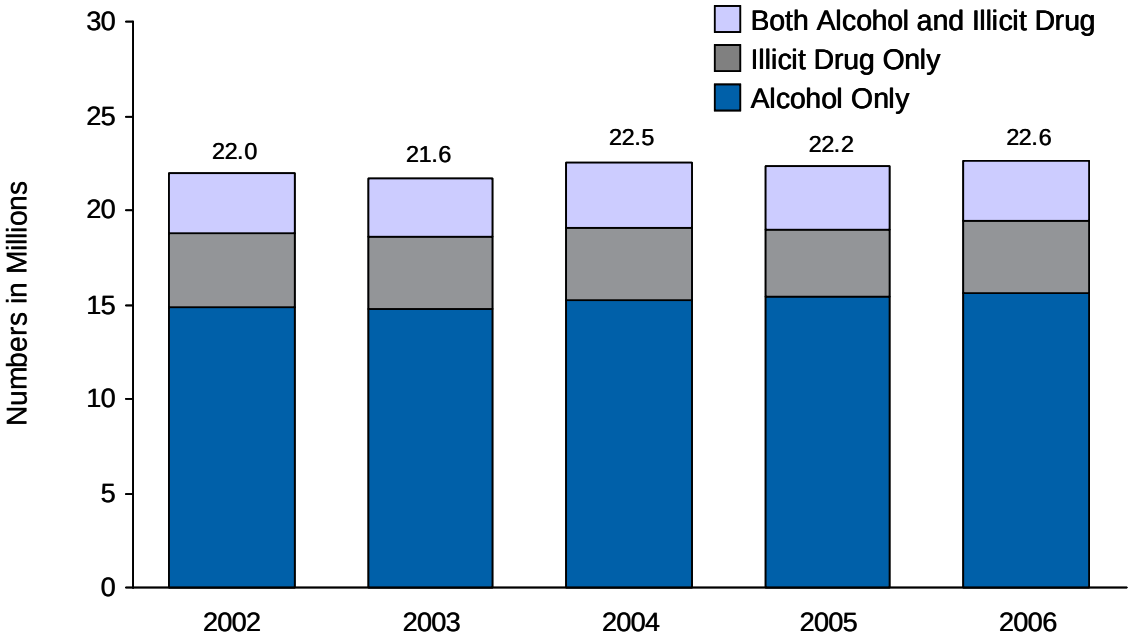
This chapter provides estimates of the prevalence and patterns of substance use disorders occurring in the past year from the 2006 NSDUH and compares these estimates against the results from the 2002, 2003, 2004, and 2005 surveys. It also provides estimates of the prevalence and patterns of the receipt of treatment in the past year for problems related to substance use. This chapter concludes with a discussion of the need for and the receipt of treatment at specialty facilities for problems associated with substance use.

7.1 Substance Dependence or Abuse

- In 2006, an estimated 22.6 million persons aged 12 or older were classified with substance dependence or abuse in the past year (9.2 percent of the population aged 12 or older) (Figure 7.1). Of these, 3.2 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.8 million were dependent on or abused illicit drugs but not alcohol, and 15.6 million were dependent on or abused alcohol but not illicit drugs.

- The number of persons with substance dependence or abuse was stable between 2002 and 2006 (22.0 million in 2002, 21.6 million in 2003, 22.5 million in 2004, 22.2 million in 2005, and 22.6 million in 2006). In 2006, 18.8 million persons aged 12 or older were classified with dependence on or abuse of alcohol (7.6 percent), which has remained unchanged since 2002.

Figure 7.1 Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2002-2006

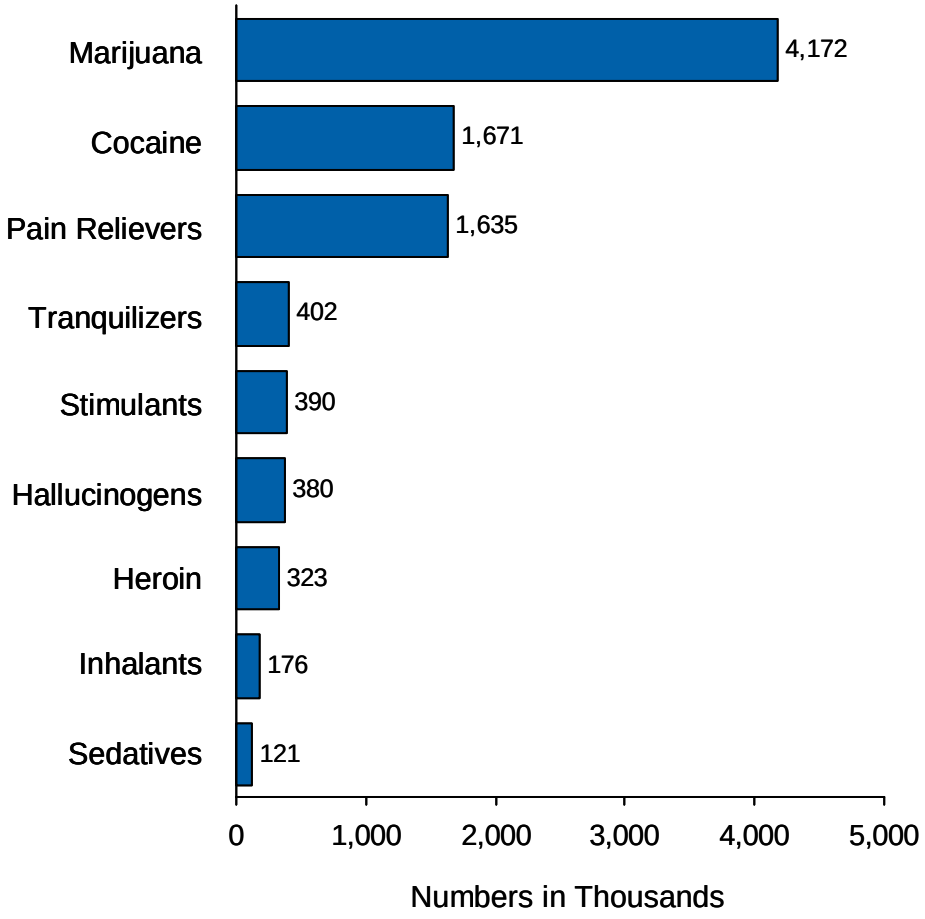


[+]Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- The specific illicit drugs that had the highest levels of past year dependence or abuse in 2006 were marijuana, followed by cocaine and pain relievers. Of the 7.0 million persons aged 12 or older classified with dependence on or abuse of illicit drugs in 2006, 4.2 million were dependent on or abused marijuana and hashish (representing 1.7 percent of the total population aged 12 or older, and 59.4 percent of all those classified with illicit drug dependence or abuse), 1.7 million persons were classified with dependence on or abuse of cocaine, and 1.6 million persons were classified with dependence on or abuse of pain relievers (Figure 7.2).

- Between 2002 and 2006, the percentages of persons with dependence on or abuse of illicit drugs (3.0 percent in 2002, 2.9 percent in 2003, 3.0 percent in 2004, 2.8 percent in 2005, and 2.9 percent in 2006) and with dependence on or abuse of alcohol (7.7 percent in 2002, 7.5 percent in 2003, 7.8 percent in 2004, 7.7 percent in 2005, and 7.6 percent in 2006) remained unchanged.

Figure 7.2 Dependence on or Abuse of Specific Illicit Drugs in the Past Year among Persons Aged 12 or Older: 2006

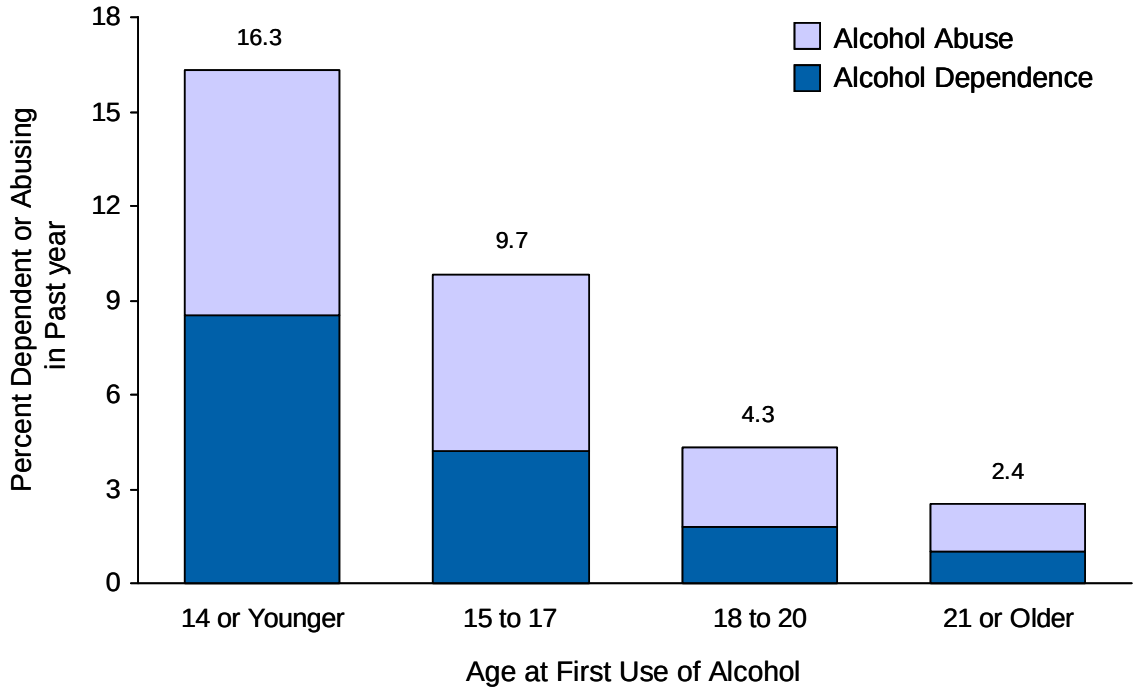


Age at First Use

- In 2006, among adults aged 18 or older who first tried marijuana at age 14 or younger, 12.9 percent were classified with illicit drug dependence or abuse, higher than the 2.2 percent of adults who had first used marijuana at age 18 or older.

- Among adults, age at first use of alcohol was associated with dependence on or abuse of alcohol in 2006. For example, among adults aged 18 or older who first tried alcohol at age 14 or younger, 17.5 percent were classified with alcohol dependence or abuse compared with only 3.7 percent of adults who had first used alcohol at age 18 or older. Adults aged 21 or older who had first used alcohol before age 21 were more likely than adults who had their first drink at age 21 or older to be classified with alcohol dependence or abuse (9.6 vs. 2.4 percent) (Figure 7.3).

Figure 7.3 Alcohol Dependence or Abuse in the Past Year among Adults Aged 21 or Older, by Age at First Use of Alcohol: 2006



Age

- Rates of substance dependence or abuse were associated with age. In 2006, the rate of substance dependence or abuse among adults aged 18 to 25 (21.3 percent) was higher than that among youths aged 12 to 17 (8.0 percent) and among adults aged 26 or older (7.2 percent).

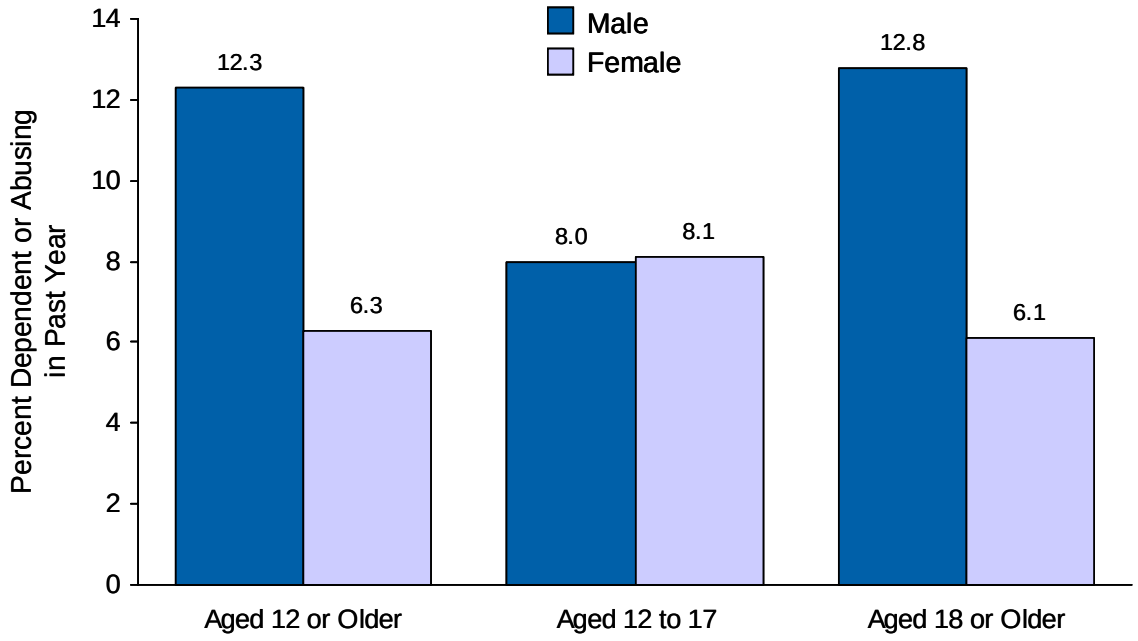
- In 2006, among persons with substance dependence or abuse, the proportion with dependence on or abuse of illicit drugs also was associated with age: 57.4 percent of youths aged 12 to 17, 36.9 percent of young adults aged 18 to 25, and 24.1 percent of adults aged 26 or older.

- The rate of substance dependence or abuse among youths aged 12 to 17 remained the same between 2005 and 2006 (8.0 percent in each year). The rate of alcohol dependence or abuse among youths aged 12 to 17 remained stable during the same period (5.5 percent in 2005 vs. 5.4 percent in 2006).

Gender

- As was the case from 2002 through 2005, the rate of substance dependence or abuse for males aged 12 or older in 2006 was about twice as high as the rate for females (12.3 vs. 6.3 percent) (Figure 7.4). Among youths aged 12 to 17, however, the rate of substance dependence or abuse among males was similar to the rate among females (8.0 vs. 8.1 percent).

Figure 7.4 Substance Dependence or Abuse in the Past Year, by Age and Gender: 2006



- The rate of illicit drug dependence or abuse among males aged 12 or older was similar between 2005 and 2006 (3.5 percent in 2005 and 3.7 percent in 2006). The rate for females remained unchanged during the same period (2.1 percent in 2005 vs. 2.0 percent in 2006).

Race/Ethnicity

- In 2006, among persons aged 12 or older, the rate of substance dependence or abuse was the lowest among Asians (4.3 percent). Racial/ethnic groups reporting similar rates included Native Hawaiians or Other Pacific Islanders (12.0 percent), persons reporting two or more races (12.0 percent), Hispanics (10.0 percent), whites (9.2 percent), and blacks (9.0 percent). The rate among American Indians or Alaska Natives (19.0 percent) was higher than the rates among Hispanics, whites, and blacks. These rates were all similar to the rates reported in 2005.

Education/Employment

- Rates of substance dependence or abuse were associated with level of education in 2006. Among adults aged 18 or older, those who graduated from a college or university had a lower rate of dependence or abuse (7.3 percent) than those who graduated from high school (9.4 percent), those who did not graduate from high school (10.3 percent), and those with some college (10.8 percent).

- Rates of substance dependence or abuse were associated with current employment status in 2006. A higher percentage of unemployed adults aged 18 or older were classified with dependence or abuse (19.5 percent) than were full-time employed adults (10.4 percent) or part-time employed adults (10.2 percent).

- Most adults aged 18 or older with substance dependence or abuse were employed full time in 2006. Of the 20.6 million adults classified with dependence or abuse, 12.7 million (61.5 percent) were employed full time.

Criminal Justice Populations

- In 2006, adults aged 18 or older who were on parole or a supervised release from jail during the past year had higher rates of dependence on or abuse of a substance (36.9 percent) than their counterparts who were not on parole or supervised release during the past year (9.1 percent).

- In 2006, probation status was associated with substance dependence or abuse. The rate of substance dependence or abuse was 39.7 percent among adults who were on probation during the past year, which was significantly higher than the rate among adults who were not on probation during the past year (8.7 percent).

Geographic Area

- In 2006, rates of substance dependence or abuse for persons aged 12 or older showed evidence of differences by region, with the West (10.2 percent) and Midwest (10.0 percent) having higher rates than the South (8.5 percent) and Northeast (8.4 percent). However, rates for substance dependence or abuse among persons aged 12 or older in 2006 did not vary significantly by county type (9.4 percent in large metropolitan counties, 9.0 percent in small metropolitan counties, and 8.9 percent in nonmetropolitan counties).

7.2 Past Year Treatment for a Substance Use Problem

Estimates described in this section refer to treatment received to reduce or stop 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. Persons could report receiving treatment at more than one location. Note that the definition of treatment in this section is different from the definition of specialty treatment

described in Section 7.3. Specialty treatment only includes treatment at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or a mental health center.

Individuals who reported receiving substance use treatment but were missing information on whether the treatment was specifically for alcohol use or illicit drug use were not counted in estimates of illicit drug use treatment or in estimates of alcohol use treatment; however, they were counted in estimates for "drug or alcohol use" treatment.

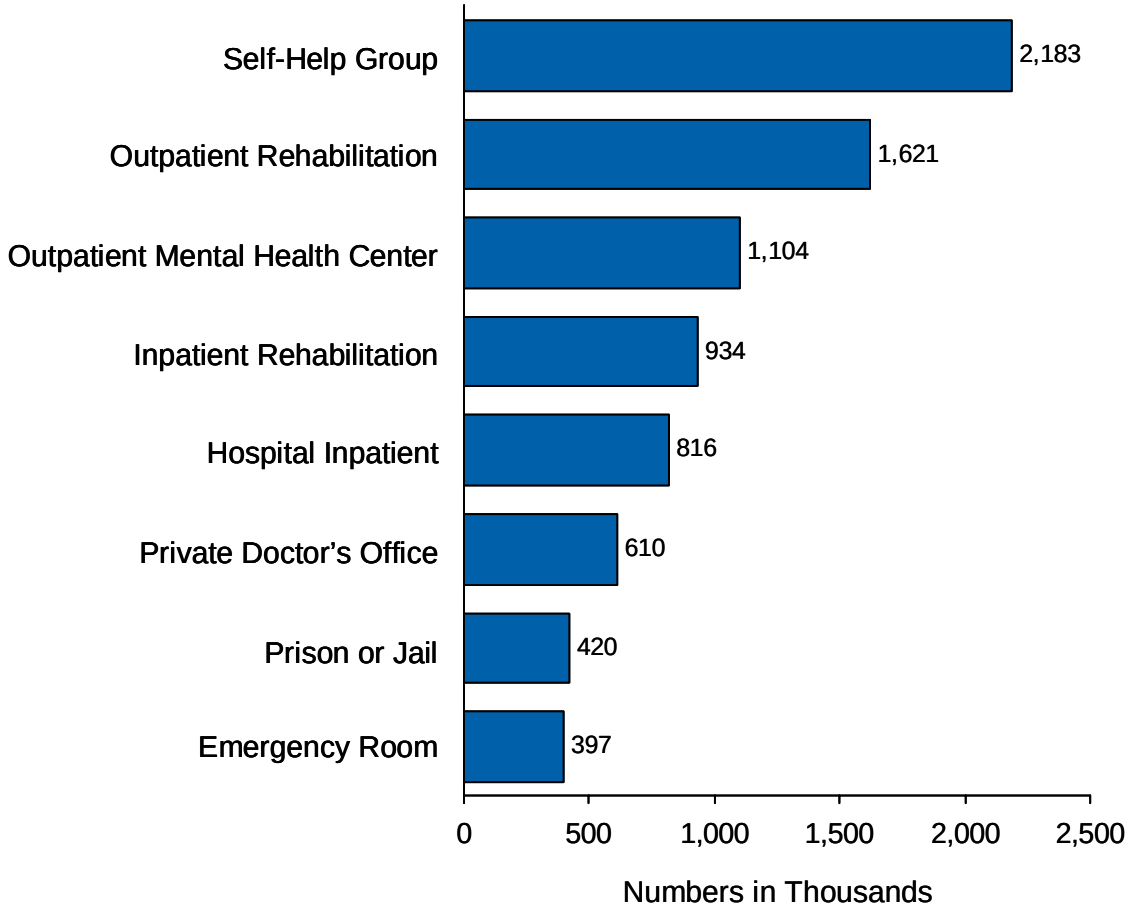
- In 2006, 4.0 million persons aged 12 or older (1.6 percent of the population) received some kind of treatment for a problem related to the use of alcohol or illicit drugs. Of these, 1.6 million received treatment for the use of both alcohol and illicit drugs, 0.9 million received treatment for the use of illicit drugs but not alcohol, and 1.2 million received treatment for the use of alcohol but not illicit drugs. (Note that estimates by substance do not add to the total number of persons receiving treatment because the total includes persons who reported receiving treatment but did not report for which substance the treatment was received.)

- The number and the percentage of the population receiving substance use treatment within the past year remained stable between 2005 and 2006 (3.9 million, 1.6 percent in 2005; 4.0 million, 1.6 percent in 2006).

- In 2006, among the 4.0 million persons aged 12 or older who received treatment for alcohol or illicit drug use in the past year, 2.2 million persons received treatment at a self-help group, and 1.6 million received treatment at a rehabilitation facility as an outpatient (Figure 7.5). There were 1.1 million persons who received treatment at a mental health center as an outpatient, 934,000 persons who received treatment at a rehabilitation facility as an inpatient, 816,000 at a hospital as an inpatient, 610,000 at a private doctor's office, 420,000 at a prison or jail, and 397,000 at an emergency room. None of these estimates changed significantly between 2005 and 2006.

- In 2006, during their most recent treatment in the past year, 2.5 million persons reported receiving treatment for alcohol use, and 1.2 million persons reported receiving treatment for marijuana use (Figure 7.6). Accordingly, estimates on receiving treatment for the use of other drugs were 928,000 persons for cocaine, 547,000 for pain relievers, 535,000 for stimulants, 466,000 for heroin, and 442,000 for hallucinogens. (Note that respondents could indicate that they received treatment for more than one substance during their most recent treatment.)

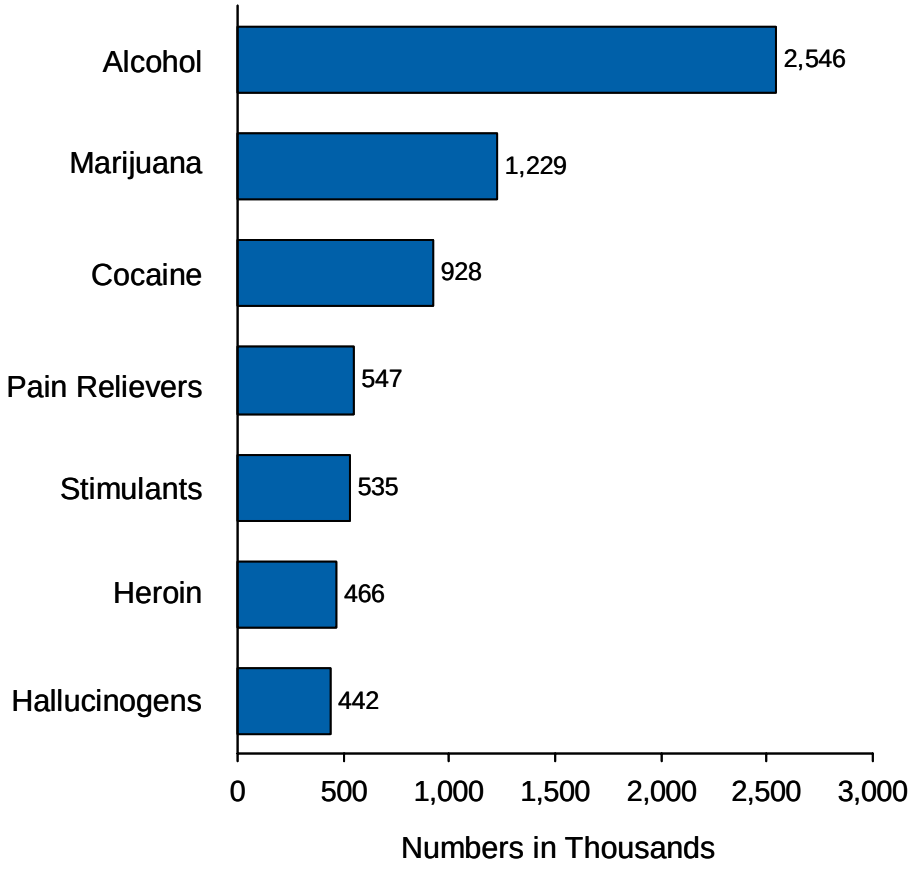
Figure 7.5 Locations Where Past Year Substance Use Treatment Was Received among Persons Aged 12 or Older: 2006



7.3 Need and Receipt of Specialty Treatment

This section discusses the need for and receipt of treatment for a substance use problem at a "specialty" treatment facility. Specialty treatment is defined as treatment received at any of the following types of facilities: hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), or mental health centers. It does not include treatment at an emergency room, private doctor's office, self-help group, prison or jail, or hospital as an outpatient. An individual is defined as needing treatment for an alcohol or drug use problem if he or she met the DSM-IV (APA, 1994) diagnostic criteria for dependence on or abuse of alcohol or illicit drugs in the past 12 months or if he or she received specialty treatment for alcohol use or illicit drug use in the past 12 months.

Figure 7.6 Substances for Which Most Recent Treatment Was Received in the Past Year among Persons Aged 12 or Older: 2006



In this section, an individual needing treatment for an illicit drug use problem is defined as receiving treatment for his or her drug use problem only if he or she reported receiving specialty treatment for drug use in the past year. Thus, an individual who needed treatment for illicit drug use but only received specialty treatment for alcohol use in the past year or who received treatment for illicit drug use only at a facility not classified as a specialty facility was not counted as receiving treatment for drug use. Similarly, an individual who needed treatment for an alcohol use problem was only counted as receiving alcohol use treatment if the treatment was received for alcohol use at a specialty treatment facility. Individuals who reported receiving specialty substance use treatment but were missing information on whether the treatment was specifically for alcohol use or drug use were not counted in estimates of specialty drug use treatment or in estimates of specialty alcohol use treatment; however, they were counted in estimates for "drug or alcohol use" treatment.

In addition to questions about symptoms of substance use problems that are used to classify respondents' need for treatment based on DSM-IV criteria, NSDUH includes questions asking respondents about their perceived need for treatment (i.e., whether they felt they needed treatment or counseling for illicit drug use or alcohol use). In this report, estimates for perceived

need for treatment are only discussed for persons who were classified as needing treatment (based on DSM-IV criteria) but did not receive treatment at a specialty facility. Similarly, estimates for whether a person made an effort to get treatment are only discussed for persons who felt the need for treatment.

Illicit Drug or Alcohol Use Treatment and Treatment Need

- In 2006, 23.6 million persons aged 12 or older needed treatment for an illicit drug or alcohol use problem (9.6 percent of the persons aged 12 or older). Of these, 2.5 million (1.0 percent of persons aged 12 or older and 10.8 percent of those who needed treatment) received treatment at a specialty facility. Thus, 21.1 million persons (8.6 percent of the population aged 12 or older) needed treatment for an illicit drug or alcohol use problem but did not receive treatment at a specialty substance abuse facility in the past year. These estimates are similar to the estimates for 2005.

- Of the 2.5 million people aged 12 or older who received specialty substance use treatment in 2006, 731,000 persons received treatment for both alcohol and illicit drug use, 826,000 received treatment for alcohol use only, and 845,000 received treatment for illicit drug use only.

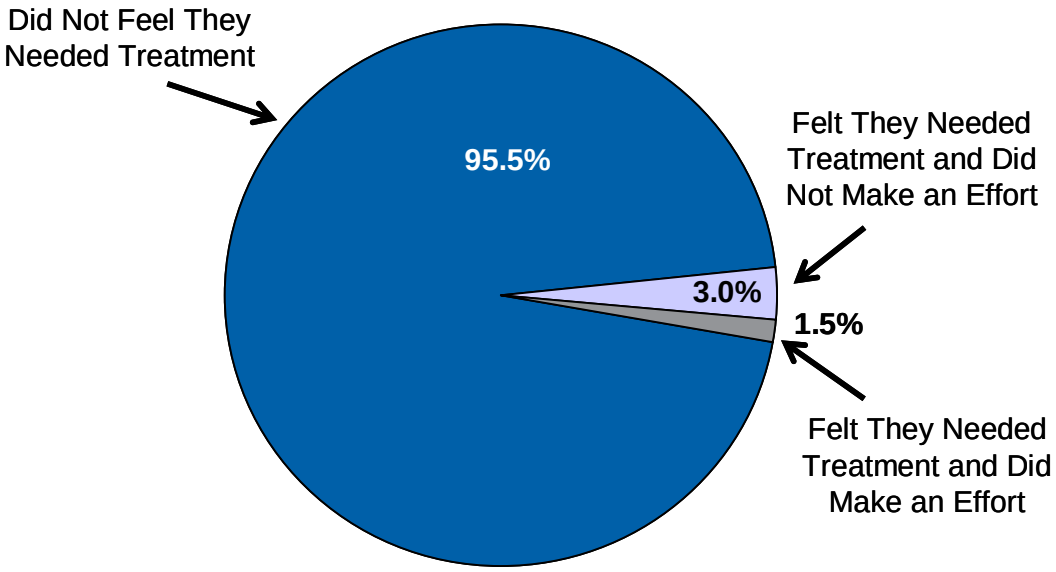
- In 2006, among persons who received their last or current substance use treatment at a specialty facility in the past year, 42.1 percent reported using their "own savings or earnings" as a source of payment for their most recent specialty treatment. In addition, 37.4 percent reported using private health insurance, 26.9 percent reported using Medicaid, 21.4 percent reported using public assistance other than Medicaid, 20.9 percent reported using Medicare, and 16.3 percent reported relying on family members. (Note that persons could report more than one source of payment.)

- In 2006, more than half of the 2.5 million persons aged 12 or older who received specialty substance use treatment in the past year also received treatment at a self-help group (1.5 million persons). In addition, among those who received specialty substance use treatment, 377,000 received treatment at a prison or jail and 369,000 received treatment at an emergency room. The number who received treatment at a private doctor's office in 2006 was higher than the number in 2005 (422,000 vs. 254,000, respectively).

- Of the 21.1 million persons in 2006 who were classified as needing substance use treatment but not receiving treatment at a specialty facility in the past year, 940,000 persons (4.5 percent) reported that they perceived a need for treatment for their illicit drug or alcohol use problem (Figure 7.7). Of these 940,000 persons who felt they needed treatment but did not receive treatment in 2006, 314,000 (33.5 percent) reported that they made an effort to get treatment, and 625,000 (66.5 percent) reported making no effort to get treatment. These estimates were similar to the numbers reported in 2005 (296,000 and 865,000, respectively).

- The number and the percentage of youths aged 12 to 17 who needed treatment for an illicit drug or alcohol use problem remained unchanged between 2005 and 2006 (2.1 million youths, and 8.3 percent of the population in 2005; 2.1 million youths, and 8.2 percent of the population in 2006). Of the 2.1 million persons in 2006, only 181,000 youths received treatment at a specialty facility (about 8.7 percent of youths who needed treatment), leaving 1.9 million youths who needed treatment for a substance use problem but did not receive it at a specialty facility.

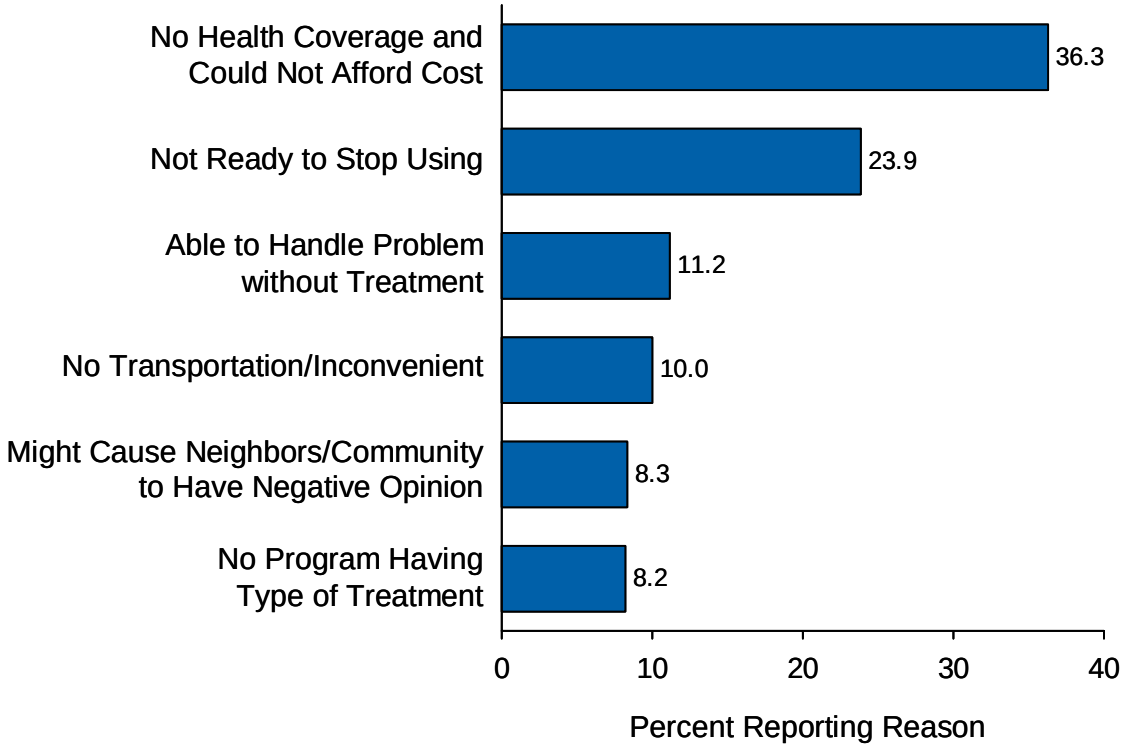
Figure 7.7 Past Year Perceived Need for and Effort Made to Receive Specialty Treatment among Persons Aged 12 or Older Needing But Not Receiving Treatment for Illicit Drug or Alcohol Use: 2006



- Based on 2004-2006 combined data, the five most often reported reasons for not receiving illicit drug or alcohol use treatment among persons who needed but did not receive treatment at a specialty facility and perceived a need for treatment included (a) not ready to stop using (37.2 percent), (b) no health coverage and could not afford cost (30.9 percent), (c) possible negative effect on job (13.3 percent), (d) not knowing where to go for treatment (12.6 percent), and (e) concern that might cause neighbors/community to have negative opinion (11.0 percent).

- Based on 2004-2006 combined data, among persons who needed but did not receive illicit drug or alcohol use treatment, made an effort to receive treatment, and felt a need for treatment, the four most often reported reasons for not receiving treatment were (a) no health insurance and could not afford cost (36.3 percent), (b) not ready to stop using (23.9 percent), (c) able to handle the problem without treatment (11.2 percent), and (d) no transportation/inconvenient (10.0 percent) (Figure 7.8).

Figure 7.8 Reasons for Not Receiving Substance Use Treatment among Persons Aged 12 or Older Who Needed and Made an Effort to Get Treatment But Did Not Receive Treatment and Felt They Needed Treatment: 2004-2006 Combined



Illicit Drug Use Treatment and Treatment Need

- In 2006, the number of persons aged 12 or older needing treatment for an illicit drug use problem was 7.8 million (3.2 percent of the total population). Of these, 1.6 million (0.6 percent of the total population and 20.3 percent of the persons who needed treatment) received treatment at a specialty facility for an illicit drug use problem in the past year. Thus, there were 6.2 million persons (2.5 percent of the total population) who needed treatment but did not receive treatment at a specialty facility for an illicit drug use problem in 2006.

- The number of persons needing treatment for illicit drug use in 2006 (7.8 million) was similar to the number needing treatment in 2002 (7.7 million), 2003 (7.3 million), 2004 (8.1 million), and 2005 (7.6 million). Also, the number of persons needing but not receiving specialty treatment in the past year for an illicit drug use problem in 2006 (6.2 million) was similar to the estimates in 2002 (6.3 million), 2003 (6.2 million), 2004 (6.6 million), and 2005 (6.3 million).

- Of the 6.2 million people who needed but did not receive specialty treatment for illicit drug use in 2006, 496,000 (8.0 percent) reported that they perceived a need for treatment for their illicit drug use problem. Of the 496,000 persons who felt a need for treatment in 2006 (similar to the number reported in 2005, 601,000 persons), 182,000 (36.6 percent) reported that they made an effort and 314,000 (63.4 percent) reported making no effort to get treatment.

- Among youths aged 12 to 17, there were 1.2 million (4.8 percent) who needed treatment for an illicit drug use problem in 2006. Of this group, only 136,000 received treatment at a specialty facility (11.2 percent of youths aged 12 to 17 who needed treatment), leaving 1.1 million youths who needed treatment but did not receive it at a specialty facility.

- Among people who needed but did not receive illicit drug use treatment and felt they needed treatment (based on 2004-2006 combined data), the six most often reported reasons for not receiving treatment were (a) no health coverage and could not afford cost (35.1 percent), (b) not ready to stop using (31.8 percent), (c) not knowing where to go for treatment (14.7 percent), (d) concern that getting treatment might cause neighbors/community to have negative opinion (13.5 percent), (e) possible negative effect on job (12.8 percent), and (f) being able to handle the problem without treatment (12.4 percent).

Alcohol Use Treatment and Treatment Need

- In 2006, the number of persons aged 12 or older needing treatment for an alcohol use problem was 19.5 million (7.9 percent of the population aged 12 or older). Of these, 1.6 million (0.6 percent of the total population and 8.0 percent of the people who needed treatment for an alcohol use problem) received alcohol use treatment at a specialty facility. Thus, there were 18.0 million people who needed treatment but did not receive treatment at a specialty facility for an alcohol use problem. Between 2005 and 2006, there were no statistically significant changes in the number and the percentage of persons needing, receiving, or needing but not receiving treatment for an alcohol use problem.

- Among the 18.0 million people who needed but did not receive treatment for an alcohol use problem in 2006, there were 541,000 (3.0 percent) who felt they needed treatment for their alcohol use problem. Of these, 220,000 (40.6 percent) made an effort but were unable to get treatment, and 321,000 (59.4 percent) did not make an effort to get treatment.

- In 2006, there were 1.4 million youths (5.5 percent) aged 12 to 17 who needed treatment for an alcohol use problem. Of this group, only 101,000 received treatment at a specialty facility (0.4 percent of all youths and 7.2 percent of youths who needed treatment), leaving 1.3 million youths who needed but did not receive treatment.

8. Prevalence and Treatment of Mental Health Problems

This chapter presents findings on mental health problems in the United States, including the prevalence and treatment of serious psychological distress (SPD) and major depressive episode (MDE) and the association of these problems with substance use and substance dependence or abuse (substance use disorder).

SPD is an overall indicator of past year psychological distress that is derived from the K6 scale administered to adults aged 18 or older in the National Survey on Drug Use and Health (NSDUH). Numerical scores derived from responses to these six questions range from 0 to 24. For this report, a score of 13 or higher is considered SPD. It is notable that the data related to SPD in 2005 and 2006 are not directly comparable with data from earlier years because of study design changes. Further information on the measurement of SPD, the scoring algorithm, and the study design changes is provided in Section B.4.4 of Appendix B.

A module of questions designed to obtain measures of lifetime and past year prevalence of MDE, severity of the MDE as measured by role impairments, and treatment for depression was administered to adults aged 18 or older and youths aged 12 to 17 in 2006. Some questions in the adolescent depression module were modified slightly to make them more appropriate for youths. Given these differences, adult and youth depression estimates are presented separately in this chapter.

MDE is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had symptoms that met the criteria for major depressive disorder as described in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (American Psychiatric Association [APA], 1994). It should be noted that no exclusions were made for MDE caused by medical illness, bereavement, or substance use disorders.

Although there is substantial overlap in the populations classified with SPD and MDE, there are important distinctions between the definitions of the two. Meeting the criteria for SPD indicates that the respondent endorsed having symptoms at a level known to be indicative of having a mental disorder (i.e., any disorder such as an anxiety or mood disorder). Meeting the criteria for MDE indicates that the respondent had the specific physical and emotional symptom profile indicative of MDE in the past 12 months. MDE is known to be a fairly common disorder that often has a significant impact on a person's work, home, and social life. The questions used to measure MDE and role impairment and the scoring algorithm for these responses are included in Section B.4.5 of Appendix B.

This chapter also presents data on the receipt of treatment for any type of mental health problem among adults and adolescents. This may be different from the treatment received specifically for MDE, and it is possible for a respondent to have indicated receipt of treatment for depression without having indicated that he or she received treatment for any mental health problems. Different questions and definitions of treatment and counseling are used for adults and

youths. Treatment for adults aged 18 or older is defined as the receipt of treatment or counseling for any problem with emotions, "nerves," or mental health in the past year in any inpatient or outpatient setting or the use of prescription medication for a mental or emotional condition. Treatment for youths aged 12 to 17 is defined as receiving treatment or counseling for problems with behaviors or emotions from specific mental health or other health professionals in school, home, or from other outpatient or inpatient settings within the past year. Both the youth and the adult questions specifically exclude treatment for problems with substance use, which is asked about elsewhere in the interview. Estimates of unmet need for treatment are reported separately for all adults and for adults with SPD. Unmet need is defined using a question in the 2006 NSDUH that asks whether the respondent perceived a need for mental health treatment or counseling at any time in the 12 months prior to the interview but did not receive it.

It is important to note that because the survey covers only the U.S. civilian, noninstitutionalized population, persons who were residing in long-term psychiatric or other institutions at the time of the interview were not included in the NSDUH sample.

8.1 Adults Aged 18 or Older

Prevalence of Serious Psychological Distress

- In 2006, there were an estimated 24.9 million adults aged 18 or older in the United States with SPD in the past year. This represents 11.3 percent of all adults in this country, a rate equal the rate of SPD in 2005 (Figure 8.1).

- Rates of SPD in 2006 were highest for adults aged 18 to 25 (17.7 percent) and lowest for adults aged 50 or older (6.9 percent).

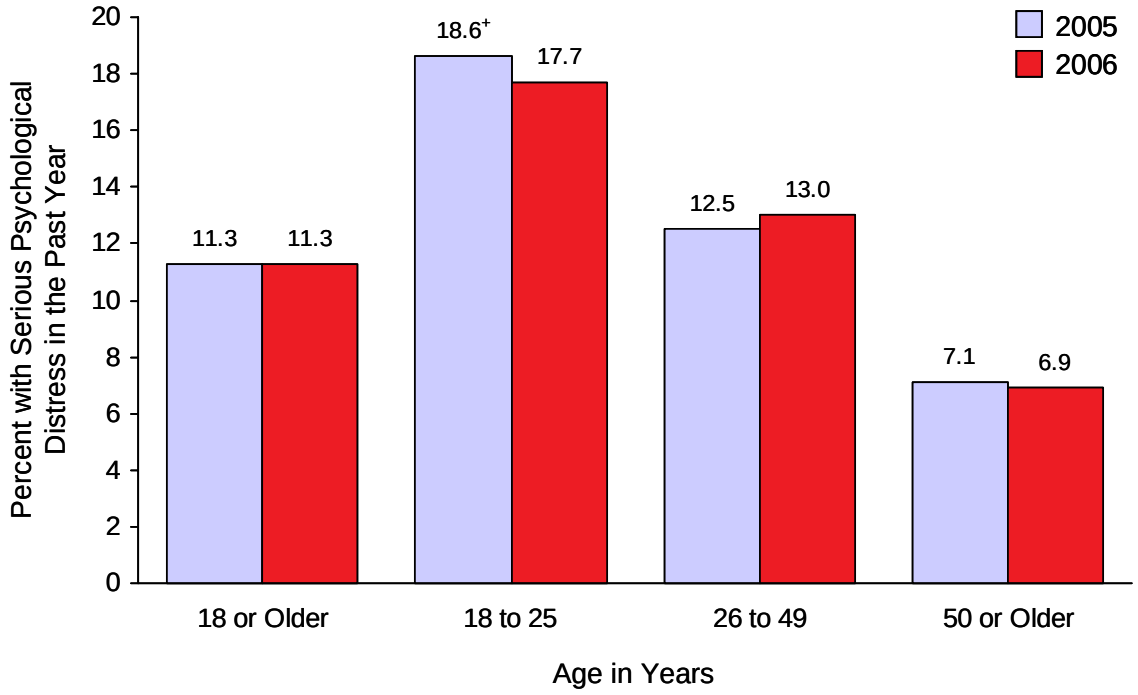
- The prevalence of SPD among women aged 18 or older (13.7 percent) was significantly higher than that among men in that age group (8.7 percent).

- In 2006, rates of past year SPD were lowest among Asians at 7.8 percent. Rates for other racial/ethnic groups were 10.5 percent among blacks, 10.8 percent among Hispanics and among Native Hawaiians and Other Pacific Islanders, 11.4 percent among whites, 25.3 percent among persons reporting two or more races, and 25.9 percent among American Indians or Alaska Natives.

Treatment among Adults with Serious Psychological Distress

- Among the 24.9 million adults aged 18 or older with SPD in 2006, 10.9 million (44.0 percent) received treatment for a mental health problem in the past year. Among adults with SPD, 39.0 percent received a prescription medication, 27.2 percent received outpatient treatment, and 3.9 percent received inpatient treatment for a mental health problem in the past year. Respondents could report more than one type of treatment.

Figure 8.1 Rates of Serious Psychological Distress in the Past Year among Adults Aged 18 or Older, by Age: 2005-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Serious Psychological Distress and Substance Use and Dependence or Abuse

- Past year illicit drug use was higher among adults aged 18 or older with SPD (27.2 percent) than among adults without SPD (12.3 percent). Similarly, the rate of past month cigarette use was higher among adults with SPD (44.2 percent) than among adults without SPD (24.5 percent).

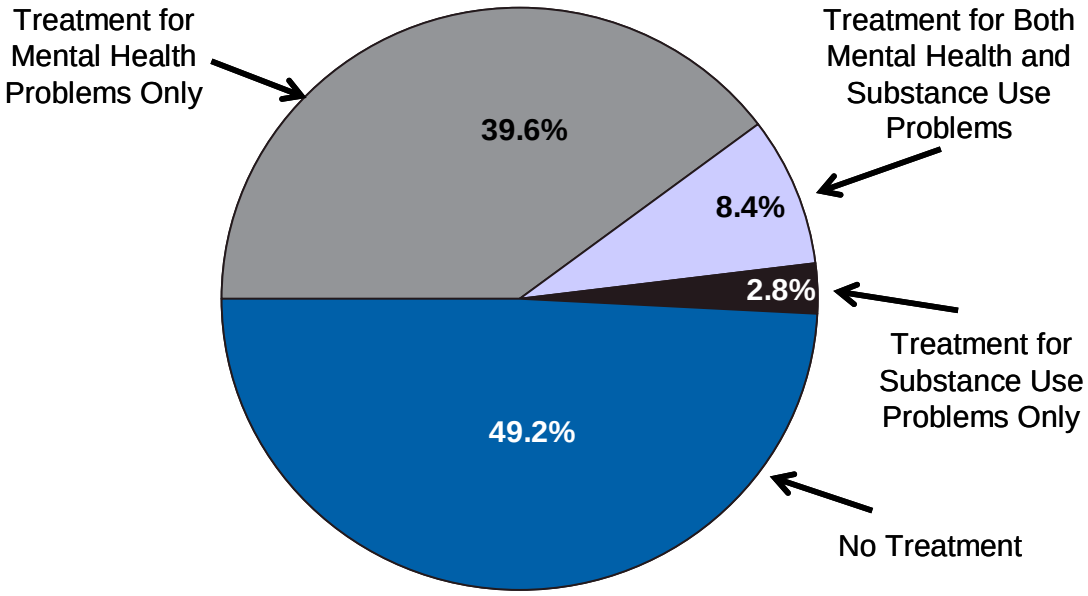
- Among adults aged 18 or older with SPD, the rate of binge alcohol use (drinking five or more drinks on the same occasion on at least 1 day in the past 30 days) was 28.8 percent, higher than the 23.9 percent among adults who did not meet the criteria for SPD. Similarly, the rate of heavy alcohol use (drinking five or more drinks on the same occasion [i.e., at the same time or within a couple of hours of each other] on each of 5 or more days in the past 30 days) among adults with SPD in the past year was higher (9.4 percent) than the rate reported among adults without SPD in the past year (7.2 percent).

- SPD in the past year was associated with past year substance dependence or abuse in 2006. Among adults aged 18 or older with SPD, 22.3 percent were dependent on or abused illicit drugs or alcohol. The rate among adults without SPD was 7.7 percent.

Treatment among Adults with Co-Occurring Serious Psychological Distress and Substance Use Disorders

- Among the 5.6 million adults aged 18 or older with both SPD and substance dependence or abuse (i.e., a substance use disorder) in 2006, half (50.8 percent) received mental health treatment or substance use treatment at a specialty facility; 8.4 percent received both treatment for mental health problems and specialty substance use treatment, 39.6 percent received only treatment for mental health problems, and 2.8 percent received only specialty substance use treatment (Figure 8.2).

Figure 8.2 Past Year Treatment among Adults Aged 18 or Older with Both Serious Psychological Distress and a Substance Use Disorder: 2006



5.6 Million Adults with Co-Occurring SPD and Substance Use Disorder

Prevalence of Major Depressive Episode

- In 2006, 15.8 million adults (7.2 percent of persons aged 18 or older) had at least one MDE in the past year. After a statistically significant decline in the rate of past year MDE between 2004 and 2005 (8.0 and 7.3 percent, respectively), the rate of past year MDE was stable between 2005 and 2006.

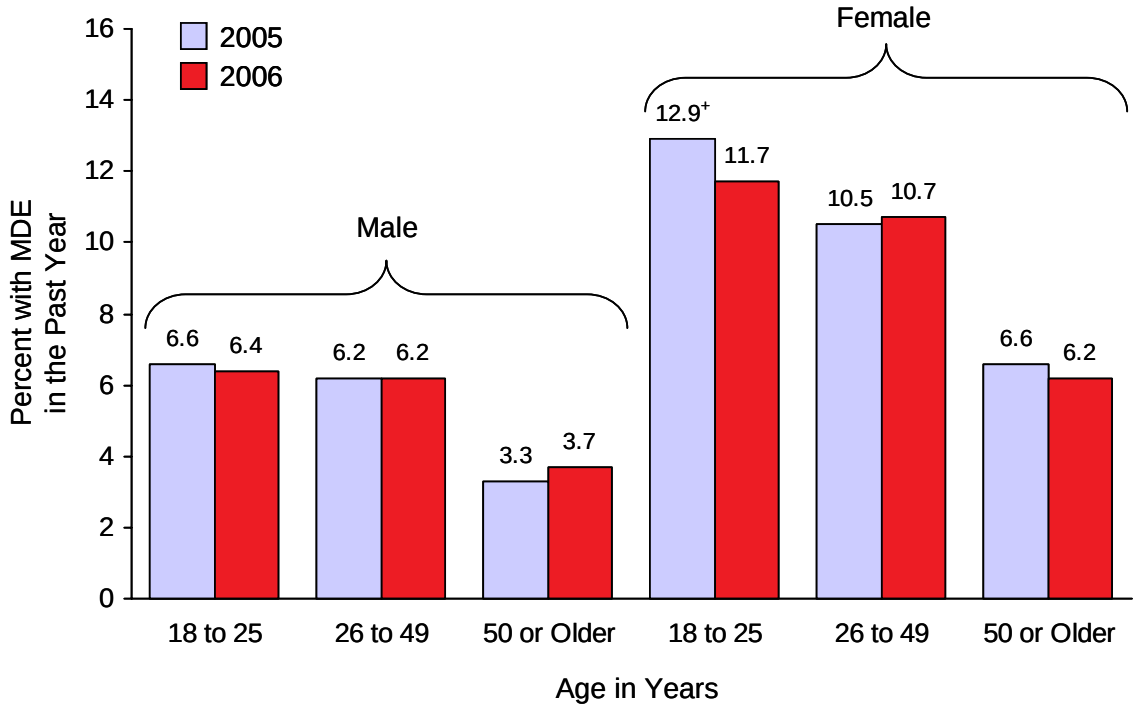
- In 2006, an estimated 30.4 million adults had at least one MDE in their lifetime (13.9 percent of persons aged 18 or older). The rate was 15.0 percent among persons aged 18 to 25, 15.9 percent among persons aged 26 to 49, and 11.1 percent among persons aged 50 or older.

- The past year prevalence of MDE in 2006 was lowest for those aged 50 or older (5.1 percent). The rates were similar among persons aged 18 to 25 (9.0 percent) and those aged 26 to 49 (8.5 percent).

- The past year prevalence of MDE was higher among adult females than among adult males (9.0 vs. 5.3 percent). Among women aged 18 to 25, the past year MDE rate decreased from 12.9 percent in 2005 to 11.7 percent in 2006 (Figure 8.3).

- Among adults aged 18 or older, past year prevalence of MDE varied by race/ethnicity in 2006. The rate of MDE was lowest among Asians (3.0 percent), while rates for other groups were 14.3 percent among persons reporting two or more races, 12.1 percent among American Indians or Alaska Natives, 7.8 percent among whites, 6.3 percent among blacks, 5.8 percent among Native Hawaiians or Other Pacific Islanders, and 5.4 percent among Hispanics.

Figure 8.3 Major Depressive Episode in the Past Year among Adults Aged 18 or Older, by Age and Gender: 2005-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

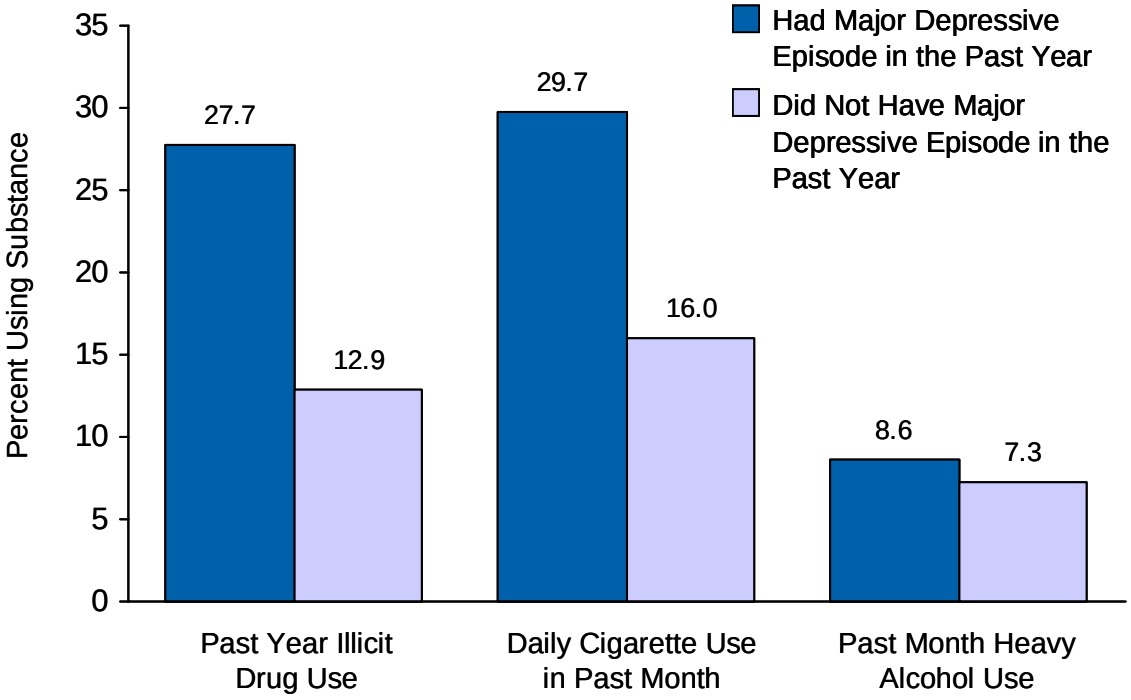
- Among adults aged 18 or older, past year prevalence of MDE was higher among unemployed persons (11.6 percent) than among persons employed full time (6.6 percent), persons employed part time (7.6 percent), and persons not in the labor force (7.8 percent).

Major Depressive Episode and Substance Use and Dependence or Abuse

- In 2006, adults aged 18 or older with MDE in the past year were more likely than those without MDE to have used an illicit drug in the past year (27.7 vs. 12.9 percent) (Figure 8.4). A similar pattern was observed for specific types of past year illicit drug use, such as marijuana, cocaine, hallucinogens, inhalants, and the nonmedical use of prescription-type psychotherapeutics.

- Past month heavy alcohol use also was associated with MDE in the past year in 2006. Among adults aged 18 or older with MDE in the past year, 8.6 percent were heavy alcohol users, higher than the 7.3 percent of adults without MDE in the past year. Similarly, among adults with MDE, the rate of daily cigarette use in the past month was 29.7 percent, while the rate was 16.0 percent among adults without MDE.

Figure 8.4 Substance Use among Adults Aged 18 or Older, by Major Depressive Episode in the Past Year: 2006



- Having MDE in the past year was associated with past year substance dependence or abuse. Among adults aged 18 or older who had MDE in 2006, 24.3 percent were dependent on or abused alcohol or illicit drugs, while among adults without MDE only 8.1 percent were dependent on or abused alcohol or illicit drugs. Adults with MDE were more likely than those without MDE to be dependent on or abuse illicit drugs (9.4 vs. 2.1 percent) and alcohol (19.3 vs. 7.0 percent).

Treatment for Major Depressive Episode

- Among adults aged 18 or older who had MDE in the past year, 69.1 percent received treatment (i.e., saw or talked to a medical doctor or other professional or used prescription medication) for depression in the same time period. The treatment rate in 2006 was higher than in 2005 (65.6 percent), particularly for persons 50 years or older (85.4 vs. 78.2 percent).

- In 2006, women who had MDE in the past year were more likely than men to receive treatment for depression in the past year (73.7 vs. 60.8 percent).

- Among adults aged 18 or older with MDE in the past year, approximately half of those with no insurance (49.6 percent) received treatment for depression in the past year compared with higher rates for those with insurance: 71.1 percent of adults with private insurance, 79.9 percent of adults covered by Medicaid or CHIP, and 86.8 percent of adults with other health insurance (including Medicare, CHAMPUS, TRICARE, CHAMPVA, VA, and other sources of health care or insurance) (Figure 8.5).

Treatment for Mental Health Problems and Unmet Treatment Need among Adults

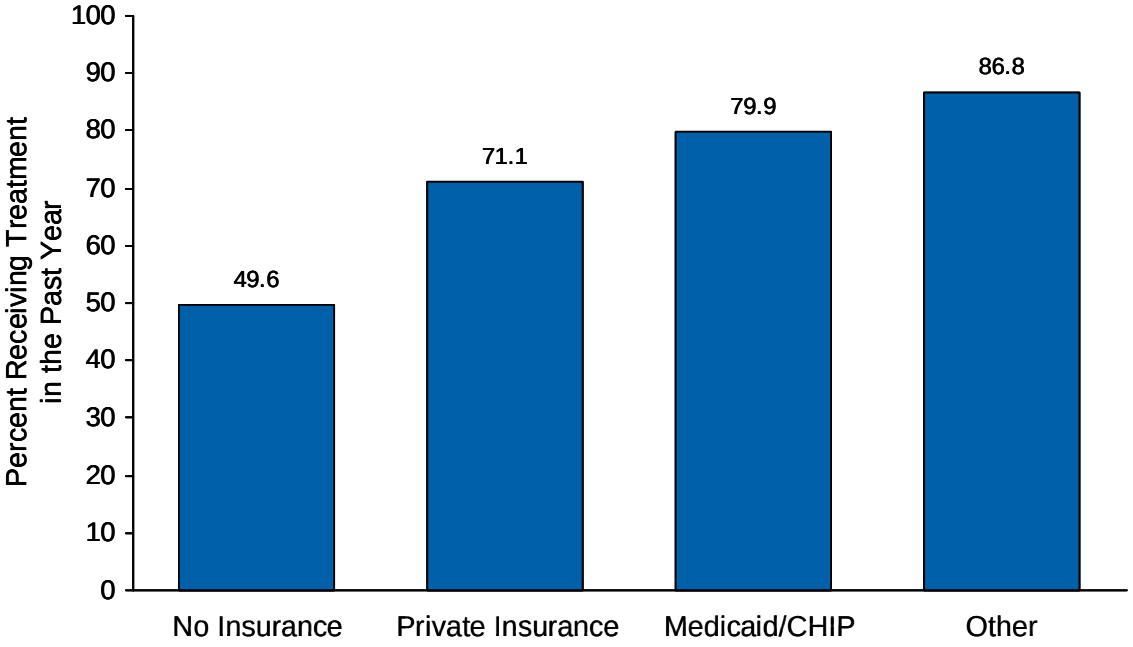
- In 2006, 28.3 million adults (12.9 percent of the population 18 years or older) received treatment for mental health problems during the past 12 months (Figure 8.6). This is similar to the rate in 2005 (13.0 percent).

- In 2006, the treatment type most often reported by adults aged 18 or older was prescription medication (10.9 percent), followed by outpatient treatment (6.7 percent). Rates of prescription medication and outpatient treatment in 2006 were similar to the rates in 2005 (10.7 and 6.8 percent, respectively). Respondents could report more than one type of treatment.

- About 1.6 million adults (0.7 percent of the population 18 years or older) received inpatient care for mental health problems during the past year. This was significantly lower than the rate of inpatient treatment in 2005 (1.0 percent, or 2.1 million adults). Declines were particularly prominent among women (1.1 percent in 2005 vs. 0.7 percent in 2006), persons living in the South (1.3 vs. 0.7 percent), persons with a family income of less than $20,000 (2.7 vs. 1.9 percent), and persons receiving government assistance (3.3 vs. 2.2 percent).

- Rates of treatment for mental health problems varied by age for adults aged 18 or older: 10.8 percent for adults aged 18 to 25, 14.0 percent for adults aged 26 to 49, and 12.4 percent for adults aged 50 or older.

Figure 8.5 Past Year Treatment for Major Depressive Episode (MDE) among Adults Aged 18 or Older with MDE in the Past Year, by Insurance Status: 2006

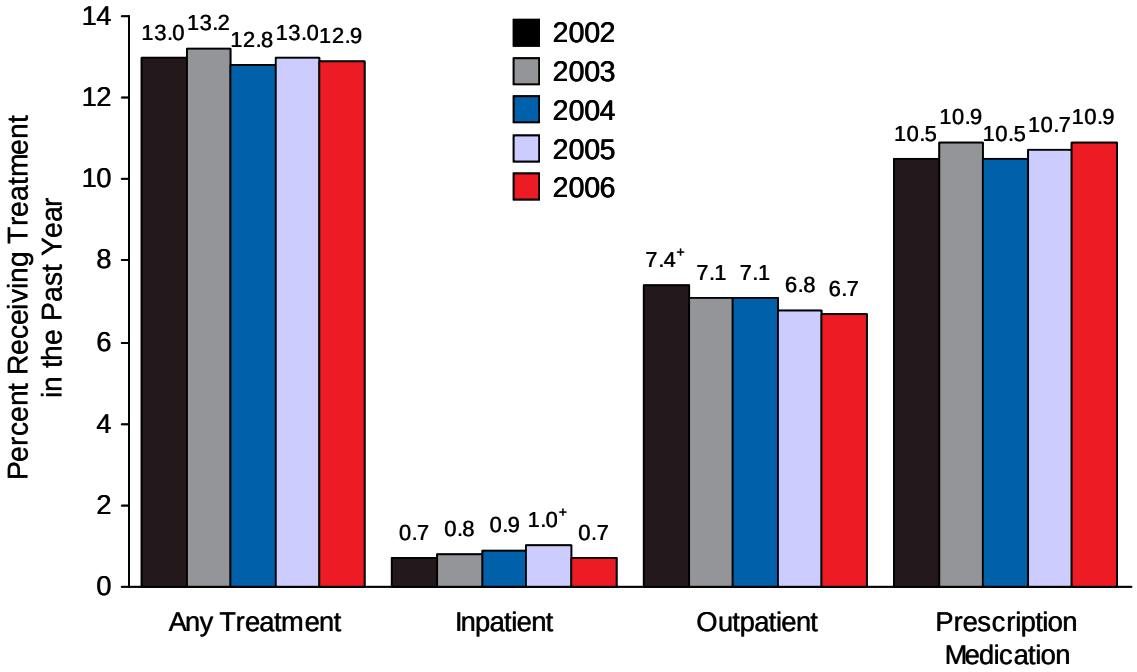


- Men were less likely than women to receive outpatient treatment (4.8 vs. 8.4 percent) and prescription medication (7.2 vs. 14.2 percent) for mental health problems in the past year. There was no significant gender difference in inpatient treatment (0.8 vs. 0.7 percent).

- Among racial/ethnic groups, the rates of treatment for adults aged 18 or older in 2006 were 21.6 percent for persons reporting two or more races, 15.2 percent for whites, 11.9 percent for American Indians or Alaska Natives, 7.4 percent for blacks, 7.0 percent for Native Hawaiians or Other Pacific Islanders, 7.0 percent for Hispanics, and 5.6 percent for Asians.

- In 2006, there were 10.5 million adults aged 18 or older (4.8 percent) who reported an unmet need for treatment or counseling for mental health problems in the past year. This included 4.8 million adults who did not receive mental health treatment. Among the 5.6 million adults who did receive some type of treatment or counseling for a mental health problem in the past year, 19.9 percent reported an unmet need. (Unmet need among adults who received treatment may reflect a delay in treatment or a perception of insufficient treatment.)

Figure 8.6 Past Year Treatment for Mental Health Problems among Adults Aged 18 or Older, by Type of Treatment: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

- Among the 4.8 million adults who reported an unmet need for treatment or counseling for mental health problems and did not receive treatment in the past year, several barriers to treatment were reported. These included an inability to afford treatment (41.5 percent), believing at the time that the problem could be handled without treatment (34.0 percent), not having the time to go for treatment (17.1 percent), and not knowing where to go for services (16.0 percent) (Figure 8.7).

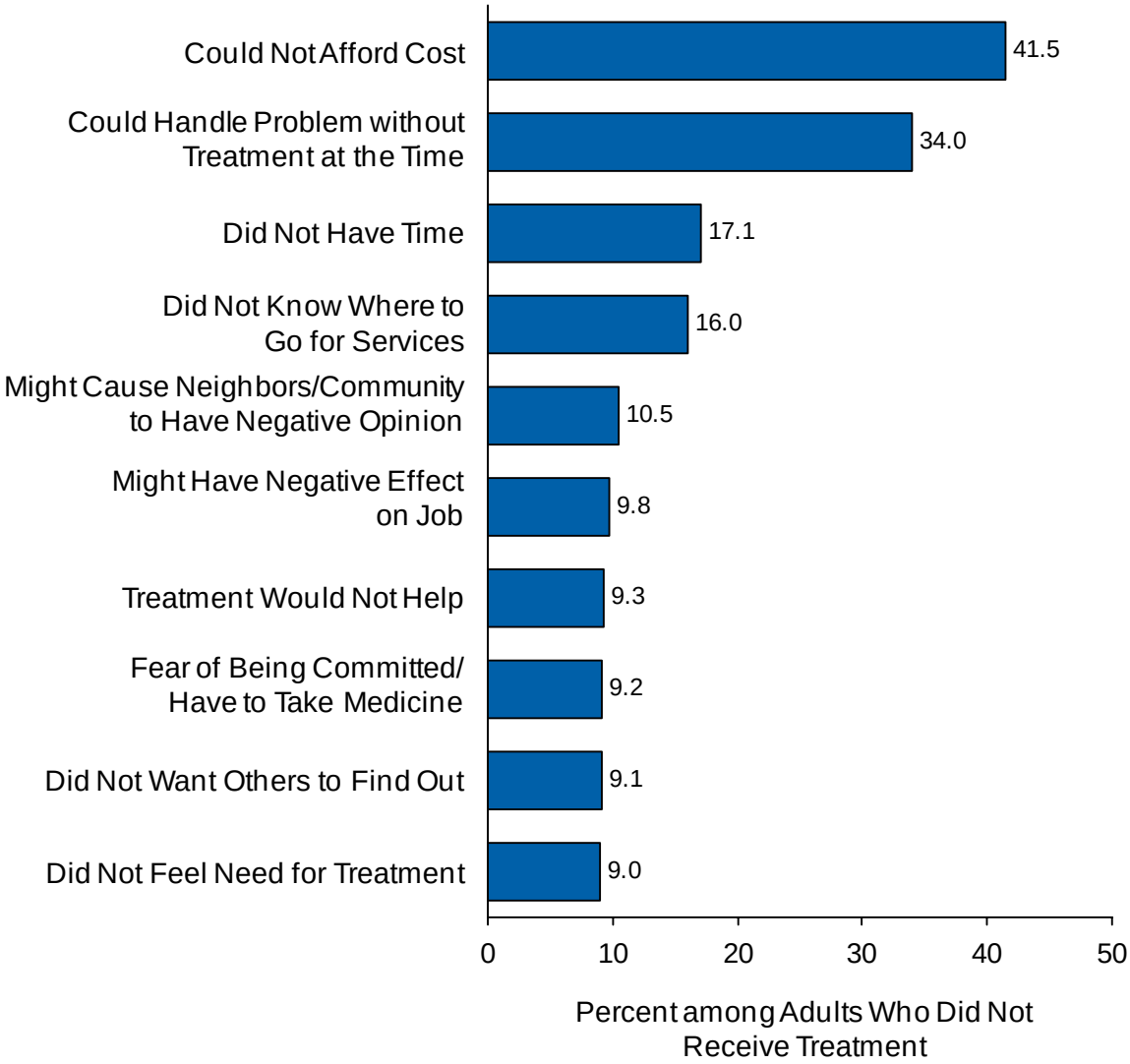
8.2 Youths Aged 12 to 17

Prevalence of Major Depressive Episode

- In 2006, there were 3.2 million youths (12.8 percent of the population aged 12 to 17) who reported at least one MDE in their lifetime and 2.0 million youths (7.9 percent) who had MDE during the past year. These rates are lower than 2005's estimates of 13.7 percent lifetime MDE and 8.8 percent past year MDE.

- Among youths aged 12 to 17, the past year prevalence of MDE ranged from 4.0 percent among 12 year olds to 11.1 percent among those aged 16 and 10.3 percent among those aged 17.

Figure 8.7 Reasons for Not Receiving Mental Health Treatment in the Past Year among Adults Aged 18 or Older with an Unmet Need for Treatment Who Did Not Receive Treatment: 2006



- The rate of MDE in the past year was lower for adolescent females in 2006 (11.8 percent) than in 2005 (13.3 percent). The rates for males were similar in 2006 and 2005 (4.2 and 4.5 percent, respectively).

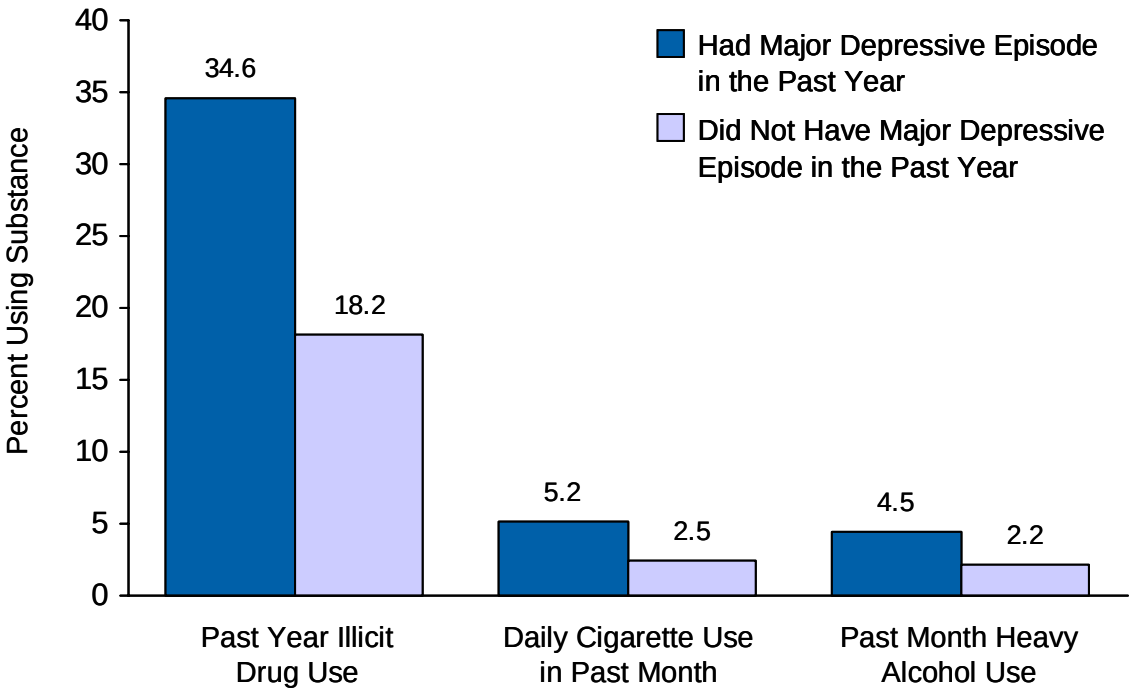
- Among youths aged 12 to 17, 8.0 percent of Hispanics had MDE in the past year, similar to the rate for non-Hispanic youths (7.9 percent). Also, youths who reported two or more races had a lifetime MDE prevalence of 13.0 percent, while the rates for American Indians or Alaska Natives and whites were 9.3 and 8.1 percent, respectively.

Major Depressive Episode and Substance Use

- Among 12 to 17 year olds who had past year MDE, 34.6 percent had used illicit drugs during the same period (Figure 8.8). This was higher than the 18.2 percent of youths who did not have past year MDE who used illicit drugs during the past year. This pattern was similar for specific types of illicit drug use, including marijuana, cocaine, heroin, hallucinogens, inhalants, and the nonmedical use of prescription-type psychotherapeutics.

- In 2006, youths aged 12 to 17 who had MDE during the past year were more likely to report daily cigarette use in comparison with those who did not have MDE during the past year (5.2 vs. 2.5 percent). Similarly, youths who had past year MDE were more likely to report heavy use of alcohol than those who did not have MDE (4.5 vs. 2.2 percent).

Figure 8.8 Substance Use among Youths Aged 12 to 17, by Major Depressive Episode in the Past Year: 2006



- The occurrence of MDE in the past year among youths aged 12 to 17 was associated with a higher prevalence of illicit drug or alcohol dependence or abuse (18.8 percent). Among youths who did not report past year MDE, 7.1 percent had illicit drug or alcohol dependence or abuse during the same period.

Treatment for Major Depressive Episode

- In 2006, 38.9 percent of youths aged 12 to 17 with past year MDE received treatment for depression (saw or talked to a medical doctor or other professional or used prescription medication). Among youths with past year MDE, 23.9 percent saw or talked to a medical doctor or other professional only, 2.1 percent used prescription medication only, and 12.7 percent received treatment from both sources for depression in the past year.

Mental Health Treatment among Youths

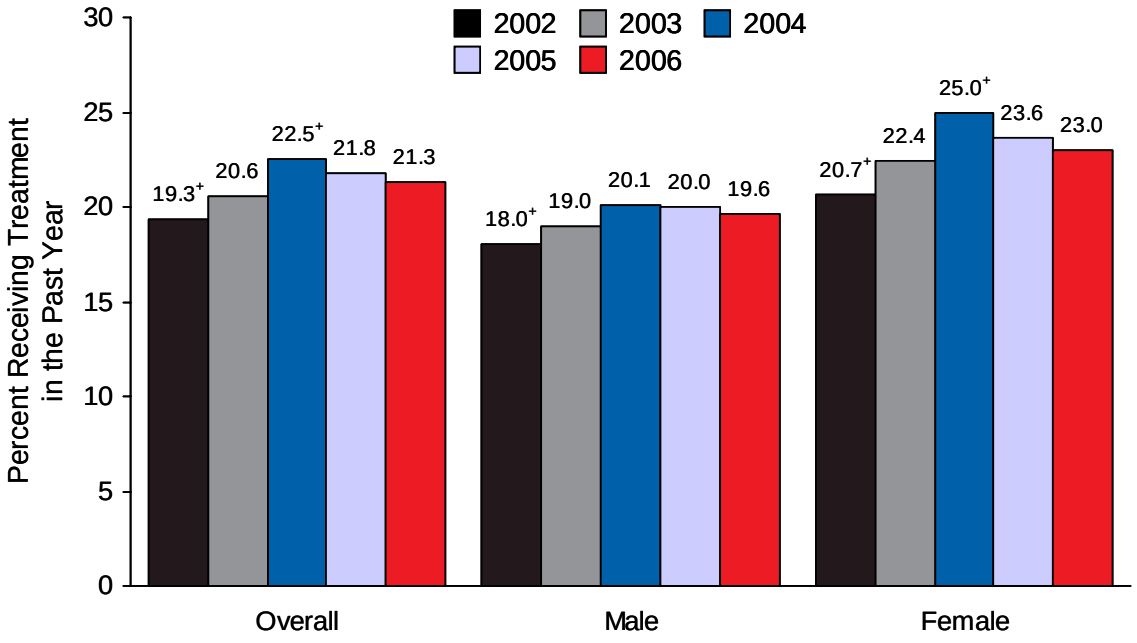
- In 2006, there were 5.4 million youths (21.3 percent) who received treatment or counseling for emotional or behavior problems in the year prior to the interview (Figure 8.9). Adolescent females were more likely than adolescent males to report past year treatment for mental health problems (23.0 vs. 19.6 percent, respectively).

- The rate of illicit drug use in the past year was higher among youths aged 12 to 17 who received mental health treatment or counseling in the past year than among those who did not receive treatment or counseling (28.8 vs. 17.0 percent, respectively). This pattern also was observed for marijuana, cocaine, hallucinogens, inhalants, and the nonmedical use of prescription-type psychotherapeutics.

- Youths aged 12 to 17 who received mental health treatment or counseling in the past year were more likely to use alcohol in the past year than those who did not receive treatment or counseling (40.0 vs. 31.0 percent, respectively). Youths receiving mental health treatment or counseling in the past year also were more likely to have smoked cigarettes in the past year (25.2 vs. 14.7 percent).

- In 2006, 14.5 percent of youths aged 12 to 17 who received mental health treatment or counseling in the past year were dependent on or abused illicit drugs or alcohol in the past year, higher than the 6.3 percent who did not receive treatment or counseling.

Figure 8.9 Past Year Treatment for Mental Health Problems among Youths Aged 12 to 17, by Gender: 2002-2006



+Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

9. Discussion of Trends in Substance Use among Youths and Young Adults

This report presents findings from the 2006 National Survey on Drug Use and Health (NSDUH). Conducted since 1971 and previously named the National Household Survey on Drug Abuse (NHSDA), the survey underwent several methodological improvements in 2002 that have affected prevalence estimates. As a result, the 2002 through 2006 estimates are not comparable with estimates from 2001 and earlier surveys. Therefore, the primary focus of the report is on comparisons of measures of substance use and mental health problems across subgroups of the U.S. population in 2006 and changes between 2005 and 2006, as well as between 2002 and 2006. This chapter provides an additional discussion of the findings concerning a topic of great interest—trends in substance use among youths and young adults.

An important step in the analysis and interpretation of NSDUH or any other survey data is to compare the results with those from other data sources. This can be difficult sometimes because the other surveys typically have different purposes, definitions, and designs. Research has established that surveys of substance use and other sensitive topics often produce inconsistent results because of different methods used. Thus, it is important to understand that conflicting results often reflect differing methodologies, not incorrect results. Despite this limitation, comparisons can be very useful. Consistency across surveys can provide confirmation or support for conclusions about trends and patterns of use, and inconsistent results can point to areas for further study. Further discussion of this issue is included in Appendix D, along with descriptions of methods and results from other sources of substance use and mental health data.

Unfortunately, few additional data sources are available at this time to compare with NSDUH results. One established source is Monitoring the Future (MTF), a study sponsored by the National Institute on Drug Abuse (NIDA). MTF surveys students in the 8th, 10th, and 12th grades in classrooms during the spring of each year, and it also collects data by mail from a subsample of adults who had participated earlier in the study as 12th graders (Johnston, O'Malley, Bachman, & Schulenberg, 2007a, 2007b). Historically, NSDUH rates of substance use among youths have been lower than those of MTF, and occasionally the two surveys have shown different trends over a short time period. Nevertheless, the two sources have shown very similar long-term trends in prevalence. NSDUH and MTF rates of substance use generally have been similar among young adults, and the two sources also have shown similar trends.

A comparison of NSDUH and MTF estimates for 2002 to 2006 is shown in Tables 9.1 and 9.2 at the end of this chapter for several substances that are defined similarly in the two surveys. MTF data on 8th and 10th graders combined give the closest match on age to estimates for NSDUH youths aged 12 to 17, while MTF follow-up data on persons aged 19 to 24 provide the closest match on age to estimates for NSDUH young adults aged 18 to 25. The NSDUH results are remarkably consistent with MTF trends for both youths and young adults, as discussed below.

Both surveys generally show decreases between 2002 and 2006 in the percentages of youths who used marijuana, Ecstasy, LSD, alcohol, and cigarettes in the lifetime, past year, and

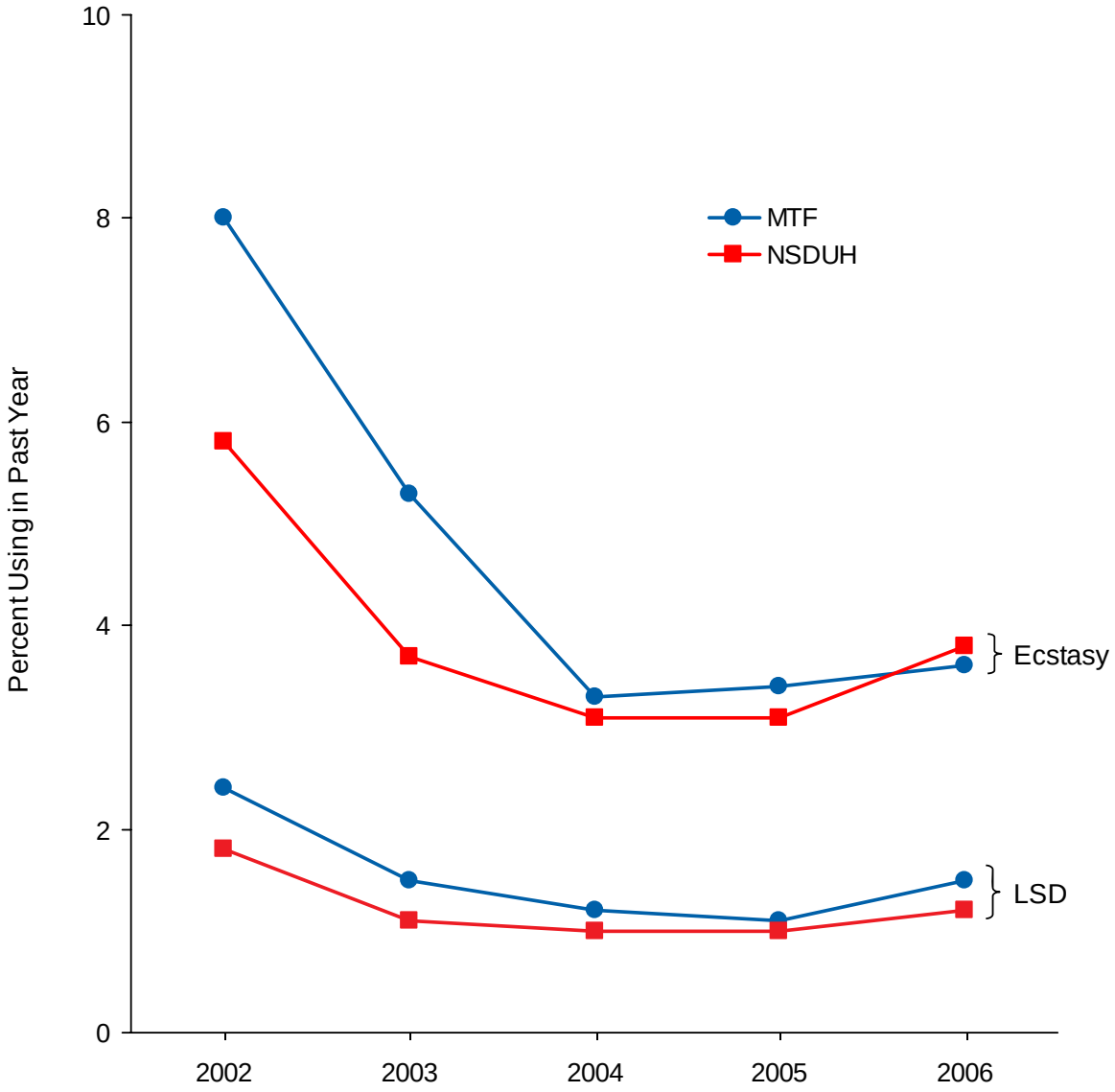
past month (Table 9.1). Exceptions were for LSD in the past month for MTF and cigarettes in the past year for MTF. For the latter, an estimate is not available. Both surveys show no difference in the rates of past month cocaine and inhalant use among youths between 2002 and 2006, although NSDUH does show a significant decrease from 2003 to 2006 in past month cocaine use. Declines between 2002 and 2006 in past year and lifetime cocaine use are evident in NSDUH data, but not in MTF. The consistency between NSDUH and MTF trend data is found not only in terms of the specific drugs showing decreases, but also in terms of the magnitude of the decreases. Despite the higher levels of prevalence estimated from MTF, the two surveys show very similar rates of change in prevalence, especially for the three substances used most commonly by youths: alcohol, cigarettes, and marijuana. Between 2002 and 2006, the rate of current alcohol use among youths declined 6 percent according to NSDUH and 7 percent according to MTF. Current cigarette use prevalence rates in 2006 were 20 percent lower in NSDUH and 18 percent lower in MTF compared with 2002 rates. For past month marijuana use, the NSDUH decline was 18 percent, and the MTF decline was 21 percent.

Data on young adults also show similar trends in the two surveys, although not as consistent as for the youth data (Table 9.2). Potential reasons for differences are the relatively smaller MTF sample size for young adults and possible bias in the MTF sample due to noncoverage of school dropouts and a low overall response rate, considering nonresponse by schools, by students in the 12th grade survey, and in the follow-up mail survey. Both surveys show declines from 2002 to 2006 in past year and past month cigarette and marijuana use among young adults. However, the NSDUH rates of decline in current cigarette and marijuana use were less than for youths and were less in the NSDUH data than in MTF. Past month marijuana prevalence declined 6 percent according to NSDUH and 14 percent according to MTF. For past month cigarette use, declines were 6 percent in NSDUH and 15 percent in MTF. Both surveys show stable trends in past month cocaine, LSD, and inhalant use among young adults, although in NSDUH there was a small but statistically significant increase for current alcohol use, from 60.5 percent in 2002 to 61.9 percent in 2006.

Considering past year prevalence data, both NSDUH and MTF generally show large decreases in the use of Ecstasy and LSD between 2002 and 2004, then a leveling in 2005 (Figure 9.1). These trends occurred for both youths and young adults. The 2006 data from both surveys show a continued leveling among youths, but suggest a possible resurgence in the use of these two hallucinogens among young adults. Although the only statistically significant change between 2005 and 2006 was for past year Ecstasy use among young adults in NSDUH (from 3.1 to 3.8 percent), rates were higher in 2006 than in 2005 among young adults for past month Ecstasy use in NSDUH, past month and past year Ecstasy use in MTF, past year LSD use in NSDUH, and past month and past year LSD use in MTF.

Because of the lack of statistical significance for most of these results, they should not be considered conclusive. Nevertheless, the consistency in the results from these two independent surveys serves as evidence of a possible increase in hallucinogen use. This resurgence is further supported in NSDUH by a statistically significant increase between 2005 and 2006 in past year initiation of Ecstasy use. The number of initiates increased from 615,000 in 2005 to 860,000 in 2006. There was no increase in LSD initiation.

Figure 9.1 Past Year Ecstasy and LSD Use among Young Adults in NSDUH and MTF: 2002-2006



NOTE: Young adults are defined as respondents aged 18 to 25 for NSDUH and aged 19 to 24 for MTF.

Table 9.1 Comparison of NSDUH and MTF Prevalence Estimates among Youths: 2002-2006

Substance/ Time Period	NSDUH Ages 12-17					MTF 8th and 10th Grades				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Marijuana										
Lifetime	20.6[a]	19.6[a]	19.0[a]	17.4	17.3	29.0[a]	27.0[a]	25.7[a]	25.3[a]	23.8
Past Year	15.8[a]	15.0[a]	14.5[a]	13.3	13.2	22.5[a]	20.5[a]	19.7	19.4	18.5
Past Month	8.2[a]	7.9[a]	7.6[a]	6.8	6.7	13.1[a]	12.3[a]	11.2	10.9	10.4
Cocaine										
Lifetime	2.7[a]	2.6	2.4	2.3	2.2	4.9	4.4	4.4	4.5	4.1
Past Year	2.1[a]	1.8	1.6	1.7	1.6	3.2	2.8	2.9	2.9	2.6
Past Month	0.6	0.6[a]	0.5	0.6	0.4	1.4	1.1	1.3	1.3	1.3
Ecstasy										
Lifetime	3.3[a]	2.4[a]	2.1	1.6	1.9	5.5[a]	4.3[a]	3.6	3.4	3.5
Past Year	2.2[a]	1.3	1.2	1.0	1.2	3.9[a]	2.6	2.1	2.2	2.1
Past Month	0.5[a]	0.4	0.3	0.3	0.3	1.6[a]	0.9	0.8	0.8	1.0
LSD										
Lifetime	2.7[a]	1.6[a]	1.2[a]	1.1[a]	0.9	3.8[a]	2.8[a]	2.3	2.2	2.2
Past Year	1.3[a]	0.6[a]	0.6[a]	0.6	0.4	2.1[a]	1.5	1.4	1.4	1.3
Past Month	0.2[a]	0.2	0.2	0.1	0.1	0.7	0.6	0.6	0.6	0.6
Inhalants										
Lifetime	10.5	10.7	11.0[a]	10.5	10.1	14.4	14.3	14.9	15.1	14.7
Past Year	4.4	4.5	4.6	4.5	4.4	6.8[a]	7.1	7.8	7.8	7.8
Past Month	1.2	1.3	1.2	1.2	1.3	3.1	3.2	3.5	3.2	3.2
Alcohol										
Lifetime	43.4[a]	42.9[a]	42.0[a]	40.6	40.4	57.0[a]	55.8[a]	54.1[a]	52.1	51.0
Past Year	34.6[a]	34.3[a]	33.9	33.3	32.9	49.4[a]	48.3[a]	47.5[a]	45.3	44.7
Past Month	17.6[a]	17.7[a]	17.6[a]	16.5	16.6	27.5[a]	27.6[a]	26.9	25.2	25.5
Cigarettes										
Lifetime	33.3[a]	31.0[a]	29.2[a]	26.7	25.8	39.4[a]	35.7[a]	34.3[a]	32.4[a]	30.4
Past Year	20.3[a]	19.0[a]	18.4[a]	17.3	17.0	--	--	--	--	--
Past Month	13.0[a]	12.2[a]	11.9[a]	10.8	10.4	14.2[a]	13.5[a]	12.6	12.1	11.6

-- Not available.

NOTE: MTF data for 8th and 10th graders are simple averages of estimates for those two grades. Data for 8th and 10th graders are reported in Johnston, O'Malley, Bachman, and Schulenberg (2007b). Design effects used for variance estimation are reported in Johnston, O'Malley, Bachman, and Schulenberg (2006c).

[a] Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006. University of Michigan, The Monitoring the Future Study, 2002, 2003, 2004, 2005, and 2006.

Table 9.2 Comparison of NSDUH and MTF Prevalence Estimates among Young Adults: 2002-2006

Substance/ Time Period	NSDUH Ages 18-25					MTF Ages 19-24				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Marijuana										
Lifetime	53.8	53.9[a]	52.8	52.4	52.4	56.1	56.4[a]	55.6	54.4	53.8
Past Year	29.8[a]	28.5	27.8	28.0	28.0	34.2[a]	33.0	31.6	31.4	30.9
Past Month	17.3[a]	17.0	16.1	16.6	16.3	19.8[a]	19.9[a]	18.2	17.0	17.0
Cocaine										
Lifetime	15.4	15.0	15.2	15.1	15.7	12.9	14.5	14.3	12.6	13.6
Past Year	6.7	6.6	6.6	6.9	6.9	6.5	7.3	7.8	6.9	7.0
Past Month	2.0	2.2	2.1	2.6	2.2	2.5	2.6	2.4	2.1	2.4
Ecstasy										
Lifetime	15.1[a]	14.8[a]	13.8	13.7	13.4	16.0[a]	16.6[a]	14.9[a]	12.4	11.5
Past Year	5.8[a]	3.7	3.1[a]	3.1[a]	3.8	8.0[a]	5.3[a]	3.3	3.4	3.6
Past Month	1.1	0.7[a]	0.7[a]	0.8	1.0	1.6[a]	1.0	0.8	0.6	0.9
LSD										
Lifetime	15.9[a]	14.0[a]	12.1[a]	10.5[a]	8.9	13.9[a]	13.8[a]	10.4[a]	7.9	6.7
Past Year	1.8[a]	1.1	1.0	1.0	1.2	2.4[a]	1.5	1.2	1.1	1.5
Past Month	0.1	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.3
Inhalants										
Lifetime	15.7[a]	14.9[a]	14.0[a]	13.3	12.5	11.7[a]	11.4[a]	10.6	9.3	9.7
Past Year	2.2[a]	2.1	2.1	2.1[a]	1.8	2.2	1.5	2.3	1.6	1.8
Past Month	0.5	0.4	0.4	0.5	0.4	0.8	0.3	0.4	0.3	0.4
Alcohol										
Lifetime	86.7	87.1	86.2	85.7	86.5	88.4	87.6	87.2	87.1	87.0
Past Year	77.9	78.1	78.0	77.9	78.8	83.9	82.3	83.1	82.8	83.2
Past Month	60.5[a]	61.4	60.5[a]	60.9	61.9	67.7	66.3	67.3	66.8	67.0
Cigarettes										
Lifetime	71.2[a]	70.2[a]	68.7[a]	67.3	66.6	--	--	--	--	--
Past Year	49.0[a]	47.6	47.5	47.2	47.0	41.8[a]	40.8[a]	41.4[a]	40.2[a]	37.1
Past Month	40.8[a]	40.2[a]	39.5	39.0	38.4	31.4[a]	29.5[a]	30.2[a]	28.7	26.7

-- Not available.

NOTE: MTF data for persons aged 19 to 24 are simple averages of modal age groups 19-20, 21-22, and 23-24 as reported in Johnston, O'Malley, and Bachman (2003c) and Johnston, O'Malley, Bachman, and Schulenberg (2004a, 2005a, 2006b, 2007a).

NOTE: For the 19 to 24 age group in the MTF data, significance tests were performed assuming independent samples across years. Although appropriate for comparisons of 2003 and 2005 estimates with 2006 estimates, this assumption results in conservative tests for comparisons of 2002 and 2004 estimates with 2006 estimates because it does not take into account covariances that are associated with repeated observations from the longitudinal samples. Estimates of covariances were not available.

[a] Difference between this estimate and the 2006 estimate is statistically significant at the .05 level.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006. University of Michigan, The Monitoring the Future Study, 2002, 2003, 2004, 2005, and 2006.

Appendix A: Description of the Survey

A.1 Sample Design

The 2006 National Survey on Drug Use and Health (NSDUH)[2] is part of a coordinated 5-year sample design providing estimates for all 50 States plus the District of Columbia for the years 2005 through 2009. The respondent universe is the civilian, noninstitutionalized population aged 12 years old or older residing within the United States and the District of Columbia. The survey includes persons living in noninstitutionalized group quarters (e.g., shelters, rooming/boarding houses, college dormitories, migratory workers' camps, halfway houses), and civilians living on military bases. Persons excluded from the survey include persons with no fixed household address (e.g., homeless and/or transient persons not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term hospitals.

Although there is no planned overlap with the 1999 through 2004 samples, a coordinated design for 2005 through 2009 facilitates 50 percent overlap in second-stage units (area segments) within each successive 2-year period from 2005 through 2009. Because the 2005 design enables estimates to be developed by State in all 50 States plus the District of Columbia, States may be viewed as the first level of stratification as well as a reporting variable.

For the 50-State design, 8 States were designated as large sample States (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) with samples large enough to support direct State estimates. In 2006, sample sizes in these States ranged from 3,512 to 3,671. For the remaining 42 States and the District of Columbia, smaller, but adequate, samples were selected to support State estimates using small area estimation (SAE).[3] Sample sizes in these States ranged from 862 to 1,000 in 2006.

States were first stratified into a total of 900 State sampling (SS) regions (48 regions in each large sample State and 12 regions in each small sample State). These regions were contiguous geographic areas designed to yield the same number of interviews on average.[4] Unlike the 1999 through 2001 NHSDAs and the 2002 through 2004 NSDUHs in which the first-stage sampling units were clusters of census blocks called area segments, the first stage of

[2] Prior to 2002, the survey was known as the National Household Survey on Drug Abuse (NHSDA).

[3] SAE is a hierarchical Bayes modeling technique used to make State-level estimates for approximately 20 substance-use-related measures. See the *State Estimates of Substance Use from the 2004-2005 National Surveys on Drug Use and Health* (Wright, Sathe, & Spagnola, 2007) for more details.

[4] Areas were defined using 2000 census geography. Dwelling units (DUs) and population counts were obtained from the 2000 census data supplemented with revised population counts from Claritas (http://cluster1.claritas.com/claritas/Default.jsp).

selection for the 2005 through 2009 NSDUHs was census tracts.[5] This stage was included to contain sample segments within a single census tract to the extent possible.[6]

A total of 48 census tracts per SS region were selected with probability proportional to size. Within sampled census tracts, adjacent census blocks were combined to form the second-stage sampling units or area segments. One area segment was selected within each sampled census tract with probability proportional to population size to support the 5-year sample and any supplemental studies that the Substance Abuse and Mental Health Services Administration (SAMHSA) may choose to field.[7] Of these segments, 24 were designated for the coordinated 5-year sample and 24 were designated as "reserve" segments. Eight sample segments per SS region were fielded during the 2006 survey year.

These sampled segments were allocated equally into four separate samples, one for each 3-month period (calendar quarter) during the year. That is, a sample was selected from two segments in each calendar quarter so that the survey was essentially continuous in the field. In each of the area segments, a listing of all addresses was made, from which a national sample of 182,459 addresses was selected. Of the selected addresses, 151,288 were determined to be eligible sample units. In these sample units (which can be either households or units within group quarters), sample persons were randomly selected using an automated screening procedure programmed in a handheld computer carried by the interviewers. The number of sample units completing the screening was 137,057. Youths aged 12 to 17 years and young adults aged 18 to 25 years were oversampled at this stage. Because of the large sample size, there was no need to oversample racial/ethnic groups, as was done on surveys prior to 1999. A total of 85,034 persons were selected nationwide. Consistent with previous surveys in this series, the final respondent sample of 67,802 persons was representative of the U.S. general population (since 1991, the civilian, noninstitutionalized population) aged 12 or older. In addition, State samples were representative of their respective State populations. More detailed information on the disposition of the national screening and interview sample can be found in Appendix B.

The survey covers residents of households (living in houses/townhouses, apartments, condominiums, etc.), persons in noninstitutional group quarters (e.g., shelters, rooming/boarding houses, college dormitories, migratory workers' camps, halfway houses), and civilians living on military bases. Although the survey covers residents of these types of units (they are given a nonzero probability of selection), the sample sizes of most specific groups are too small to provide separate estimates.

More information on the sample design can be found in the 2006 NSDUH sample design report by Morton et al. (2007) on the Office of Applied Studies (OAS) website (available as a PDF at http://www.oas.samhsa.gov/nhsda/methods.cfm#2k6).

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[5] Census tracts are relatively permanent statistical subdivisions of counties and provide a stable set of geographic units across decennial census periods.

[6] Some census tracts had to be aggregated in order to meet the minimum DU requirement of 150 DUs in urban areas and 100 DUs in rural areas.

[7] For more details on the 5-year sample, see the 2006 sample design report in the *2006 NSDUH Methodological Resource Book* (Morton, Chromy, Hunter, & Martin, 2007).

A.2 Data Collection Methodology

The data collection method used in NSDUH involves in-person interviews with sample persons, incorporating procedures that would be likely to increase respondents' cooperation and willingness to report honestly about their illicit drug use behavior. Confidentiality is stressed in all written and oral communications with potential respondents. Respondents' names are not collected with the data, and computer-assisted interviewing (CAI) methods, including audio computer-assisted self-interviewing (ACASI), are used to provide a private and confidential setting to complete the interview.

Introductory letters are sent to sampled addresses, followed by an interviewer visit. A 5-minute screening procedure using a handheld computer involves listing all household members along with their basic demographic data. The computer uses the demographic data in a preprogrammed selection algorithm to select zero to two sample person(s), depending on the composition of the household. This selection process is designed to provide the necessary sample sizes for the specified population age groupings.

Interviewers immediately attempt to conduct the NSDUH interview with each selected person in the household. The interviewer requests the selected respondent to identify a private area in the home to conduct the interview away from other household members. The interview averages about an hour and includes a combination of CAPI (computer-assisted personal interviewing, in which the interviewer reads the questions) and ACASI (which is self-administered by the respondent).

The NSDUH interview consists of a core and supplemental sections. A core set of questions critical for basic trend measurement of prevalence estimates remains in the survey every year and comprises the first part of the interview. Supplemental questions, or modules, that can be revised, dropped, or added from year to year make up the remainder of the interview. The core consists of initial demographic items (which are interviewer-administered) and self-administered questions pertaining to the use of tobacco, alcohol, marijuana, cocaine, crack cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives. Supplemental topics in the remaining self-administered sections include (but are not limited to) injection drug use, perceived risks of substance use, substance dependence or abuse, arrests, treatment for substance use problems, pregnancy and health care issues, and mental health issues. Supplemental demographic questions (which are interviewer-administered and follow the ACASI questions) address such topics as immigration, current school enrollment, employment and workplace issues, health insurance coverage, and income. It should be noted that some of the supplemental portions of the interview have remained in the survey, relatively unchanged, from year to year (e.g., current health insurance coverage, employment).

Thus, the interview begins in CAPI mode with the field interviewer (FI) reading the questions from the computer screen and entering the respondent's replies into the computer. The interview then transitions to the ACASI mode for the sensitive questions. In this mode, the respondent can read the questions silently on the computer screen and/or listen to the questions read through headphones and enter his or her responses directly into the computer. At the conclusion of the ACASI section, the interview returns to the CAPI mode with the interviewer

completing the questionnaire. Each respondent who completes a full interview is given a $30.00 cash payment as a token of appreciation for his or her time.

No personal identifying information is captured in the CAI record for the respondent. Interviewers transmit the completed interview data to RTI in Research Triangle Park, North Carolina, via home telephone lines.

A.3 Data Processing

Computers at RTI direct the information to a raw data file that consists of one record for each completed interview. Even though editing and consistency checks are done by the CAI program during the interview, additional, more complex edits and consistency checks are completed at RTI. Cases are retained only if respondents provided data on lifetime use of cigarettes and at least nine other substances in the core section of the questionnaire. An important aspect of subsequent editing routines involves assignment of codes when respondents legitimately were skipped out of questions that definitely did not apply to them (e.g., if respondents never used a drug of interest). For key drug use measures, the editing procedures identify inconsistencies between related variables. Inconsistencies in variables pertaining to the most recent period that respondents used a drug are edited by assigning an "indefinite" period of use (e.g., use at some point in the lifetime, which could mean use in the past 30 days or past 12 months). Inconsistencies in other key drug use variables are edited by assigning missing data codes. These inconsistencies then are resolved through statistical imputation procedures, as discussed below.

A.3.1 Statistical Imputation

For some key variables that still have missing or ambiguous values after editing, statistical imputation is used to replace these values with appropriate response codes. For example, the response is ambiguous if the editing procedures assigned a respondent's most recent use of a drug to "use at some point in the lifetime," with no definite period within the lifetime. In this case, the imputation procedures assign a definite value for when the respondent last used the drug (e.g., in the past 30 days, more than 30 days ago but within the past 12 months, more than 12 months ago). Similarly, if the response is completely missing, the imputation procedures replace missing values with nonmissing ones.

In most cases, missing or ambiguous values are imputed using a methodology called predictive mean neighborhoods (PMN), which was developed specifically for the 1999 survey and used in all subsequent survey years. The PMN method offers a rigorous and flexible method that was implemented to improve the quality of estimates and allow more variables to be imputed. Some of the key reasons for implementing this method include the following: (1) the ability to use covariates to determine donors is far greater than that offered in the hot deck, (2) the relative importance of covariates can be determined by standard estimating equation techniques, (3) the correlations across response variables can be accounted for by making the imputation multivariate, and (4) sampling weights can be easily incorporated in the models. The PMN method has some similarity with the predictive mean matching method of Rubin (1986) except that, for the donor records, Rubin used the observed variable value (not the predictive mean) to compute the distance function. Also, the well-known method of nearest neighbor

imputation is similar to PMN, except that the distance function is in terms of the original predictor variables and often requires somewhat arbitrary scaling of discrete variables. PMN is a combination of a model-assisted imputation methodology and a random nearest neighbor hot-deck procedure. The hot-deck procedure is set up in such a way that imputed values are made consistent with preexisting nonmissing values for other variables. Whenever feasible, the imputation of variables using PMN is multivariate, in which imputation is accomplished on several response variables at once. Variables requiring imputation using PMN are the core demographic variables, core drug use variables (recency of use, frequency of use, and age at first use), income, health insurance, and noncore demographic variables for work status, immigrant status, and the household roster. A weighted regression imputation is used to impute some of the missing values in the nicotine dependence variables.

In the modeling stage of PMN, the model chosen depends on the nature of the response variable *Y*. In the 2006 NSDUH, the models included binomial logistic regression, multinomial logistic regression, Poisson regression, and ordinary linear regression, where the models incorporated the sampling design weights.

In general, hot-deck imputation replaces an item nonresponse (missing or ambiguous value) with a recorded response that is donated from a "similar" respondent who has nonmissing data. For random nearest neighbor hot-deck imputation, the missing or ambiguous value is replaced by a responding value from a donor randomly selected from a set of potential donors. Potential donors are those defined to be "close" to the unit with the missing or ambiguous value according to a predefined function called a distance metric. In the hot-deck stage of PMN, the set of candidate donors (the "neighborhood") consists of respondents with complete data who have a predicted mean close to that of the item nonrespondent. The predicted means are computed both for respondents with and without missing data, which differs from Rubin's method where predicted means are not computed for the donor respondent (Rubin, 1986). In particular, the neighborhood consists of either the set of the closest 30 respondents or the set of respondents with a predicted mean (or means) within 5 percent of the predicted mean(s) of the item nonrespondent, whichever set is smaller. If no respondents are available who have a predicted mean (or means) within 5 percent of the item nonrespondent, the respondent with the predicted mean(s) closest to that of the item nonrespondent is selected as the donor.

In the univariate case (where only one variable is imputed using PMN), the neighborhood of potential donors is determined by calculating the relative distance between the predicted mean for an item nonrespondent and the predicted mean for each potential donor, then choosing those means defined by the distance metric. The pool of donors is restricted further to satisfy logical constraints whenever necessary (e.g., age at first crack use must not be less than age at first cocaine use).

Whenever possible, missing or ambiguous values for more than one response variable are considered at a time. In this (multivariate) case, the distance metric is a Mahalanobis distance (Manly, 1986) rather than a relative Euclidean distance. Whether the imputation is univariate or multivariate, only missing or ambiguous values are replaced, and donors are restricted to be logically consistent with the response variables that are not missing. Furthermore, donors are restricted to satisfy "likeness constraints" whenever possible. That is, donors are required to have the same values for variables highly correlated with the response. If no donors are available who

meet these conditions, these likeness constraints can be loosened. For example, donors for the age at first use variable are required to be of the same age as recipients, if at all possible. Further details on the PMN methodology are provided in RTI International (2007a) and by Singh, Grau, and Folsom (2001, 2002).

Although statistical imputation could not proceed separately within each State due to insufficient pools of donors, information about each respondent's State of residence was incorporated in the modeling and hot-deck steps. For most drugs, respondents were separated into three "State usage" categories as follows: respondents from States with high usage of a given drug were placed in one category, respondents from States with medium usage into another, and the remainder into a third category. This categorical "State rank" variable was used as one set of covariates in the imputation models. In addition, eligible donors for each item nonrespondent were restricted to be of the same State usage category (i.e., the same "State rank") as the nonrespondent.

A.3.2 Development of Analysis Weights

The general approach to developing and calibrating analysis weights involved developing design-based weights, d_k, as the product of the inverse of the selection probabilities at each selection stage. Similar to the 2005 NSDUH, the 2006 NSDUH used the new four-stage sample selection scheme. An extra selection stage of census tracts was added before the selection of a segment. Thus, the design-based weights, d_k, for the 2006 NSDUH incorporated the extra layer of sampling selection to reflect the change in sample design. Adjustment factors, $a_k(\lambda)$, then were applied to the design-based weights to adjust for nonresponse, to poststratify to known population control totals, and to control for extreme weights when necessary. In view of the importance of State-level estimates with the 50-State design, it was necessary to control for a much larger number of known population totals. Several other modifications to the general weight adjustment strategy that had been used in past surveys also were implemented for the first time beginning with the 1999 CAI sample.

Weight adjustments were based on a generalization of Deville and Särndal's (1992) logit model. This generalized exponential model (GEM) (Folsom & Singh, 2000b) incorporates unit-specific bounds (ℓ_k, u_k), $k \in s$, for the adjustment factor $a_k(\lambda)$ as follows:

$$a_k(\lambda) = \frac{\ell_k(u_k - c_k) + u_k(c_k - \ell_k)\exp(A_k x_k'\lambda)}{(u_k - c_k) + (c_k - \ell_k)\exp(A_k x_k'\lambda)},$$

where c_k are prespecified centering constants, such that $\ell_k < c_k < u_k$ and $A_k = (u_k - \ell_k) / (u_k - c_k)(c_k - \ell_k)$. The variables ℓ_k, c_k, and u_k are user-specified bounds, and λ is the column vector of p model parameters corresponding to the p covariates x. The λ-parameters are estimated by solving

$$\sum_s x_k d_k a_k(\lambda) - \tilde{T}_x = 0,$$

where $\tilde{T}_x$ denotes control totals that could be either nonrandom, as is generally the case with poststratification, or random, as is generally the case for nonresponse adjustment.

The final weights $w_k = d_k a_k(\lambda)$ minimize the distance function $\Delta(w,d)$ defined as

$$\Delta(w,d) = \sum_{k \in s} \frac{d_k}{A_k} \left\{ (a_k - \ell_k) \log \frac{a_k - \ell_k}{c_k - \ell_k} + (u_k - a_k) \log \frac{u_k - a_k}{u_k - c_k} \right\}.$$

This general approach was used at several stages of the weight adjustment process, including (1) adjustment of household weights for nonresponse at the screener level, (2) poststratification of household weights to meet population controls for various demographic groups by State, (3) adjustment of household weights for extremes, (4) poststratification of selected person weights, (5) adjustment of responding person weights for nonresponse at the questionnaire level, (6) poststratification of responding person weights, and (7) adjustment of responding person weights for extremes.

Every effort was made to include as many relevant State-specific covariates (typically defined by demographic domains within States) as possible in the multivariate models used to calibrate the weights (nonresponse adjustment and poststratification steps). Because further subdivision of State samples by demographic covariates often produced small cell sample sizes, it was not possible to retain all State-specific covariates (even after meaningful collapsing of covariate categories) and still estimate the necessary model parameters with reasonable precision. Therefore, a hierarchical structure was used in grouping States with covariates defined at the national level, at the census division level within the Nation, at the State group within the census division, and, whenever possible, at the State level. In every case, the controls for the total population within a State and the five age groups (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50 or older) within a State were maintained except that, in the last step of poststratification of person weights, six age groups (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50 to 64, 65 or older) were used. Census control totals by age, race, gender, and Hispanicity were required for the civilian, noninstitutionalized population of each State. Beginning with the 2002 NSDUH, the Population Estimates Branch of the U.S. Census Bureau has produced the necessary population estimates in response to a special request based on the 2000 census.

Consistent with the surveys from 1999 onward, control of extreme weights through separate bounds for adjustment factors was incorporated into the GEM calibration processes for both nonresponse and poststratification. This is unlike the traditional method of winsorization in which extreme weights are truncated at prespecified levels and the trimmed portions of weights are distributed to the nontruncated cases. In GEM, it is possible to set bounds around the prespecified levels for extreme weights, and then the calibration process provides an objective way of deciding the extent of adjustment (or truncation) within the specified bounds. A step was added to poststratify the household-level weights to obtain census-consistent estimates based on the household rosters from all screened households; these household roster-based estimates then provided the control totals needed to calibrate the respondent pair weights for subsequent planned analyses. An additional step poststratified the selected person sample to conform to the adjusted roster estimates. This additional step takes advantage of the inherent two-phase nature of the NSDUH design. The final step poststratified the respondent person sample to external census data (defined within the State whenever possible, as discussed above). For more detailed information, see the *2005 NSDUH Methodological Resource Book* (RTI International, 2007a).

For certain populations of interest, 2 years of NSDUH data were combined to obtain annual averages. The person-level weights for estimates based on the annual averages were obtained by dividing the analysis weights for the 2 specific years by a factor of 2.

Appendix B: Statistical Methods and Measurement

B.1 Target Population

An important limitation of estimates of drug use prevalence from the National Survey on Drug Use and Health (NSDUH) is that they are only designed to describe the target population of the survey—the civilian, noninstitutionalized population aged 12 or older. Although this population includes almost 98 percent of the total U.S. population aged 12 or older, it excludes some important and unique subpopulations who may have very different drug use patterns. For example, the survey excludes active military personnel, who have been shown to have significantly lower rates of illicit drug use. Also, persons living in institutional group quarters, such as prisons and residential drug use treatment centers, are not included in NSDUH, yet they have been shown in other surveys to have higher rates of illicit drug use. Also excluded are homeless persons not living in a shelter on the survey date; they are another population shown to have higher than average rates of illicit drug use. Appendix D describes other surveys that provide data for these populations.

B.2 Sampling Error and Statistical Significance

This report includes tables for national estimates (see Appendices F and G) that were drawn from a more comprehensive set of tables referred to as "detailed tables."[8] The national estimates, along with the associated standard errors (SEs), were computed for all detailed tables, including those in this report, using a multiprocedure package, SUDAAN® Software for Statistical Analysis of Correlated Data. SUDAAN was designed for the statistical analysis of data collected using stratified, multistage cluster sampling designs, as well as other observational and experimental studies involving repeated measures or studies subject to cluster correlation effects (RTI International, 2004). The final, nonresponse-adjusted, and poststratified analysis weights were used in SUDAAN to compute unbiased design-based drug use estimates.

The sampling error (i.e., the standard error or SE) of an estimate is the error caused by the selection of a sample instead of conducting a census of the population. The sampling error may be reduced by selecting a large sample and/or by using efficient sample design and estimation strategies, such as stratification, optimal allocation, and ratio estimation.

With the use of probability sampling methods in NSDUH, it is possible to develop estimates of sampling error from the survey data. These estimates have been calculated using SUDAAN for all estimates presented in this report using a Taylor series linearization approach that takes into account the effects of NSDUH's complex design features. The sampling errors are used to identify unreliable estimates and to test for the statistical significance of differences between estimates.

[8] This comprehensive set of tables is available at http://oas.samhsa.gov/WebOnly.htm#NHSDAtabs.

B.2.1 Variance Estimation for Totals

Although the SEs of estimates of means and proportions can be calculated appropriately in SUDAAN using a Taylor series linearization approach, SEs of estimates of totals may be underestimated in situations where the domain size is poststratified to data from the U.S. Census Bureau. Because of this underestimation, alternatives for estimating SEs of totals were implemented.

Estimates of means or proportions, $\hat{p}_d$, such as drug use prevalence estimates for a domain *d*, can be expressed as a ratio estimate:

$$\hat{p}_d = \frac{\hat{Y}_d}{\hat{N}_d},$$

where $\hat{Y}_d$ is a linear statistic estimating the number of substance users in the domain *d* and $\hat{N}_d$ is a linear statistic estimating the total number of persons in domain *d* (both users and nonusers). The SUDAAN software package is used to calculate direct estimates of $\hat{Y}_d$ and $\hat{N}_d$ and also can be used to estimate their respective SEs. A Taylor series approximation method implemented in SUDAAN provides estimates for $\hat{p}_d$ and its SE.

When the domain size, $\hat{N}_d$, is free of sampling error, an appropriate estimate of the SE for the total number of substance users is

$$\mathrm{SE}(\hat{Y}_d) = \hat{N}_d \mathrm{SE}(\hat{p}_d).$$

This approach is theoretically correct when the domain size estimates, $\hat{N}_d$, are among those forced to match their respective U.S. Census Bureau population estimates through the weight calibration process (Chen et al., 2007). In these cases, $\hat{N}_d$ is not subject to a sampling error induced by the NSDUH design. For a more detailed explanation of the weight calibration process, see Section A.3.2 in Appendix A.

For estimated domain totals, $\hat{Y}_d$, where $\hat{N}_d$ is not fixed (i.e., where domain size estimates are not forced to match the U.S. Census Bureau population estimates), this formulation still may provide a good approximation if it can be assumed that the sampling variation in $\hat{N}_d$ is negligible relative to the sampling variation in $\hat{p}_d$. This is a reasonable assumption for most cases in this study.

For various subsets of estimates, the above approach yielded an underestimate of the variance of a total because $\hat{N}_d$ was subject to considerable variation. In 2000, an approach was implemented to reflect more accurately the effects of the weighting process on the variance of total estimates. This approach consisted of calculating SEs of totals for all estimates in a particular detailed table using the formula above when a majority of estimates in a table were

among domains in which $\hat{N}_d$ was fixed during weighting or if it could be assumed that the sampling variation in $\hat{N}_d$ was negligible. SEs of totals in detailed tables, where the majority of estimates were among domains in which $\hat{N}_d$ was subject to considerable variability, were calculated directly in SUDAAN. Starting with the 2005 NSDUH and continuing in the 2006 NSDUH, a "mixed" method approach was implemented for all detailed tables to improve on the accuracy of SEs. This method had been applied to only a select number of tables in the 2004 NSDUH. This approach assigns the method of SE calculation to domains (subgroups for which the estimates were calculated) within tables so that all estimates among a select set of domains with fixed $\hat{N}_d$ were calculated using the formula above, and all other estimates were calculated directly in SUDAAN, regardless of other estimates within the same table. The set of domains considered controlled (i.e., those with a fixed $\hat{N}_d$) was restricted to main effects and two-way interactions in order to maintain continuity between years. Domains consisting of three-way interactions may be controlled in 1 year but not necessarily in preceding or subsequent years. The use of such SEs did not affect the SE estimates for the corresponding proportions presented in the same sets of tables because all SEs for means and proportions are calculated directly in SUDAAN. As a result of the use of this mixed-method approach, the SEs for the total estimates within many detailed tables were calculated differently from those in prior NSDUH reports.

Table B.1 at the end of this appendix contains a list of domains with a fixed $\hat{N}_d$. This table includes both the main effects and two-way interactions and may be used to identify the method of SE calculation employed for estimates of totals in the various tables of this report. For example, Table G.13 in Appendix G of this report presents estimates of illicit drug use among persons aged 18 or older within the domains of gender, Hispanic origin and race, education, and current employment. Estimates among the total population (age main effect), males and females (age by gender interaction), and Hispanics and non-Hispanics (age by Hispanic origin interaction) were treated as controlled in this table, and the formula above was used to calculate the SEs. The SEs for all other estimates, including white and black or African American (age by Hispanic origin by race interaction) were calculated directly from SUDAAN. It is important to note that estimates presented in this report for racial groups are among non-Hispanics. For instance, the domain for whites is actually non-Hispanic whites and is therefore a two-way interaction.

B.2.2 Suppression Criteria for Unreliable Estimates

As has been done in past NSDUH reports, direct survey estimates produced for this study that are considered to be unreliable due to unacceptably large sampling errors are not shown in this report and are noted by asterisks (*) in the tables containing such estimates. The criteria used for suppressing all direct survey estimates were based on the relative standard error (RSE) (defined as the ratio of the SE over the estimate), nominal (actual) sample size, and effective sample size for each estimate.

Proportion estimates ($\hat{p}$) within the range [$0 < \hat{p} < 1$], rates, and the corresponding estimated number of users were suppressed if

$$\text{RSE}[-\ln(\hat{p})] > .175 \text{ when } \hat{p} \leq .5$$

or

$$\text{RSE}[-\ln(1 - \hat{p})] > .175 \text{ when } \hat{p} > .5.$$

Using a first-order Taylor series approximation to estimate $\text{RSE}[-\ln(\hat{p})]$ and $\text{RSE}[-\ln(1 - \hat{p})]$, the following equation was derived and used for computational purposes:

$$\frac{\text{SE}(\hat{p})/\hat{p}}{-\ln(\hat{p})} > .175 \text{ when } \hat{p} \leq .5$$

or

$$\frac{\text{SE}(\hat{p})/(1-\hat{p})}{-\ln(1-\hat{p})} > .175 \text{ when } \hat{p} > .5.$$

The separate formulas for $\hat{p} \leq .5$ and $\hat{p} > .5$ produce a symmetric suppression rule; that is, if $\hat{p}$ is suppressed, $1-\hat{p}$ will be suppressed as well. See Figure B.1 for a graphical representation of the required minimum effective sample sizes as a function of the proportion estimated. When $.05 < \hat{p} < .95$, the symmetric properties of the rule produce local minimum effective sample sizes at $\hat{p} = .2$ and again at $\hat{p} = .8$, such that an effective sample size of greater than 50 is required; this means that estimates would be suppressed for these values of $\hat{p}$ unless the effective sample sizes were greater than 50. Within this same interval of $.05 < \hat{p} < .95$, a local maximum effective sample size of 68 is required at $\hat{p} = .5$. So, to simplify requirements and maintain a conservative suppression rule, estimates of $\hat{p}$ between .05 and .95, which had effective sample sizes below 68, were suppressed.

In addition, a minimum nominal sample size suppression criterion (n = 100) that protects against unreliable estimates caused by small design effects and small nominal sample sizes was employed. Prevalence estimates also were suppressed if they were close to 0 or 100 percent (i.e., if $\hat{p} < .00005$ or if $\hat{p} \geq .99995$).

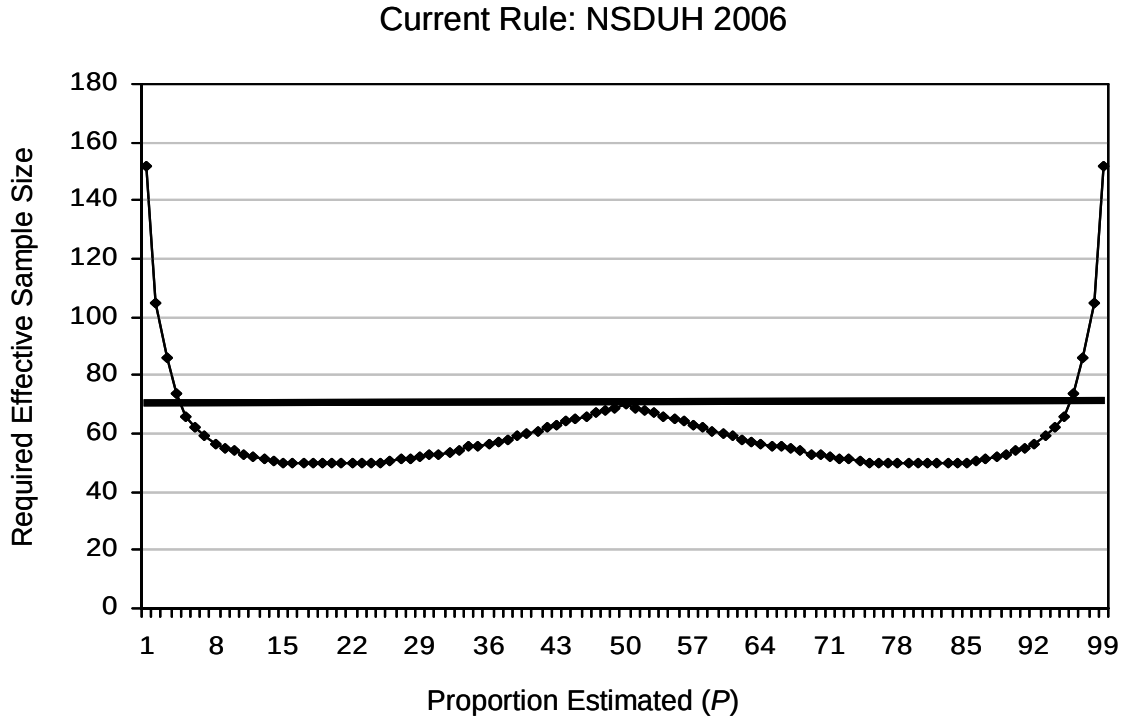
Estimates of other totals (e.g., number of initiates) along with means and rates that are not bounded between 0 and 1 (e.g., mean age at first use and incidence rates) were suppressed if the RSEs of the estimates were larger than .5. Additionally, estimates of the mean age at first use were suppressed if the sample size was smaller than 10 respondents. Also, the estimated incidence rate and number of initiates were suppressed if they rounded to 0.

The suppression criteria for various NSDUH estimates are summarized in Table B.2 at the end of this appendix.

B.2.3 Statistical Significance of Differences

This section describes the methods used to compare prevalence estimates in this report. Customarily, the observed difference between estimates is evaluated in terms of its statistical significance. Statistical significance is based on the p value of the test statistic and refers to the

Figure B.1 Required Effective Sample as a Function of the Proportion Estimated



probability that a difference as large as that observed would occur due to random variability in the estimates if there were no difference in the prevalence estimates for the population groups being compared. The significance of observed differences in this report is reported at the .05 level. When comparing prevalence estimates, the null hypothesis (no difference between prevalence estimates) was tested against the alternative hypothesis (there is a difference in prevalence estimates) using the standard difference in proportions test expressed as

$$Z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\text{var}(\hat{p}_1) + \text{var}(\hat{p}_2) - 2\text{cov}(\hat{p}_1, \hat{p}_2)}} ,$$

where $\hat{p}_1$ = first prevalence estimate, $\hat{p}_2$ = second prevalence estimate, $\text{var}(\hat{p}_1)$ = variance of first prevalence estimate, $\text{var}(\hat{p}_2)$ = variance of second prevalence estimate, and $\text{cov}(\hat{p}_1, \hat{p}_2)$ = covariance between $\hat{p}_1$ and $\hat{p}_2$. In cases where significance tests between years were performed, the prevalence estimate from the earlier year (e.g., 2002, 2003, 2004, or 2005) becomes the first prevalence estimate, and the prevalence estimate from the later year (e.g., 2003, 2004, 2005, or 2006) becomes the second prevalence estimate.

Under the null hypothesis, *Z* is asymptotically distributed as a normal random variable. Therefore, calculated values of *Z* can be referred to the unit normal distribution to determine the corresponding probability level (i.e., *p* value). Because the covariance term between the two

estimates is not necessarily zero, SUDAAN was used to compute estimates of *Z* along with the associated *p* values using the analysis weights and accounting for the sample design as described in Appendix A. A similar procedure and formula for *Z* were used for estimated totals; however, it should be noted that because it was necessary to calculate the SE outside of SUDAAN for domains forced by the weighting process to match their respective U.S. Census Bureau population estimates, the corresponding test statistics also were computed outside of SUDAAN.

When comparing population subgroups across three or more levels of a categorical variable, log-linear chi-square tests of independence of the subgroups and the prevalence variables were conducted first to control the error level for multiple comparisons. If the chi-square test indicated overall significant differences, the significance of each particular pairwise comparison of interest was tested using SUDAAN analytic procedures to properly account for the sample design. Using the published estimates and SEs to perform independent *t* tests for the difference of proportions usually will provide the same results as tests performed in SUDAAN. However, where the significance level is borderline, results may differ for two reasons: (1) the covariance term is included in SUDAAN tests, whereas it is not included in independent *t* tests; and (2) the reduced number of significant digits shown in the published estimates may cause rounding errors in the independent *t* tests.

As part of a comparative analysis discussed in Chapter 9, prevalence estimates from the Monitoring the Future (MTF) study, sponsored by the National Institute on Drug Abuse (NIDA), were presented for recency measures of selected substances (see Tables 9.1 and 9.2). The analyses focused on prevalence estimates for 8th and 10th graders and prevalence estimates for young adults aged 19 to 24 for 2002 through 2006. Estimates for the 8th and 10th grade students were calculated using MTF data as the simple average of the 8th and 10th grade estimates. Estimates for young adults aged 19 to 24 were calculated using MTF data as the simple average of three modal age groups: 19 and 20 years, 21 and 22 years, and 23 and 24 years. Published results were not available from NIDA for significant differences in prevalence estimates between years for these subgroups, so testing was performed using information that was available.

For the 8th and 10th grade average estimates, tests of differences were performed between 2006 and the 4 prior years. Estimates for persons in grade 8 and grade 10 were considered independent, simplifying the calculation of variances for the combined grades. Across years, the estimates for 2006 involved samples independent of those in 2002, 2003, and 2004, but from 2005 to 2006 the sample of schools overlapped 50 percent, creating a covariance in the estimates. Design effects published in Johnston et al. (2007b) for adjacent and nonadjacent year testing were used. For the 19- to 24-year-old age group, tests of differences were done assuming independent samples across years, which is appropriate for comparisons of 2003 and 2005 with 2006. However, this results in conservative tests for comparisons of 2002 and 2004 data with 2006 data because it does not take into account covariances associated with repeated observations from the longitudinal samples. Estimates of covariances were not available.

As an example, the difference between the 2005 and 2006 averages of prevalence estimates for persons in grades 8 and 10 can be expressed as

$$\overline{p}_2 - \overline{p}_1 ,$$

where $\overline{p}_1 = (\hat{p}_{11} + \hat{p}_{12})/2$, $\hat{p}_{11}$ and $\hat{p}_{12}$ are the prevalence estimates for the 8th and 10th grades, respectively, for 2005; and $\overline{p}_2$ is defined similarly for 2006. The variance of a prevalence estimate $\hat{p}$ can be written as

$$\text{var}(\hat{p}) = \tfrac{1}{n} D\hat{p}(1-\hat{p}),$$

where *n* is the sample size and *D* is the appropriate design effect obtained from the sampling design. In the MTF study, design effects were available for comparisons between adjacent year (i.e., 2005 vs. 2006) estimates and nonadjacent year (i.e., 2002 vs. 2006, 2003 vs. 2006, and 2004 vs. 2006) estimates; therefore, the variance of the difference between 2 years of estimates for a particular grade can be expressed as

$$\text{var}(\hat{p}_{2i} - \hat{p}_{1i}) = D_i \left(\tfrac{1}{n_{1i}} \hat{p}_{1i}(1-\hat{p}_{1i}) + \tfrac{1}{n_{2i}} \hat{p}_{2i}(1-\hat{p}_{2i}) \right);\ i = 1,2,$$

where $i = 1$ indexes the 8th grade, $i = 2$ indexes the 10th grade, D_i is the design effect appropriate for comparisons between estimates of the 2 years (with separate design effect parameters for adjacent and nonadjacent years), and the n_{ji} are the sample sizes corresponding to the indexed year and grade prevalence estimates, $i, j = 1,2$. Because the 8th and 10th grade samples were independently drawn, the variance of the difference between the 8th and 10th grade averages can be expressed as

$$\text{var}(\overline{p}_2 - \overline{p}_1) = \tfrac{1}{4}\{\text{var}(\hat{p}_{21} - \hat{p}_{11}) + \text{var}(\hat{p}_{22} - \hat{p}_{12})\}.$$

The test statistic can therefore be written as

$$Z = \frac{\overline{p}_2 - \overline{p}_1}{\sqrt{\text{var}(\overline{p}_2 - \overline{p}_1)}},$$

where *Z* is asymptotically distributed as a standard normal random variable.

B.3 Other Information on Data Accuracy

The accuracy of survey estimates can be affected by nonresponse, coding errors, computer processing errors, errors in the sampling frame, reporting errors, and other errors not due to sampling. They are sometimes referred to as "nonsampling errors." These types of errors and their impact are reduced through data editing, statistical adjustments for nonresponse, close monitoring and periodic retraining of interviewers, and improvement in various quality control procedures.

Although these types of errors often can be much larger than sampling errors, measurement of most of these errors is difficult. However, some indication of the effects of some types of these errors can be obtained through proxy measures, such as response rates and from other research studies.

B.3.1 Screening and Interview Response Rate Patterns

In 2006, respondents continued to receive a $30 incentive in an effort to maximize response rates. Of the 151,288 eligible households sampled for the 2006 NSDUH, 137,057 were screened successfully, for a weighted screening response rate of 90.6 percent (Table B.3). In these screened households, a total of 85,034 sample persons were selected, and completed interviews were obtained from 67,802 of these sample persons, for a weighted interview response rate of 74.2 percent (Table B.4). A total of 11,750 (17.7 percent) sample persons were classified as refusals or parental refusals, 3,144 (3.7 percent) were not available or never at home, and 2,338 (4.3 percent) did not participate for various other reasons, such as physical or mental incompetence or language barrier (see Table B.4, which also shows the distribution of the selected sample by interview code and age group). Among demographic subgroups, the weighted interview response rate was highest among 12 to 17 year olds (85.5 percent), females (75.9 percent), blacks (77.9 percent), among persons in the Midwest (75.4 percent), and among residents of nonmetropolitan areas (76.8 percent) (Table B.5).

The overall weighted response rate, defined as the product of the weighted screening response rate and weighted interview response rate, was 67.2 percent in 2006. Nonresponse bias can be expressed as the product of the nonresponse rate ($1 - R$) and the difference between the characteristic of interest between respondents and nonrespondents in the population ($P_r - P_{nr}$). By maximizing NSDUH response rates, it is hoped that the bias due to the difference between the estimates from respondents and nonrespondents is minimized. Drug use surveys are particularly vulnerable to nonresponse due to the difficult nature of accessing heavy drug users. In a study that matched 1990 census data to 1990 NHSDA nonrespondents,[9] it was found that populations with low response rates did not always have high drug use rates. For example, although some populations were found to have low response rates and high drug use rates (e.g., residents of large metropolitan areas and males), other populations had low response rates and low drug use rates (e.g., older adults and high-income populations). Therefore many of the potential sources of bias tend to cancel each other in estimates of overall prevalence (Gfroerer, Lessler, & Parsley, 1997).

B.3.2 Inconsistent Responses and Item Nonresponse

Among survey participants, item response rates were above 99 percent for most drug use items. However, respondents could give inconclusive or inconsistent information about whether they ever used a given drug (i.e., "yes" or "no") and, if they had used a drug, when they last used it; the latter information is needed to identify those lifetime users of a drug who used it in the past year or past month. In addition, respondents could give inconsistent responses to items such as when they first used a drug compared with their most recent use of a drug. These missing or inconsistent responses first are resolved where possible through a logical editing process. Additionally, missing or inconsistent responses are imputed using statistical methodology (Aldworth et al., 2007a). These imputation procedures in NSDUH are based on responses to multiple questions, so that the maximum amount of information is used in determining whether a respondent is classified as a user or nonuser, and if the respondent is classified as a user, whether the respondent is classified as having used in the past year or the past month. For example,

[9] Prior to 2002, NSDUH was known as the National Household Survey on Drug Abuse (NHSDA).

ambiguous data on the most recent use of cocaine are statistically imputed based on a respondent's data for use (or most recent use) of tobacco products, alcohol, inhalants, marijuana, hallucinogens, and nonmedical use of prescription psychotherapeutic drugs. Nevertheless, editing and imputation of missing responses are potential sources of measurement error. For more information on editing and statistical imputation, see Sections A.3 and A.3.1 of Appendix A. Additional information on editing and statistical imputation procedures can be found online at http://www.drugabusestatistics.samhsa.gov/nsduh/methods.cfm#top.

B.3.3 Data Reliability

NSDUH research staff are conducting a study to assess the reliability of respondents' responses to the survey. An interview/reinterview method was employed in which 3,136 individuals were interviewed on two occasions during 2006 generally 5 to 15 days apart. The reliability of the responses will be assessed by comparing the responses of the first interview (time 1) to the responses from the reinterview (time 2). Preliminary analyses of data from approximately two thirds of the study's respondents show that, overall, there is a good level of consistency between measures of substance use and mental health between the two data collection time points. Results of the study will be published later.

B.3.4 Validity of Self-Reported Substance Use

Most substance use prevalence estimates, including those produced for NSDUH, are based on self-reports of use. Although studies have generally supported the validity of self-report data, it is well documented that these data often are biased (underreported or overreported). The bias varies by several factors, including the mode of administration, the setting, the population under investigation, and the type of drug (Aquilino, 1994; Brener et al., 2006; Harrison & Hughes, 1997; Tourangeau & Smith, 1996; Turner, Lessler, & Gfroerer, 1992). NSDUH utilizes widely accepted methodological practices for increasing the accuracy of self-reports, such as encouraging privacy through audio computer-assisted self-interviewing (ACASI) and providing assurances that individual responses will remain confidential. Comparisons using these methods within NSDUH have shown that they reduce reporting bias (Gfroerer, Eyerman, & Chromy, 2002). Various procedures, such as biological specimens (e.g., urine, hair, saliva), proxy reports (e.g., family member, peer), and repeated measures (e.g., recanting), have been used to validate self-report data (Fendrich, Johnson, Sudman, Wislar, & Spiehler, 1999). However, these procedures often are impractical or too costly for general population epidemiological studies (SRNT Subcommittee on Biochemical Verification, 2002).

A recent study cosponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) and NIDA examined the validity of NSDUH self-report data on drug use among persons aged 12 to 25. The study found that it is possible to collect urine and hair specimens with a high response rate in a general population survey, and that most youths and young adults reported their recent drug use accurately (Harrison, Martin, Enev, & Harrington, 2007). However, there was some reporting of differences in either direction, with some respondents not reporting use but testing positive, and some reporting use but testing negative. Technical and statistical problems related to the hair tests precluded presenting comparisons of self-reports and hair test results, while small sample sizes for self-reports and positive urine test results for opiates and stimulants precluded drawing conclusions about the validity of self-reports

of these drugs. Further, inexactness in the window of detection for drugs in biological specimens and biological factors affecting the window of detection could account for some inconsistency between self-reports and urine test results.

B.4 Measurement Issues

Several measurement issues associated with the 2006 NSDUH may be of interest and are discussed in this section. Specifically, these issues include the methods for measuring incidence, nicotine (cigarette) dependence, substance dependence and abuse, serious psychological distress (SPD), depression, methamphetamine use, and income.

B.4.1 Incidence

In epidemiological studies, incidence is defined as the number of new cases of a disease occurring within a specific period of time. Similarly, in substance use studies, incidence refers to the first use of a particular substance.

In the 2004 NSDUH national results report (Office of Applied Studies [OAS], 2005b), a new measure related to incidence was introduced, and since then it has become the primary focus of Chapter 5 in this national results report. The incidence measure is termed "past year initiation" and refers to respondents whose date of first use of a substance was within the 12 months prior to their interview date. This measure is determined by self-reported past year use, age at first use, year and month of recent new use, and the interview date.

Since 1999, the survey questionnaire has allowed for collection of year and month of first use for recent initiates (i.e., persons who used a particular substance for the first time in a given survey year). Month, day, and year of birth also are obtained directly or are imputed for item nonrespondents as part of the data postprocessing. Additionally, the questionnaire call record provides the date of the interview. By imputing a day of first use within the year and month of first use, a specific date of first use, $t_{fu,d,i}$, can be used for estimation purposes.

Past year initiation among persons using a substance in the past year can be viewed as an indicator variable defined as follows:

$$I_{(\textit{Past Year Initiate})}(i) = \begin{cases} 1 & \text{if } \left(DOI_i MOI_i YOI_i - t_{fu,d,i}\right) \leq 365 \\ 0 & \text{otherwise} \end{cases},$$

where DOI_i, MOI_i, and YOI_i denote the day, month, and year of the interview, respectively, and $t_{fu,d,i}$ denotes the date of first use.

The calculation of this estimate does not take into account whether a respondent initiated substance use while a resident of the United States. This method of calculation has little effect on past year estimates and allows for direct comparability with other standard measures of substance use because the populations of interest for the measures will be the same (i.e., both measures examine all possible respondents and are not restricted to those initiating substance use only in the United States).

One important note for incidence estimates is the relationship between main categories and subcategories of substances (e.g., illicit drugs would be a main category, and inhalants and marijuana would be subcategories in relation to illicit drugs). For most measures of substance use, any member of a subcategory is by necessity a member of the main category (e.g., if a respondent is a past month user of a particular drug, then he or she is also a past month user of illicit drugs in general). However, this is not the case with regard to incidence statistics. Because an individual can only be an initiate of a particular substance category (main or sub) a single time, a respondent with lifetime use of multiple substances may not, by necessity, be included as a past year initiate of a main category, even if he or she were a past year initiate for a particular subcategory because his or her first initiation of other substances could have occurred earlier.

In addition to estimates of the number of persons initiating use of a substance in the past year, estimates of the mean age of past year first-time users of these substances are computed. Unless specified otherwise, estimates of the mean age at initiation in the past 12 months have been restricted to persons aged 12 to 49 so that the mean age estimates reported are not influenced by those few respondents who were past year initiates at age 50 or older. As a measure of central tendency, means are influenced heavily by the presence of extreme values in the data, and this constraint should increase the utility of these results to health researchers and analysts by providing a better picture of the substance use initiation behaviors among the civilian, noninstitutionalized population in the United States. This constraint was applied only to estimates of mean age at first use and does not affect estimates of incidence.

Because NSDUH is a survey of persons aged 12 years old or older at the time of the interview, younger individuals in the sample dwelling units are not eligible for selection into the NSDUH sample. Some of these younger persons may have initiated substance use during the past year. As a result, past year initiate estimates suffer from undercoverage if a user assumes that these estimates reflect all initial users instead of only for those above the age of 11. For earlier years, data can be obtained retrospectively based on the age at and date of first use. As an example, persons who were 12 years old on the date of their interview in the 2006 survey may report having initiated use of cigarettes between 1 and 2 years ago; these persons would have been past year initiates reported in the 2005 survey had persons who were 11 years old on the date of the 2005 interview been allowed to participate in the survey. Similarly, estimates of past year use by younger persons (age 10 or younger) can be derived from the current survey, but they apply to initiation in prior years and not the survey year.

To get an impression of the potential undercoverage in the current year, reports of substance use initiation reported in 2006 by persons aged 12 or older were estimated for the years in which these persons would have been 1 to 11 years younger. These estimates do not necessarily reflect behavior by persons 1 to 11 years younger in 2006. Instead, the data for the 11 year olds reflect initiation in the year prior to the 2006 survey, the data for the 10 year olds reflect behavior between the 12^{th} and 23^{rd} month prior to the 2006 survey, and so on. A very rough way to adjust for the difference in the years that the estimate pertains to without considering changes in the population is to apply an adjustment factor to each age-based estimate of past year initiates. This adjustment factor can be based on a ratio of lifetime users aged 12 to 17 in 2006 to the same estimate for the prior applicable survey year. To illustrate the calculation, consider past year use of alcohol. In the 2006 survey, 105,862 persons 12 years old in 2006 were estimated to have initiated use of alcohol between 1 and 2 years earlier. These persons would

have been past year initiates in the 2005 survey conducted on the same dates had the 2005 survey covered younger persons. The estimated number of lifetime users currently aged 12 to 17 was 10,255,011 for 2006 and 10,305,889 for 2005, indicating fewer overall initiates of alcohol use among persons aged 17 or younger in 2006. Thus, an adjusted estimate of initiation of alcohol use by persons who were 11 years old in 2006 is given by

$$\left(Estimated\ Past\ Year\ Initiates\ Aged\ 11\right)_{2005} \times \frac{\left(Estimated\ Lifetime\ Users\ Aged\ 12\ to\ 17\right)_{2006}}{\left(Estimated\ Lifetime\ Users\ Aged\ 12\ to\ 17\right)_{2005}}.$$

This yielded an adjusted estimate of 105,339 persons 11 years old on a 2006 survey date and initiating use of alcohol in the past year:

$$105{,}862 * \frac{10{,}255{,}011}{10{,}305{,}889} = 105{,}339.$$

A similar procedure was used to adjust the estimated number of past year initiates among persons who would have been 10 years old on the date of the interview in 2004 and for younger persons in earlier years. The overall adjusted estimate for past year initiates of alcohol use by persons 11 years of age or younger on the date of the interview was 268,883, or about 6.1 percent of the estimate based on past year initiation by persons 12 or older only (268,883 ÷ 4,381,000 = 0.0614).

Based on similar analyses, the estimated undercoverage of past year initiates was 5.4 percent for cigarettes, 1.7 percent for marijuana, and 27.7 percent for inhalants.

The undercoverage of past year initiates aged 11 or younger also affects the mean age at first use estimate. An adjusted estimate of the mean age at first use was calculated using a weighted estimate of the mean age at first use based on the current survey and the numbers of persons aged 11 or younger in the past year obtained in the aforementioned analysis for estimating undercoverage of past year initiates. Analysis results showed that the mean age at first use was changed from 16.6 to 16.1 (or a decrease of 2.7 percent) for alcohol, from 17.1 to 16.6 (or a decrease of 3.0 percent) for cigarettes, from 17.4 to 17.3 (or a decrease of 0.7 percent) for marijuana, and from 15.7 to 14.3 (or a decrease of 8.8 percent) for inhalants.

B.4.2 Nicotine (Cigarette) Dependence

The 2006 NSDUH computer-assisted interviewing (CAI) instrumentation included questions designed to measure nicotine dependence among current cigarette smokers. Nicotine dependence is based on criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) (Shiffman, Hickcox, Gnys, Paty, & Kassel, 1995; Shiffman, Waters, & Hickcox, 2004) and the Fagerstrom Test of Nicotine Dependence (FTND) (Fagerstrom, 1978; Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991). The above-mentioned criteria were first used to measure nicotine dependence in NSDUH in 2003.

The conceptual roots of the NDSS (Edwards & Gross, 1976) are similar to those behind the American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental*

Disorders, 4th edition (DSM-IV), concept of dependence (APA, 1994). The 2006 NSDUH contained 19 NDSS questions that addressed five aspects of dependence:

1. Smoking drive (compulsion to smoke driven by nicotine craving and withdrawal)
    a. After not smoking for a while, you need to smoke in order to feel less restless and irritable.
    b. When you don't smoke for a few hours, you start to crave cigarettes.
    c. You sometimes have strong cravings for a cigarette where it feels like you're in the grip of a force you can't control.
    d. You feel a sense of control over your smoking - that is, you can "take it or leave it" at any time.
    e. You sometimes worry that you will run out of cigarettes.
2. Nicotine tolerance
    a. Since you started smoking, the amount you smoke has increased.
    b. Compared to when you first started smoking, you need to smoke a lot more now in order to be satisfied.
    c. Compared to when you first started smoking, you can smoke much, much more now before you start to feel anything.
3. Continuous smoking
    a. You smoke cigarettes fairly regularly throughout the day.
    b. You smoke about the same amount on weekends as on weekdays.
    c. You smoke just about the same number of cigarettes from day to day.
    d. It's hard to say how many cigarettes you smoke per day because the number often changes.
    e. It's normal for you to smoke several cigarettes in an hour, then not have another one until hours later.
4. Behavioral priority (preferring smoking over other reinforcing activities)
    a. You tend to avoid places that don't allow smoking, even if you would otherwise enjoy them.
    b. There are times when you choose not to be around your friends who don't smoke because they won't like it if you smoke.
    c. Even if you're traveling a long distance, you'd rather not travel by airplane because you wouldn't be allowed to smoke.
5. Stereotypy (fixed patterns of smoking)
    a. Do you have any friends who do not smoke cigarettes?

b. The number of cigarettes you smoke per day is often influenced by other things - how you're feeling, or what you're doing, for example.

c. Your smoking is not affected much by other things. For example, you smoke about the same amount whether you're relaxing or working, happy or sad, alone or with others.

Each of the five domains listed above can be assessed by a separate measure, but an average score across all domains also can be obtained for overall nicotine dependence (Shiffman et al., 2004). The NDSS algorithm for calculating this average score was based on the respondent's answers to 17 of the 19 questions listed above. The two items regarding nonsmoking friends (4b and 5a) were excluded due to frequently missing data.

To optimize the number of respondents who could be classified for nicotine dependence, imputation was utilized for all respondents who answered all but 1 of the 17 nicotine dependence questions that were used in the NDSS algorithm. The imputation was based on weighted least square regressions using the other 16 NDSS items as covariates in the model (Aldworth et al., 2007a).

Responses to items 1a-c, 1e, 2a-c, 3a-c, 4a, 4c, and 5c were coded from 1 to 5 where

1 = Not at all true of me
2 = Sometimes true of me
3 = Moderately true of me
4 = Very true of me
5 = Extremely true of me

Responses to items 1d, 3d, 3e, and 5b were reverse coded from 5 to 1 where

5 = Not at all true of me
4 = Sometimes true of me
3 = Moderately true of me
2 = Very true of me
1 = Extremely true of me

The NDSS score was calculated as the sum of the responses to the previous questions divided by 17. The NDSS score was only calculated for current cigarette smokers who had complete data (based on actual reporting and imputation) for all 17 questions.

A current cigarette smoker was defined as nicotine dependent if his or her NDSS score was greater than or equal to 2.75. If the NDSS score for a current cigarette smoker was less than 2.75 or the NDSS score was not defined, then the respondent was determined to be nondependent based on the NDSS. The threshold of 2.75 was derived by examining the distribution of scores in other samples of smokers administered the NDSS, including a contrast of scores obtained for nondependent smokers (chippers) versus heavy smokers (Shiffman, Paty, Kassel, Gnys, & Zettler-Segal, 1994).

The FTND is a multi-item measure of dependence, but much of its ability to discriminate dependent smokers derives from a single item that assesses how soon after waking that smokers have their first cigarette (Heatherton, Kozlowski, Frecker, Rickert, & Robinson, 1989). Because most nicotine is cleared from the bloodstream overnight, smokers typically wake in nicotine deprivation, and rapid movement to smoke is considered a sign of dependence. A current cigarette smoker was defined as nicotine dependent based on the FTND if the first cigarette smoked was within 30 minutes of waking up on the days that he or she smoked.

Using both the NDSS and the FTND measures described above, a current cigarette smoker was defined as having nicotine dependence in the past month if he or she met either the NDSS or FTND criteria for dependence.

B.4.3 Illicit Drug and Alcohol Dependence and Abuse

The 2006 NSDUH CAI instrumentation included questions that were designed to measure dependence on and abuse of illicit drugs and alcohol. For these substances,[10] dependence and abuse questions were based on the criteria in the DSM-IV (APA, 1994).

Specifically, for marijuana, hallucinogens, inhalants, and tranquilizers, a respondent was defined as having dependence if he or she met three or more of the following six dependence criteria:

1. Spent a great deal of time over a period of a month getting, using, or getting over the effects of the substance.
2. Used the substance more often than intended or was unable to keep set limits on the substance use.
3. Needed to use the substance more than before to get desired effects or noticed that the same amount of substance use had less effect than before.
4. Inability to cut down or stop using the substance every time tried or wanted to.
5. Continued to use the substance even though it was causing problems with emotions, nerves, mental health, or physical problems.
6. The substance use reduced or eliminated involvement or participation in important activities.

For alcohol, cocaine, heroin, pain relievers, sedatives, and stimulants, a seventh withdrawal criterion was added. A respondent was defined as having dependence if he or she met three or more of seven dependence criteria. The seventh withdrawal criterion is defined by a respondent reporting having experienced a certain number of withdrawal symptoms that vary by substance (e.g., having trouble sleeping, cramps, hands tremble).

For each illicit drug and alcohol, a respondent was defined as having abused that substance if he or she met one or more of the following four abuse criteria and was determined not to be dependent on the respective substance in the past year:

[10] Substances include alcohol, marijuana, cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives.

1. Serious problems at home, work, or school caused by the substance, such as neglecting your children, missing work or school, doing a poor job at work or school, or losing a job or dropping out of school.
2. Used the substance regularly and then did something that might have put you in physical danger.
3. Use of the substance caused you to do things that repeatedly got you in trouble with the law.
4. Had problems with family or friends that were probably caused by using the substance and continued to use the substance even though you thought the substance use caused these problems.

Criteria used to determine whether a respondent was asked the dependence and abuse questions included responses from the core substance use questions and the frequency of substance use questions, as well as the noncore substance use questions. Missing or incomplete responses in the core substance use and frequency of substance use questions were imputed. However, the imputation process did not take into account reported data in the noncore (i.e., substance dependence and abuse) CAI modules. Responses to the dependence and abuse questions that were inconsistent with the imputed substance use or frequency of substance use may have existed because different criteria and combinations of different criteria were used as skip logic for each substance.

For alcohol and marijuana, respondents were asked the dependence and abuse questions if they reported substance use on more than 5 days in the past year, or if they reported any substance use in the past year but did not report their frequency of past year use. Therefore, inconsistencies could have occurred where the imputed frequency of use response indicated less frequent use than required for respondents to be asked the dependence and abuse questions originally.

For cocaine, heroin, and stimulants, respondents were asked the dependence and abuse questions if they reported past year use in a core drug module or past year use in the noncore special drugs module. Thus, inconsistencies could have occurred when the response to a core substance use question indicated no use in the past year, but responses to dependence and abuse questions indicated substance dependence or abuse for the respective substance.

In 2005, there were two new questions added to the noncore special drugs module about past year methamphetamine use: "Have you ever, even once, used methamphetamine?" and "Have you ever, even once, used a needle to inject methamphetamine?" In 2006, there was an additional follow-up question added to the noncore special drugs module confirming prior responses about methamphetamine use: “Earlier, the computer recorded that you have never used methamphetamine. Which answer is correct?” The responses to these new questions were used in the skip logic for the stimulant dependence and abuse questions. Based on the decisions made during the methamphetamine analysis (see Section B.4.6), respondents who indicated past year methamphetamine use solely from these new special drug use questions (i.e., did not indicate methamphetamine use from the core drug module or other questions in the special drugs module) were categorized as NOT having past year stimulant dependence or abuse. Furthermore, if these same respondents were categorized as not having past year dependence on or abuse of any other

substance (e.g., pain relievers, tranquilizers, or sedatives for the psychotherapeutic drug grouping), then they were categorized as NOT having past year dependence on or abuse of psychotherapeutics, illicit drugs, illicit drugs or alcohol, and illicit drugs and alcohol.

Respondents might have provided ambiguous information about past year use of any individual substance, in which case these respondents were not asked the dependence and abuse questions for that substance. Subsequently, these respondents could have been imputed to be past year users of the respective substance. In this situation, the dependence and abuse data were unknown; thus, these respondents were classified as not dependent on or abusing the respective substance. However, such a respondent never actually was asked the dependence and abuse questions.

B.4.4 Serious Psychological Distress

For this 2006 NSDUH report, serious psychological distress (SPD) was measured using the K6 screening instrument for nonspecific psychological distress (Kessler et al., 2003a). In NSDUH reports prior to 2004, the K6 scale was used to measure serious mental illness (SMI). For a discussion of the reasons that the K6 was used to measure SPD instead of SMI for the 2004 and later NSDUH reports, as well as details on a methodological study of the measurement of SMI, see Section B.4.4 of Appendix B in the 2004 NSDUH national results report (OAS, 2005b).

The K6 consists of six questions that ask respondents how frequently they experienced symptoms of psychological distress during the 1 month in the past year when they were at their worst emotionally. The use of this scale for SPD (or SMI prior to 2004) was based on a methodological study designed to evaluate several screening scales for measuring SMI in NSDUH. These scales evaluated in this methodological study consisted of a truncated version of the World Health Organization (WHO) Composite International Diagnostic Interview Short Form (CIDI-SF) scale (Kessler, Andrews, Mroczek, Üstün, & Wittchen, 1998), the K10/K6 scale of nonspecific psychological distress (Kessler et al., 2003a), and a truncated version of the WHO Disability Assessment Schedule (WHO-DAS) (Rehm et al., 1999). Overall, the K6 scale exhibited sound psychometric properties.

The six questions comprising the K6 scale are given as follows:

DSNERV1 Most people have periods when they are not at their best emotionally. Think of 1 month in the past 12 months when you were the most depressed, anxious, or emotionally stressed. If there was no month like this, think of a typical month.

During that month, how often did you feel nervous?

1 All of the time
2 Most of the time
3 Some of the time
4 A little of the time
5 None of the time
DK/REF

Response categories are the same for the following questions:

DSHOPE During that same month when you were at your worst emotionally . . . how often did you feel hopeless?

DSFIDG During that same month when you were at your worst emotionally . . . how often did you feel restless or fidgety?

DSNOCHR During that same month when you were at your worst emotionally . . . how often did you feel so sad or depressed that nothing could cheer you up?

DSEFFORT During that same month when you were at your worst emotionally . . . how often did you feel that everything was an effort?

DSDOWN During that same month when you were at your worst emotionally . . . how often did you feel down on yourself, no good, or worthless?

To create a score, the six items (DSNERV1, DSHOPE, DSFIDG, DSNOCHR, DSEFFORT, and DSDOWN) on the K6 scale were coded from 0 to 4 so that "all of the time" was coded 4, "most of the time" 3, "some of the time" 2, "a little of the time" 1, and "none of the time" 0, with "don't know" and "refuse" also coded 0. Summing across the transformed responses resulted in a score with a range from 0 to 24. Respondents with a total score of 13 or greater were classified as having past year SPD (or SMI prior to 2004). This cut point was chosen to equalize false positives and false negatives.

In the 2003 NSDUH, the mental health module (i.e., the serious mental illness module) contained a truncated version of the CIDI-SF scale, the K10/K6 scale, and a truncated version of the WHO-DAS scale (in this order) to mirror the questions used by Kessler et al. (2003a). Thus, the module contained a broad array of questions from the CIDI-SF about mental health (i.e., panic attacks, depression, mania, phobias, generalized anxiety, posttraumatic stress disorder, and use of mental health services) that preceded the K6 items, and the four extra questions in the K10 scale were interspersed among the items in the K6 scale. In the 2004 NSDUH, the sample of respondents 18 or older was split evenly between the "long form" module, which included all items in the mental health module used in the 2003 NSDUH (sample A), and a "short form" module consisting only of the K6 items (sample B). The "short form" version was introduced to reduce interview time, removing questions that were not needed for estimation of SPD, and to provide space for a new module on depression. Inclusion of the "long form" version in half of the sample was to measure the impact on the K6 responses of changing the context of the K6.

Results from the 2004 NSDUH showed large differences between the two samples in both the K6 total score and the proportion of respondents with a K6 total score of 13 or greater. These differences were most pronounced in the 18 to 25 age group. These contextual differences suggest that the K6 scale is sensitive to item ordering in relation to other questions in the module; that is, respondents appear to respond to the K6 items differently depending on whether the scale is preceded by a broad array of other mental health questions.

Given the difference in K6 reporting between the A (long form) and B (short form) samples, the 2004 SPD estimates presented in the 2004 detailed tables and 2004 NSDUH national results report are based only on the A sample, which used a mental health module identical to that used in 2002 and 2003. In the 2005 and 2006 NSDUHs, only the "short form" SPD module was used; therefore, the 2004 SPD estimates presented in the 2005 and 2006 detailed tables and in the corresponding NSDUH national results reports are based on the B sample, so that the estimates are comparable. Note that the 2004 SPD estimates reported in the 2004 detailed tables (OAS, 2005a) are different from the 2004 SPD estimates reported in the 2005 and 2006 detailed tables (OAS, 2006a, 2007a), and SPD estimates reported in the 2005 and 2006 detailed tables are not comparable with estimates reported in previous years.

B.4.5 Major Depressive Episode

Beginning in 2004, modules related to major depressive episode (MDE) derived from DSM-IV (APA, 1994) criteria for major depression were included in the questionnaire. These questions permit estimates to be calculated of the lifetime and past year prevalence of MDE and treatment for MDE. Separate modules were administered to adults aged 18 or older and adolescents aged 12 to 17. The adult questions were adapted from the depression section of the National Comorbidity Survey–Replication (NCS-R; Harvard School of Medicine, 2005), and the adolescent questions were adapted from the depression section of the National Comorbidity Survey–Adolescent (NCS-A; Harvard School of Medicine, 2005). To make the modules developmentally appropriate for adolescents, there are minor wording differences in a few questions between the adult and adolescent modules. Revisions to the questions in both modules were made primarily to reduce its length and to modify the NCS questions, which are interviewer-administered, to the ACASI format used in NSDUH. In addition, some revisions, based on cognitive testing, were made to improve comprehension. Furthermore, even though titles similar to those used in the NCS were used for the NSDUH modules, the results of these items may not be directly comparable. This is mainly due to differing modes of administration in each survey (ACASI in NSDUH vs. computer-assisted personal interviewing [CAPI] in NCS), revisions to wording necessary to maintain the logical processes of the ACASI environment, and possible context effects resulting from deleting questions not explicitly pertinent to severe depression.

In 2004, a split-sample design was implemented where adults in sample B received the depression module while adult respondents in sample A did not. All adolescents were administered the adolescent depression module. In 2005 and 2006, all adult and adolescent respondents were administered their respective depression modules.

According to DSM-IV, a person is defined as having had MDE in his or her lifetime if he or she has had at least five or more of the following nine symptoms nearly every day in the same 2-week period, where at least one of the symptoms is a depressed mood or loss of interest or pleasure in daily activities (APA, 1994): (1) depressed mood most of the day; (2) markedly diminished interest or pleasure in all or almost all activities most of the day; (3) significant weight loss when not sick or dieting, or weight gain when not pregnant or growing, or decrease or increase in appetite; (4) insomnia or hypersomnia; (5) psychomotor agitation or retardation; (6) fatigue or loss of energy; (7) feelings of worthlessness; (8) diminished ability to think or concentrate or indecisiveness; and (9) recurrent thoughts of death or suicidal ideation. In addition

to lifetime MDE, NSDUH measures past year MDE. Respondents who have had MDE in their lifetime are asked if, during the past 12 months, they had a period of depression lasting 2 weeks or longer while also having some of the other symptoms mentioned.

NSDUH measures the nine attributes associated with MDE as defined in DSM-IV with the following questions. Note that the questions shown are taken from the adult depression module. A few of the questions in the adolescent module were modified slightly to use wording more appropriate for youths. It should be noted that no exclusions were made for MDE caused by medical illness, bereavement, or substance use disorders.

1. Depressed mood most of the day

The following questions refer to the worst or most recent period of time when the respondent experienced any or all of the following: sadness, discouragement, or lack of interest in most things.

During that [worst/most recent] period of time…

a. … did you feel sad, empty, or depressed **most of the day nearly every day**?
b. … did you feel discouraged about how things were going in your life **most of the day nearly every day**?

2. Markedly diminished interest or pleasure in all or almost all activities most of the day

a. … did you lose interest in almost all things like work and hobbies and things you like to do for fun?
b. … did you lose the ability to take pleasure in having good things happen to you, like winning something or being praised or complimented?

3. Weight

In answering the next questions, think about the [worse/most recent] period of time.

a. Did you have a much smaller appetite than usual nearly every day during that time?
b. Did you have a much **larger** appetite than usual nearly every day?
c. Did you gain weight without trying to during that [worst/most recent] period of time?
    a. … because you were growing?
    b. … because you were pregnant?
    c. How many pounds did you gain?
d. Did you lose weight without trying to?
    a. … because you were sick or on a diet?
    b. How many pounds did you lose?

4. Insomnia or hypersomnia

a. Did you have a lot more trouble than usual falling asleep, staying asleep, or waking too early nearly every night during that [worst/most recent] period of time?

b. During that [worst/most recent] period of time, did you sleep a lot more than usual nearly every night?

5. Psychomotor agitation or retardation

a. Did you talk or move more slowly than is normal for you nearly every day?
b. Were you so restless or jittery nearly every day that you paced up and down or couldn't sit still?

6. Fatigue or loss of energy

a. During that [worst/most recent] period of time, did you feel tired or low in energy nearly every day even when you had not been working very hard?

7. Feelings of worthlessness

a. Did you feel that you were not as good as other people nearly every day?
b. Did you feel totally worthless nearly every day?

8. Diminished ability to think or concentrate or indecisiveness

a. During that [worst/most recent] time period, did your thoughts come much more slowly than usual or seem confused nearly every day?
b. Did you have a lot more trouble concentrating than usual nearly every day?
c. Were you unable to make decisions about things you ordinarily have no trouble deciding about?

9. Recurrent thoughts of death or recurrent suicidal ideation

a. Did you often think about death, either your own, someone else's, or death in general?
b. During that period, did you ever think it would be better if you were dead?
c. Did you think about committing suicide?

B.4.6 Revised Estimates of Methamphetamine Use

A challenge in measuring nonmedical use of prescription drugs comes when those drugs begin to be produced illegally. Drugs that have been manufactured by legitimate pharmaceutical companies under government regulation may become popular drugs of abuse, stimulating illegal production. In particular, most methamphetamine that currently is used nonmedically in the United States is produced by clandestine laboratories within the United States or abroad rather than by the legitimate pharmaceutical industry. Questions on methamphetamine use in NSDUH are first asked in the stimulants module in the core section of the questionnaire in the context of questions about nonmedical use of prescription stimulants. Therefore, one concern in measuring methamphetamine use in NSDUH is that some methamphetamine users may fail to report use if they do not recognize the drug when it is presented in the prescription drug context.

To address this concern, new questions were added to the special drugs module in the noncore section of the 2005 NSDUH to capture information from respondents who may have

used methamphetamine but did not recognize it as a prescription drug and therefore did not report use in the core stimulants module. These new noncore questions differed from the methamphetamine use questions asked in the core stimulants module by asking about methamphetamine use outside of the context of prescription drug use. The new questions also included more descriptive information relevant to this drug. Respondents who did not indicate in the core stimulants module that they had used methamphetamine were asked to respond to the following item:

> Methamphetamine, also known as crank, ice, crystal meth, speed, glass, and many other names, is a stimulant that usually comes in crystal or powder forms. It can be smoked, "snorted," swallowed or injected. Have you ever, even once, used Methamphetamine?

Respondents who answered "Yes" to this question then were asked questions about the last time they used methamphetamine, whether they ever injected methamphetamine with a needle, and (if applicable) the last time they used a needle to inject methamphetamine. Answers to these questions were used to classify respondents as lifetime (i.e., ever used), past year, or past month users.

Findings from the methamphetamine analysis section (Ruppenkamp, Davis, Kroutil, & Aldworth, 2006) of the *2005 NSDUH Methodological Resource Book* (RTI International, 2007a) suggested that estimates of methamphetamine use based only on core data could be lower than the true population prevalence. However, larger estimates of methamphetamine use based on both core and noncore answers could be a partial artifact of asking a second set of questions *only* from persons who did not report use the first time. Repeating questions for any drug only to those who did not report use the first time could artificially increase the positive responses. Doing so only for methamphetamine could result in a disproportionate reporting of that drug relative to the others in the survey. In addition, because the respondents reporting methamphetamine use in the new questions essentially had contradicted their prior responses, some may have made mistakes in answering the new questions.

For these reasons, additional follow-up items were included beginning with the 2006 NSDUH. In particular, these items sought to identify respondents who had failed to report methamphetamine use in response to the earlier question in the core stimulants module because they may not have considered methamphetamine to be a prescription drug. The new items added in 2006 are as follows:

> Earlier, the computer recorded that you have never used Methamphetamine, Desoxyn or Methedrine. Which answer is correct?
>
> 1 I have never, even once, used Methamphetamine, Desoxyn or Methedrine
> 2 I last used Methamphetamine [time period]
>
> [IF ABOVE ITEM ANSWERED AS 2] Why did you report earlier that you had never used Methamphetamine?

1 The earlier question asked about prescription drugs, and I didn't think of Methamphetamine as a prescription drug
2 I made a mistake when I answered the earlier question about ever using Methamphetamine
3 Some other reason

Respondents who reported "some other reason" for not having reported methamphetamine use in the core stimulants module but indicated use in the noncore questions were asked to specify this other reason.

Findings showed that it would be important to use data from these new consistency check questions in further investigating how best to estimate the prevalence of methamphetamine use in NSDUH (Ruppenkamp et al., 2006). In particular, respondents who confirmed in the first new 2006 follow-up question that they never used methamphetamine should not be counted as "additional" methamphetamine users based on their report of methamphetamine use in the noncore special drugs module. In addition, respondents who reported that they "made a mistake" in answering the earlier question about methamphetamine use in the core stimulants module would not be counted in prevalence estimates. As noted above, allowing respondents a second chance to report methamphetamine use could inflate the estimates for this drug relative to estimates for other drugs for which respondents were not asked a second set of questions.

The majority of respondents who should be included in estimates of the prevalence of methamphetamine based on the noncore special drugs questions consisted of those who both (a) confirmed in the first question that they used methamphetamine and (b) indicated in the second follow-up question that they had not reported methamphetamine use in the core stimulants module because they did not think of methamphetamine as a prescription drug. A smaller group of respondents who confirmed methamphetamine use in the noncore special drugs module also should be retained as methamphetamine users for prevalence estimation because they specified other similar reasons why they may not have recognized methamphetamine in the context of the earlier questions in the core stimulants module. More detailed documentation of how these methamphetamine data were edited will be provided in a forthcoming section of the *2006 NSDUH Methodological Resource Book* (RTI International, 2007b).

To assess the impact of the new methamphetamine use questions, weighted estimates from 2006 were generated and compared for two different scenarios: (1) only methamphetamine data from the core stimulant module from 2006, and (2) core methamphetamine data and new methamphetamine use variables that were added to the special drugs module in 2005 and 2006 (taking into account the additional follow-up questions in 2006). Comparisons were made for the lifetime, past year, and past month measures of methamphetamine use. Prevalence estimates for scenario 2 were greater than those using only the core methamphetamine data. For example, the lifetime prevalence estimates of methamphetamine use among persons aged 12 or older increased from 4.62 percent based only on core data to 5.77 percent for core plus noncore data. See the column labeled "2006" in Table B.6 for a comparison of estimates for 2006 based on these two scenarios.

The methamphetamine use estimates for 2006 that are presented in this report and in the detailed tables are based both on the original methamphetamine items in the core stimulant

module and the methamphetamine items in the special drugs module. For the purpose of examining trends in nonmedical methamphetamine use, a Bernoulli stochastic imputation procedure was used in conjunction with the predictive mean neighborhoods (PMN) method (described in Section A.3.1 of Appendix A in this report) to generate comparable estimates for prior years (i.e., 2002 through 2005).[11] An explanation of this imputation procedure is presented in Section B.4.6.1. See Table B.6 for the resulting "adjusted" estimates of lifetime, past year, and past month methamphetamine use for 2002 through 2005.

The 2005 and 2006 surveys also contained questions on how past year methamphetamine users obtained the methamphetamine that they last used. Respondents who reported past year methamphetamine use in the core stimulant or the noncore special drugs modules were asked these questions about obtaining the methamphetamine they last used. To assess the impact of respondents being routed to these source questions from both locations, weighted estimates for 2006 were generated and compared for the following two scenarios: (1) respondents routed to the source of methamphetamine questions from the core stimulants module only, and (2) respondents routed to the source of methamphetamine questions from either the core stimulants module or the noncore special drugs module (principally because they did not consider methamphetamine to be a prescription drug). This assessment revealed that an adjustment would be needed in order to compare 2006 estimates with 2005 estimates.

The 2006 estimates presented in this report and in the detailed tables for how past year methamphetamine users obtained the methamphetamine they used the last time were based on answers from respondents who reported methamphetamine use in the original core stimulant items and those who reported use in the special drugs module (principally because they did not consider methamphetamine to be a prescription drug). To generate comparable estimates for 2005, the past year source of methamphetamine estimates were adjusted by using the Bernoulli stochastic-adjusted past year methamphetamine variable. See Table B.7 for 2005 and 2006 estimates based on the different estimation methods.

In this report, estimates of the prevalence of methamphetamine use are based on data from the core and noncore methamphetamine items in 2006 and the adjusted estimates for 2002 through 2005 using the methods outlined below. These estimates are not comparable with those presented in previous NSDUH reports. However, the estimates of the numbers of past year initiates of methamphetamine use shown in this report are based only on responses to the age and date at first use questions from respondents who reported methamphetamine use in the original core stimulants items and are comparable with those in prior NSDUH reports. This procedure was necessary because data on age at first use, which are necessary to identify initiates, were not collected for noncore methamphetamine users in 2006. Starting with the 2007 NSDUH, age at first use of methamphetamine and frequency of use of the drug are being collected for persons reporting methamphetamine use in the noncore special drugs module and the core stimulant module.

[11] Although additional methamphetamine use items were included in the special drugs module in 2005, the 2005 survey did not include the follow-up questions that were added in 2006. Hence, data from 2005 needed to be included in the Bernoulli stochastic imputation procedures.

Changes in estimates of methamphetamine use have the potential to affect estimates of nonmedical use of stimulants, nonmedical use of psychotherapeutic drugs, use of illicit drugs, and use of illicit drugs other than marijuana. The methamphetamine analysis reported in the forthcoming *2006 NSDUH Methodological Resource Book* (RTI International, 2007b) revealed only negligible differences between core-only and core-plus-noncore estimates of use of illicit drugs or illicit drugs other than marijuana. Somewhat larger differences were found for estimates of nonmedical use of stimulants and psychotherapeutic drugs. No adjustment was made to these indicators in the present report pending the availability of further information on noncore methamphetamine users from 2007 and subsequent years (e.g., age at first use). Because full information on the new methamphetamine estimates is not yet available, methamphetamine estimates are not shown in the main tables in Appendix G.

The imputation-revised versions of the "core and noncore" methamphetamine recency variables were created by a complex combination of two imputation methods: predictive mean neighborhoods (PMN) and Bernoulli stochastic imputation (BSI). For a particular survey year, if the questionnaire covered the variable in question, then PMN was used to provide an imputation-revised version of that variable; otherwise, BSI was used. Core recency and lifetime variables were already imputed by methodologies discussed in Section A.3.1 of Appendix A in this report. Exhibit B.1 serves as a road map to the imputation methods used for the different variables in different survey years. Following standard NSDUH imputation procedures, lifetime use was imputed first, followed by recency.

The PMN and BSI methods are described briefly here. For step-by-step details on how the methods were applied, see the forthcoming methamphetamine analysis section in the *2006 NSDUH Methodological Resource Book* (RTI International, 2007b).

Exhibit B.1 Imputation Methodology Applied to Methamphetamine Variables in Survey Years 2002-2006

Variable	Survey Year(s)		
	2002-2004	2005	2006
Core Lifetime Use, Core Past Year Use, Core Past Month Use	PMN	PMN	PMN
Noncore Lifetime Use	BSI	PMN/BSI[1]	PMN
Noncore Past Year Use	BSI	PMN/BSI[1]	PMN
Noncore Past Month Use	BSI	PMN/BSI[1]	PMN

PMN = predictive mean neighborhoods; BSI = Bernoulli stochastic imputation.

[1] PMN was used for imputation of noncore lifetime and recency (ignoring the consistency check), but BSI was used for the consistency check. For those respondents who were determined to have failed the consistency check, the indicators for lifetime, past year, and past month were all set to nonuse.

The PMN method, which is used for most variables in NSDUH that undergo imputation, consists of a modeling step and a hot-deck step. During modeling, a neighborhood of potential donors is chosen for each item nonrespondent, and a final donor is randomly selected from that neighborhood. The neighborhood is formed by applying constraints to the set of item respondents; some of the constraints are based on predicted means from regression models. In the hot-deck step, the final donor is chosen so that its predicted mean(s) is (are) close to the predicted mean(s) of the item nonrespondent. For more information, see Section A.3.1 of Appendix A in this report.

BSI is a simpler version of PMN and can be used when the variable of interest is (1) dichotomous and (2) imputed on its own, not as part of a multivariate framework in which multiple variables need to be imputed simultaneously for consistency. As in PMN, logistic regression models are fit and predicted means are calculated. However, no neighborhoods are formed with BSI, and there is no hot-deck step. Once the predicted mean $\hat{p}$ for the item nonrespondent is calculated, the imputation-revised value for the item nonrespondent is stochastically computed as follows: It is given the value of 1 with probability $\hat{p}$, and the value of 0 with probability $1-\hat{p}$.

As applied to these measures of methamphetamine prevalence, the data used to build the BSI regression models for the years when the relevant noncore variables were not collected came from the survey years when these items were collected. The PMN imputation was done for the survey years when the relevant variables were available. For example, 2006 data were used to build the model estimating the probability of noncore past year use given noncore lifetime use. Then, the parameter estimates from this model were used to calculate predicted means for each noncore lifetime user in the 2002-2005 survey years. Finally, these predicted means were used in the stochastic imputation of the noncore past year use variable for each noncore lifetime user in the 2002-2005 survey years.

Note that the BSI method is identical to the mean-centered univariate PMN imputation method for dichotomous variables.

B.4.7 Revised Income Questions

In the 2006 NSDUH, 3,847 (5.7 percent) of the sample of 67,802 respondents received a new reduced set of income questions designed to decrease the burden on respondents. Analyses were conducted to assess if the new questions had an effect on response variables representing personal income, family[12] income, and government assistance, relative to the old questions.

In the original income module, 10 source-of-income variables were included: Social Security, Supplemental Security Income, welfare cash assistance, welfare noncash assistance, wages, food stamps, child support, interest/investment income, other income, and the number of months receiving welfare. If a household contained other family members, then separate questions were asked to ascertain personal-level responses and other-family-level responses. These responses then were combined to create family-level responses.

The new set of income questions included only 6 of the 10 source-of-income variables; questions covering Social Security, child support, interest/investment income, and other income were omitted. In addition, separate questions to ascertain personal-level and other-family-level responses were no longer asked; all questions were asked at the family level only.

[12] Family is defined as any related member in the household, including unmarried and same-sex partners. It excludes roommates, boarders, and other nonrelatives.

In both sets of income questions, personal and family-level questions were asked about actual annual income received at two levels of refinement.[13]

The respondents receiving the new income questions in 2006 consisted of two groups: (1) 2,050 were drawn from the 16,602 respondents in the first quarter, and (2) 1,797 were drawn from the 3,634 respondents who were assigned to a reliability study conducted within the main survey in the second, third, and fourth quarters. One difference between these two groups was the within-household sampling algorithm used to select respondents. In the main survey, respondents were selected according to an algorithm that allowed selection of 0, 1, or 2 persons in all households, but in the reliability study, respondents were restricted to those households in which only 1 person was selected.

An initial analysis was done to see whether the two groups needed to be analyzed in combination or separately. Using data from the 2004 NSDUH, it was shown that the two groups differed not only in the number of persons selected, but also in the number of persons eligible within a household. In the 2004 NSDUH, households with only one person eligible made up 8.7 percent of all households, but that percentage increased to 23.5 percent among households in which only one person was selected. Analyses of the 2004 survey on income and poverty variables, government assistance variables, and health insurance variables suggested that with some exceptions, the number selected within a household did not have much impact on the variables in question. However, these variables were greatly affected by whether one or more than one person in the household was eligible. Because the selection algorithm in the 2004 and 2006 NSDUHs is identical, these general conclusions are unlikely to differ in the 2006 NSDUH. Therefore, subsequent analyses dealing with the new income questions in the 2006 NSDUH needed to take into account that (1) household composition (in terms of number eligible) was likely to differ between the two groups of respondents, and (2) household composition was likely to have an effect on the income and related response variables of interest.

Analyses were conducted on the 2006 data to measure whether the new questions, relative to the old questions, had an effect on response variables representing personal income, family income, and government assistance. Results of the analyses suggested that the new income questions did not affect the reporting of personal income, family income, or government assistance response variables (except Supplemental Security Income). Based on subsequent analyses of the Supplemental Security Income variable, a decision was made to only reintroduce in a 2007 split sample questions about Social Security to the 2006 subset of six source-of-income variables because its omission in the 2006 survey appears to have caused some respondents to confuse Supplemental Security Income with Social Security. This revised module is expected to be fully implemented in 2008.

Simulation analyses were conducted on the 2005 data to measure the potential impact on imputation modeling procedures and imputation-revised estimates due to the new income questions. The simulation analyses indicated that the impact on imputation modeling procedures would be small and the impact on imputation-revised estimates would be negligible.

[13] At the coarser level, the question was designed to ascertain whether annual income was less than $20,000. At the finer level, the question was designed to ascertain annual income in increments of $1,000 up to $20,000; increments of $5,000 up to $100,000; and $100,000 or more.

Finally, an analysis of the audit trail timing data from 2006 indicated that the mean time for all respondents to complete the income questions was reduced from 4.7 minutes for the old module to 3.7 minutes for the new module, and the median time was reduced from 4.2 to 3.2 minutes. Thus, the new income questions save about 1 minute of interview time in the 2006 and future NSDUHs. For further details, refer to the forthcoming 2006 NSDUH's new income questions analysis section included in the *2006 NSDUH Methodological Resource Book* (Aldworth, Copello, Heller, Liu, & Robbins, 2007b).

B.5 Impact of Hurricanes Katrina and Rita on the NSDUH Sample

Hurricanes Katrina and Rita hit the Gulf Coast in the fall of 2005. At the end of August 2005, Hurricane Katrina caused large-scale damage and destruction in the coastal regions of Louisiana, Mississippi, and Alabama. In September 2005, Hurricane Rita devastated portions of Texas and Louisiana. The impact of the hurricanes on the NSDUH sample was evaluated, and a plan of action was developed and implemented for the 2006 survey.

The 2006 NSDUH quarter 1 (January to March) sample was supplemented with an additional segment in the seven areas determined to be hardest hit by the hurricanes. As a result, a total of 7,207 segments were fielded in the 2006 survey. In addition to supplementing the quarter 1 sample, field staff were reminded to apply standard procedures to handle unusual situations. Specifically, field staff were instructed to apply the residency rule for eligibility[14] and to include displaced persons wherever they currently were residing. Finally, temporary housing units were included in the survey by applying the half-open interval rule.[15] For more details on the 2006 sample supplement, see Morton et al. (2007).

[14] The residency rule for eligibility requires that a person reside at a selected dwelling unit at least half of the quarter in order to be eligible for the survey.

[15] For more details on the 2005 NSDUH sample, see the sample design report in the *2005 NSDUH Methodological Resource Book* (Morton et al., 2006).

Table B.1 Demographic and Geographic Domains Forced to Match Their Respective U.S. Census Bureau Population Estimates through the Weight Calibration Process, 2006

MAIN EFFECTS	TWO-WAY INTERACTIONS
Age Group	
12-17	
18-25	
26-34	**Age Group x Gender**
35-49	(e.g., Males Aged 12 to 17)
50-64	
65 or Older	
All Combinations of Groups Listed Above[1]	**Age Group x Hispanic Origin**
Gender	(e.g., Hispanics or Latinos Aged 18 to 25)
Male	
Female	
Hispanic Origin	**Age Group x Race**
Hispanic or Latino	(e.g., Whites Aged 26 or Older)
Not Hispanic or Latino	
Race	
White	**Age Group x Geographic Region**
Black or African American	(e.g., Persons Aged 12 to 25 in the Northeast)
Geographic Region	
Northeast	
Midwest	**Age Group x Geographic Division**
South	(e.g., Persons Aged 65 or Older in New England)
West	
Geographic Division	
New England	**Gender x Hispanic Origin**
Middle Atlantic	(e.g., Not Hispanic or Latino Males)
East North Central	
West North Central	
South Atlantic	**Hispanic Origin x Race**
East South Central	(e.g., Not Hispanic or Latino Whites)
West South Central	
Mountain	
Pacific	

[1] Combinations of the age groups (including but not limited to 12 or older, 18 or older, 26 or older, 35 or older, and 50 or older) also were forced to match their respective U.S. Census Bureau population estimates through the weight calibration process.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006.

Table B.2 Summary of 2006 NSDUH Suppression Rules

Estimate	Suppress if:
Prevalence Rate, $\hat{p}$, with Nominal Sample Size, *n*, and Design Effect, *deff*	(1) The estimated prevalence rate, $\hat{p}$, is < 0.00005 or ≥ 0.99995, or (2) $\frac{\text{SE}(\hat{p}) \ / \ \hat{p}}{-\ln(\hat{p})} > 0.175$ when $\hat{p} \le 0.5$, or $\frac{\text{SE}(\hat{p}) \ / \ (1 - \hat{p})}{-\ln(1 - \hat{p})} > 0.175$ when $\hat{p} > 0.5$, or (3) Effective $n < 68$, where Effective $n = \frac{n}{deff}$ or (4) $n < 100$. Note: The rounding portion of this suppression rule for prevalence rates will produce some estimates that round at one decimal place to 0.0 or 100.0 percent but are not suppressed from the tables.
Estimated Number (Numerator of $\hat{p}$)	The estimated prevalence rate, $\hat{p}$, is suppressed. Note: In some instances when $\hat{p}$ is not suppressed, the estimated number may appear as a 0 in the tables. This means that the estimate is greater than 0 but less than 500 (estimated numbers are shown in thousands).
Mean Age at First Use, $\bar{x}$, with Nominal Sample Size, *n*	(1) $\text{RSE}(\bar{x}) > 0.5$, or (2) $n < 10$.

SE = standard error; RSE = relative standard error; deff = design effect.
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006.

Table B.3 Weighted Percentages and Sample Sizes for 2005 and 2006 NSDUHs, by Screening Result Code

SCREENING RESULT CODE	SAMPLE SIZE		WEIGHTED PERCENTAGE	
	2005	2006	2005	2006
TOTAL SAMPLE	175,958	182,459	100.00	100.00
Ineligible Cases	29,046	31,171	16.59	16.87
Eligible Cases	146,912	151,288	83.41	83.13
INELIGIBLES	29,046	31,171	16.59	16.87
Vacant	16,377	17,135	55.56	55.24
Not a Primary Residence	5,310	5,733	18.89	18.50
Not a Dwelling Unit	1,979	2,655	6.57	8.17
All Military Personnel	251	314	0.85	1.06
Other, Ineligible	5,129	5,334	18.12	17.03
ELIGIBLE CASES	146,912	151,288	83.41	83.13
Screening Complete	134,055	137,057	91.33	90.55
No One Selected	76,670	78,641	51.39	51.23
One Selected	30,633	31,398	21.13	20.99
Two Selected	26,752	27,018	18.82	18.33
Screening Not Complete	12,587	14,231	8.67	9.45
No One Home	1,992	2,456	1.27	1.55
Respondent Unavailable	247	396	0.16	0.25
Physically or Mentally Incompetent	324	301	0.20	0.19
Language Barrier—Hispanic	43	53	0.04	0.03
Language Barrier—Other	317	360	0.23	0.25
Refusal	9,197	10,037	6.30	6.76
Other, Access Denied	699	543	0.45	0.37
Other, Eligible	7	8	0.00	0.00
Segment Not Accessible	0	0	0.00	0.00
Screener Not Returned	17	51	0.01	0.03
Fraudulent Case	10	23	0.00	0.01
Electronic Screening Problem	4	3	0.00	0.00

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table B.4 Weighted Percentages and Sample Sizes for 2005 and 2006 NSDUHs, by Final Interview Code

FINAL INTERVIEW CODE	PERSONS AGED 12 OR OLDER				PERSONS AGED 12 TO 17				PERSONS AGED 18 OR OLDER			
	Sample Size		Weighted Percentage		Sample Size		Weighted Percentage		Sample Size		Weighted Percentage	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	83,805	85,034	100.00	100.00	25,840	26,702	100.00	100.00	57,965	58,332	100.00	100.00
Interview Complete	68,308	67,802	76.19	74.24	22,565	22,912	87.10	85.46	45,743	44,890	74.91	72.95
No One at Dwelling Unit	1,306	1,222	1.65	1.51	206	212	0.76	0.78	1,100	1,010	1.75	1.60
Respondent Unavailable	1,782	1,922	2.10	2.23	332	410	1.31	1.50	1,450	1,512	2.20	2.31
Break-Off	38	61	0.06	0.11	9	10	0.04	0.03	29	51	0.07	0.12
Physically/Mentally Incompetent	827	856	1.97	1.90	165	187	0.63	0.72	662	669	2.12	2.03
Language Barrier - Hispanic	144	211	0.15	0.22	10	12	0.03	0.02	134	199	0.17	0.24
Language Barrier - Other	383	437	1.14	1.21	26	35	0.15	0.15	357	402	1.26	1.33
Refusal	8,632	9,709	15.30	16.84	700	755	2.75	2.72	7,932	8,954	16.76	18.47
Parental Refusal	1,737	2,041	0.71	0.84	1,737	2,041	6.80	8.10	0	0	0.00	0.00
Other	648	773	0.72	0.90	90	128	0.44	0.51	558	645	0.76	0.94

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table B.5 Response Rates and Sample Sizes for 2005 and 2006 NSDUHs, by Demographic Characteristics

Demographic Characteristic	SELECTED PERSONS		COMPLETED INTERVIEWS		WEIGHTED RESPONSE RATE	
	2005	2006	2005	2006	2005	2006
TOTAL	83,805	85,034	68,308	67,802	76.19%	74.24%
AGE IN YEARS						
12-17	25,840	26,702	22,565	22,912	87.10%	85.46%
18-25	27,337	27,303	22,764	22,152	83.06%	80.96%
26 or Older	30,628	31,029	22,979	22,738	73.50%	71.54%
GENDER						
Male	41,054	41,833	32,787	32,696	74.45%	72.44%
Female	42,751	43,201	35,521	35,106	77.80%	75.92%
RACE/ETHNICITY						
Hispanic	11,582	11,948	9,535	9,675	77.80%	77.37%
White	56,838	57,292	45,962	45,345	75.64%	73.99%
Black	9,453	9,740	8,093	8,150	81.21%	77.94%
All Other Races	5,932	6,054	4,718	4,632	69.70%	63.46%
REGION						
Northeast	16,994	17,201	13,711	13,499	73.66%	71.96%
Midwest	23,542	23,766	19,154	18,988	76.42%	75.39%
South	25,411	25,848	20,818	20,841	77.16%	75.13%
West	17,858	18,219	14,625	14,474	76.42%	73.60%
COUNTY TYPE						
Large Metropolitan	37,712	38,443	29,960	29,970	74.42%	72.35%
Small Metropolitan	28,263	28,328	23,418	22,917	77.69%	76.39%
Nonmetropolitan	17,830	18,263	14,930	14,915	79.19%	76.77%

Note: Estimates are based on demographic information obtained from screener data and are not consistent with estimates on demographic characteristics presented in the 2005 and 2006 sets of Detailed Tables.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table B.6 Nonmedical Use of Methamphetamine in Lifetime, Past Year, and Past Month, by Demographic Characteristics: Percentages Based on Different Estimation Methods, 2002-2006

Time Period/ Demographic Characteristic	2002		2003		2004		2005		2006	
	Core[1]	Adjusted Core[2]	Core[1]	Adjusted Core[2]	Core[1]	Adjusted Core[2]	Core[1]	Adjusted Core and Noncore[3]	Core[1]	Core and Noncore[4]
LIFETIME	5.27	6.53	5.18	6.37	4.88	6.03	4.26	5.21	4.62	5.77
Age										
12-17	1.48	1.68	1.31	1.53	1.19	1.37	1.17	1.26	1.13	1.34
18-25	5.66	7.42	5.20	6.91	5.24	6.98	5.18	6.74	4.87	6.42
26 or Older	5.72	7.05	5.71	6.94	5.32	6.51	4.52	5.48	5.05	6.26
Gender										
Male	6.52	8.05	6.40	7.76	6.00	7.32	5.30	6.36	5.82	7.16
Female	4.10	5.12	4.03	5.06	3.82	4.82	3.28	4.12	3.49	4.46
PAST YEAR	0.66	0.75	0.55	0.67	0.60	0.75	0.53	0.66	0.60	0.77
Age										
12-17	0.91	0.99	0.69	0.74	0.65	0.70	0.67	0.70	0.63	0.73
18-25	1.69	1.99	1.59	1.87	1.60	1.92	1.48	1.77	1.29	1.69
26 or Older	0.44	0.50	0.35	0.45	0.42	0.55	0.35	0.46	0.48	0.61
Gender										
Male	0.76	0.88	0.68	0.83	0.76	0.98	0.63	0.79	0.67	0.87
Female	0.56	0.63	0.44	0.53	0.44	0.54	0.44	0.54	0.53	0.67
PAST MONTH	0.25	0.29	0.26	0.31	0.24	0.29	0.21	0.26	0.23	0.30
Age										
12-17	0.25	0.29	0.28	0.28	0.22	0.23	0.26	0.28	0.18	0.21
18-25	0.52	0.59	0.58	0.62	0.58	0.68	0.60	0.69	0.42	0.56
26 or Older	0.21	0.24	0.20	0.25	0.19	0.23	0.14	0.18	0.20	0.26
Gender										
Male	0.30	0.36	0.35	0.41	0.26	0.34	0.23	0.29	0.28	0.36
Female	0.21	0.23	0.17	0.21	0.23	0.25	0.19	0.23	0.18	0.24

*Low precision; no estimate reported.

[1] Core estimates are based on responses to questions in the core Stimulants module only. The 2006 estimates are directly comparable with the 2002, 2003, 2004, and 2005 estimates presented here and in prior NSDUH reports.

[2] Adjusted core estimates were generated using available data from the core Stimulants module and a Bernoulli stochastic imputation procedure to be comparable with the 2006 core and noncore estimates. See Section B.4.6 in Appendix B of this report for more information on the adjustment procedure.

[3] Adjusted core and noncore estimates were generated using available data from both the core Stimulants module and the noncore Special Drugs module, and a Bernoulli stochastic imputation procedure to be comparable with the 2006 core and noncore estimates. See Section B.4.6 in Appendix B of this report for more information on the adjustment procedure.

[4] Core and noncore estimates are based on responses to questions in the core Stimulants module and as responses to additional questions in the noncore Special Drugs module for respondents who initially did not report methamphetamine use in the core module because they did not consider it to be a prescription drug.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table B.7 Source Where Methamphetamine Was Obtained for Most Recent Nonmedical Use among Past Year Users Aged 12 or Older, by Age Group: Percentages Based on Different Estimation Methods, 2005 and 2006

Source/Age Group	2005		2006	
	Core[1]	Adjusted[2]	Core[1]	Core and Noncore[3]
From Friend or Relative for Free	47.7	46.4	50.3	53.6
12-17	62.2	64.1	*	49.4
18-25	52.8	50.9	49.7	54.1
26 or Older	40.6	39.7	*	54.0
Bought from Friend or Relative	28.2	27.1	23.5	21.4
12-17	14.7	13.5	*	21.2
18-25	21.4	21.4	22.9	21.8
26 or Older	36.2	33.8	*	21.2
Took from Friend or Relative without Asking	2.6	2.4	2.0	1.7
12-17	3.9	3.6	7.3	6.3
18-25	1.4	1.4	2.2	1.9
26 or Older	*	*	*	*
Bought from Drug Dealer or Other Stranger	17.1	19.2	21.7	21.1
12-17	*	*	*	*
18-25	20.2	21.3	22.1	19.8
26 or Older	15.4	*	*	21.8
Bought on the Internet	1.5	1.3	*	*
12-17	*	*	*	*
18-25	2.0	1.7	0.3	0.2
26 or Older	*	*	*	*
Some Other Way	2.9	3.6	0.9	0.9
12-17	5.0	4.6	*	2.5
18-25	2.2	3.2	2.8	2.2
26 or Older	3.0	3.7	*	0.1

*Low precision; no estimate reported.

NOTE: Estimates for Source for Most Recent Nonmedical Use include (a) past month users who reported a single source of obtainment during the past 30 days, (b) past month users who identified their last source of obtainment after reporting multiple sources of obtainment in the past 30 days, and (c) all other past year users who reported their last source of obtainment in the past year.

NOTE: Respondents with unknown data on Source for Most Recent Nonmedical Use and respondents with unknown or invalid responses to the corresponding other-specify questions were excluded from the analysis.

[1] Core estimates are based on responses to the source of methamphetamine questions from respondents who only reported methamphetamine use in the core Stimulants module. The 2006 estimates are directly comparable with the 2005 estimates presented here and in prior NSDUH reports.

[2] Adjusted estimates were generated using available data from both the core Stimulants module and the noncore Special Drugs module, and a Bernoulli stochastic imputation procedure to be comparable with the 2006 core and noncore estimates. See Section B.4.6 in Appendix B of this report for more information on the adjustment procedure.

[3] Core and noncore estimates are based on responses to the source of methamphetamine questions from respondents who reported methamphetamine use in the core Stimulants module and from respondents who reported methamphetamine use in the noncore Special Drugs module and initially did not report methamphetamine use in the core module because they did not consider it to be a prescription drug.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Appendix C: Key Definitions, 2006

This appendix provides definitions for many of the measures and terms used in this report on the 2006 National Survey on Drug Use and Health (NSDUH). Where relevant, cross-references also are provided. For some key terms, specific question wording, including "feeder questions" that precede the question(s), is provided for clarity.

Abuse

Abuse of a substance was defined as meeting one or more of the four criteria for abuse included in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (American Psychiatric Association [APA], 1994) and if the definition for dependence was not met for that substance. Additional criteria for alcohol and marijuana abuse include the use of these drugs on 6 or more days in the past 12 months. These questions have been included in the survey since 2000. See Section B.4.3 of Appendix B for additional details.

SEE: "Dependence," "Need for Illicit Drug or Alcohol Use Treatment," and "Prevalence."

Adult Education

SEE: "Education."

Age

Age of the respondent was defined as "age at time of interview." The interview program calculated the respondent's age from the date of birth and interview date. The interview program prompts the interviewer to confirm the respondent's age after it has been calculated.

Alcohol Use

Measures of use of alcohol in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last drank an alcoholic beverage?"

Feeder question: "The next questions are about alcoholic beverages, such as, beer, wine, brandy, and mixed drinks. Listed on the next screen are examples of the types of beverages we are interested in. Please review this list carefully before you answer these questions. These questions are about drinks of alcoholic beverages. Throughout these questions, by a 'drink,' we mean a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. We are not asking about times when you only had a sip or two from a drink. Have you ever, even once, had a drink of any type of alcoholic beverage? Please do not include times when you only had a sip or two from a drink."

SEE: "Binge Use of Alcohol," "Current Use," "Heavy Use of Alcohol," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

American Indian or Alaska Native

American Indian or Alaska Native only, not of Hispanic, Latino, or Spanish origin (including North American, Central American, or South American Indian); does not include respondents reporting two or more races. (Respondents reporting that they were American Indians or Alaska Natives and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

SEE: "Hispanic" and "Race/Ethnicity."

Asian

Asian only, not of Hispanic, Latino, or Spanish origin; does not include respondents reporting two or more races. (Respondents reporting that they were Asian and of Hispanic, Latino, or Spanish origin were classified as Hispanic.) Specific Asian groups that were asked about were Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, and "Other Asian."

SEE: "Hispanic" and "Race/Ethnicity."

Baby Boom Cohort

The baby boom cohort refers to persons born in the United States after World War II between 1946 and 1964 (Light, 1988).

SEE: "Age."

Binge Use of Alcohol

Binge use of alcohol was defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

Feeder question: "How long has it been since you last drank an alcoholic beverage?"

SEE: "Alcohol Use" and "Heavy Use of Alcohol."

Black

Black/African American only, not of Hispanic, Latino, or Spanish origin; does not include respondents reporting two or more races. (Respondents reporting that they were black or African American and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

SEE: "Hispanic" and "Race/Ethnicity."

Blunts

Blunts were defined as cigars with marijuana in them. Measures of use of blunts in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last smoked part or all of a cigar with marijuana in it?"

Feeder question: "Sometimes people take tobacco out of a cigar and replace it with marijuana. This is sometimes called a 'blunt.' Have you ever smoked part or all of a cigar with marijuana in it?"

SEE: "Cigar Use," "Current Use," "Lifetime Use," "Marijuana Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," and "Tobacco Product Use."

Cash Assistance

Cash assistance was defined as receipt of direct monetary payments due to low income, such as Temporary Assistance for Needy Families (TANF), welfare, or other public assistance.

NOTE: For youths and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Welfare Assistance."

Cigar Use

Measures of use of cigars (including cigarillos and little cigars) in the respondent's lifetime, the past year, and the past month were developed from responses to the questions about cigar use in the past 30 days and the recency of use (if not in the past 30 days): "Now think about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you smoked part or all of any type of cigar?" and "How long has it been since you last smoked part or all of any type of cigar?" Responses to questions about use of cigars with marijuana in them (blunts) were not included in these measures.

Feeder question: "The next questions are about smoking cigars. By cigars we mean any kind, including big cigars, cigarillos, and even little cigars that look like cigarettes. Have you ever smoked part or all of any type of cigar?"

SEE: "Blunts," "Cigarette Use," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," "Smokeless Tobacco Use," and "Tobacco Product Use."

Cigarette Use

Measures of use of cigarettes in the respondent's lifetime, the past year, and the past month were developed from responses to the questions about cigarette use in the past 30 days and the recency of use (if not in the past 30 days): "Now think about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you smoked part or all of a cigarette?" and "How long has it been since you last smoked part or all of a cigarette?"

Feeder question: "These questions are about your use of tobacco products. This includes cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. The first questions are about cigarettes only. Have you ever smoked part or all of a cigarette?"

SEE: "Cigar Use," "Current Use," "Lifetime Daily Cigarette Use," "Lifetime Use," "Nicotine (Cigarette) Dependence," "Past Month Daily Cigarette Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," "Smokeless Tobacco Use," and "Tobacco Product Use."

Cocaine Use

Measures of use of cocaine in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any form of cocaine?"

Feeder question: "These questions are about cocaine, including all the different forms of cocaine such as powder, crack, free base, and coca paste. Have you ever, even once, used any form of cocaine?"

SEE: "Crack Use," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

College Enrollment Status

This variable was computed only for college-aged respondents (i.e., respondents aged 18 to 22). Respondents in this age group were classified as full-time college students or as some other status (including part-time students, students in other grades, or nonstudents). Respondents were classified as full-time college students if they reported that they were attending (or will be attending) their first through fifth or higher year of college or university and that they were (or will be) a full-time student. Respondents whose current enrollment status was unknown were excluded from the analysis.

Core

A core set of questions critical for basic trend measurement of prevalence estimates remains in the survey every year and comprises the first part of the interview. Supplemental or "noncore" questions, or modules, that can be revised, dropped, or added from year to year make up the remainder of the interview. The core consists of initial demographic items (which are interviewer-administered) and self-administered questions pertaining to the use of tobacco, alcohol, marijuana, cocaine, crack cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives.

SEE: "Noncore."

County Type

Counties were grouped based on the "Rural/Urban Continuum Codes" developed by the U.S. Department of Agriculture (2003). Each county is in either a metropolitan statistical area (MSA) or outside of an MSA (also see Butler & Beale, 1994). Large metropolitan (large metro) areas have a population of 1 million or more. Small metropolitan (small metro) areas have a population fewer than 1 million. Nonmetropolitan (nonmetro) areas are outside of MSAs and include urbanized counties with a population of 20,000 or more in urbanized areas, less urbanized counties with a population of at least 2,500 but fewer than 20,000 in urbanized areas, and completely rural counties with a population of fewer than 2,500 in urbanized areas. Estimates based on county-type information presented in this report use the 2003 revised definition of an MSA; estimates for 2002 in this report therefore are not directly comparable with those presented in the 2002 NSDUH report (Office of Applied Studies [OAS], 2003).

Crack Use

Measures of use of crack cocaine in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used *crack*?"

Feeder questions: "These questions are about cocaine, including all the different forms of cocaine such as powder, *crack*, free base, and coca paste. Have you ever, even once, used any form of cocaine?"

"The next questions are about *crack*, that is cocaine in rock or chunk form, and not the other forms of cocaine. Have you ever, even once, used *crack*?"

SEE: "Cocaine Use," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Current Use

Any reported use of a specific drug in the past 30 days.

SEE: "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Delinquent Behavior

Youths aged 12 to 17 were asked a series of six questions: "During the past 12 months, how many times have you . . . stolen or tried to steal anything worth more than $50?" "sold illegal drugs?" "attacked someone with the intent to seriously hurt them?" "gotten into a serious fight at school or work?" "taken part in a fight where a group of your friends fought against another group?" and "carried a handgun?"

SEE: "Gang Fighting," "Prevalence," and "Stealing."

Dependence

Dependence on illicit drugs or alcohol was defined as meeting three out of seven dependence criteria (for substances that included questions to measure a withdrawal criterion) or three out of six dependence criteria (for substances that did not include withdrawal questions) for that substance, based on criteria included in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (APA, 1994). Additional criteria for alcohol and marijuana dependence since 2000 included the use of these drugs on 6 or more days in the past 12 months. These criteria were not used to define Nicotine (Cigarette) Dependence, which used a different series of items. See Section B.4.3 of Appendix B for additional details.

SEE: "Abuse," "Need for Alcohol Use Treatment," "Need for Illicit Drug or Alcohol Use Treatment," "Need for Illicit Drug Use Treatment," "Nicotine (Cigarette) Dependence," and "Prevalence."

Depression

SEE: "Major Depressive Episode."

Driving Under the Influence

Respondents were asked whether in the past 12 months they had driven a vehicle while under the influence of alcohol and illegal drugs used together, alcohol only, or illegal drugs only.

SEE: "Prevalence."

Ecstasy Use

Measures of use of Ecstasy or MDMA (methylenedioxy-methamphetamine) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used *Ecstasy*, also known as MDMA?"

SEE: "Current Use," "Hallucinogen Use," "Lifetime Use," "LSD Use," "Past Month Use," "Past Year Use," "PCP Use," "Prevalence," and "Recency of Use."

Education

This is the measure of educational attainment among respondents who are aged 18 or older. It is based on respondents' reports of their highest grade or year of school that they completed. Response alternatives were presented in terms of single years of education, ranging from 0 if respondents never attended school to 17 if respondents completed 5 or more years at the college or university level. Respondents were classified into four categories based on their answers: less than high school, high school graduate, some college, and college graduate. Persons indicating having completed the 12^{th} grade were classified as high school graduates, and persons who indicated completing 4 or more years at the college or university level were defined as being college graduates.

Employment

Respondents were asked to report whether they worked in the week prior to the interview, and if not, whether they had a job despite not working in the past week. Respondents who worked in the past week or who reported having a job despite not working were asked whether they usually work 35 or more hours per week. Respondents who did not work in the past week but had a job were asked to look at a card that described why they did not work in the past week despite having a job. Respondents who did not have a job in the past week were asked to look at a different card that described why they did not have a job in the past week.

Full-time "Full-time" in the tables includes respondents who usually work 35 or more hours per week and who worked in the past week or had a job despite not working in the past week.

Part-time "Part-time" in the tables includes respondents who usually work fewer than 35 hours per week and who worked in the past week or had a job despite not working in the past week.

Unemployed "Unemployed" in the tables refers to respondents who did not have a job, were on layoff, and were

looking for work. For consistency with the Current Population Survey definition of unemployment, respondents who reported that they did not have a job but were looking for work needed to report making specific efforts to find work in the past 30 days, such as sending out resumes or applications, placing ads, or answering ads.

Other "Other" includes all other responses, including being a student, keeping house or caring for children full time, retired, disabled, or other miscellaneous work statuses that were defined as not being in the labor force. Respondents who reported that they did not have a job or were on layoff, but were not looking for work, were classified as not being in the labor force. Similarly, respondents who reported not having a job and looking for work also were classified as not being in the labor force if they did not report making specific efforts to find work in the past 30 days.

Ethnicity SEE: "Race/Ethnicity."

Ever Use SEE: "Lifetime Use."

Exposure to Drug Education and Prevention

Youths aged 12 to 17 who reported they attended any type of school at any time in the past 12 months were asked: "During the past 12 months . . . Have you had a special class about drugs or alcohol in school? Have you had films, lectures, discussions, or printed information about drugs or alcohol in one of your regular classes, such as health or physical education? Have you had films, lectures, discussions, or printed information about drugs or alcohol outside of one of your regular classes, such as in a special assembly?"

(Youths who reported that they were home schooled in the past 12 months also were asked these questions. Youths who reported that they were home schooled were instructed to think about their home schooling as "school.")

Youths also were asked: "During the past 12 months, have you seen or heard any alcohol or drug prevention messages from sources outside school, such as in posters, pamphlets, and radio or TV ads?"

Family Income

Family income was ascertained by asking respondents about their total personal income and total family income, based on the following questions: "Of these income groups, which category best represents (your/SAMPLE MEMBER's) total personal income during [the previous calendar year]?" and "Of these income groups, which category best represents (your/SAMPLE MEMBER's) total combined family income during [the previous calendar year]? (Income data are important in analyzing the health information we collect. For example, the information helps us to learn whether persons in one income group use certain types of medical care services or have conditions more or less often than those in another group.)" Family is defined as any related member in the household, including all foster relationships and unmarried partners (including same-sex partners.) It excludes roommates, boarders, and other nonrelatives.

NOTE: If no other family members were living with the respondent, total family income was based on information about the respondent's total personal income. For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income. In addition, respondents in 2006 were subdivided into two groups. One group received the same version of the income questions as in 2005, and the second received a reduced set of questions. Respondents in both groups were asked about total personal income and total combined family income, but introductions to these questions and the sets of preceding questions differed between the groups.

SEE: "Poverty Level (% of U.S. Census Bureau Poverty Threshold."

Food Stamps

Food stamps are government-issued coupons that can be used to purchase food. Instead of coupons, some States issue a special card that can be used like a credit card to purchase food in grocery stores.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income. In addition, respondents in 2006 were subdivided into two groups.

One group received the same version of the income questions as in 2005, and the second received a reduced set of questions. Respondents in both groups were asked whether they or anyone else living in the household received food stamps, but introductions to these questions and the sets of preceding questions differed between the groups.

SEE: "Welfare Assistance."

Gang Fighting

Youths aged 12 to 17 were asked how many times during the past 12 months they had taken part in a fight where a group of their friends fought against another group. Response alternatives were (1) 0 times, (2) 1 or 2 times, (3) 3 to 5 times, (4) 6 to 9 times, or (5) 10 or more times.

SEE: "Delinquent Behavior" and "Stealing."

Geographic Division

Data are presented for nine geographic divisions within the four geographic regions. Within the ***Northeast Region*** are the *New England Division* (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) and the *Middle Atlantic Division* (New Jersey, New York, Pennsylvania). Within the ***Midwest Region*** are the *East North Central Division* (Illinois, Indiana, Michigan, Ohio, Wisconsin) and the *West North Central Division* (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota). Within the ***South Region*** are the *South Atlantic Division* (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia), the *East South Central Division* (Alabama, Kentucky, Mississippi, Tennessee), and the *West South Central Division* (Arkansas, Louisiana, Oklahoma, Texas). Within the ***West Region*** are the *Mountain Division* (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming) and the *Pacific Division* (Alaska, California, Hawaii, Oregon, Washington).

SEE: "Region."

Hallucinogen Use

Measures of use of hallucinogens in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any hallucinogen?" Responses to questions about the use of the following drugs, which were added to the survey in 2006, were not included in these measures: ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), and 5-

MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy").

Feeder questions: "The next questions are about substances called hallucinogens. These drugs often cause people to see or experience things that are not real... Have you ever, even once, used LSD, also called *acid*? Have you ever, even once, used PCP, also called *angel dus*t or phencyclidine? Have you ever, even once, used peyote? Have you ever, even once, used mescaline? Have you ever, even once, used psilocybin, found in mushrooms? Have you ever, even once, used *Ecstasy*, also known as MDMA? Have you ever, even once used any other hallucinogen besides the ones that have been listed?"

SEE: "Current Use," "Ecstasy Use," "Lifetime Use," "LSD Use," "Past Month Use," "Past Year Use," "PCP Use," "Prevalence," and "Recency of Use."

Health Insurance Status

A series of questions was asked to identify whether respondents currently were covered by Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), military health care (such as TRICARE or CHAMPUS), private health insurance, or any kind of health insurance (if respondents reported not being covered by any of the above). If respondents did not currently have health insurance coverage, questions were asked to determine the length of time they were without coverage and the reasons for not being covered.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Medicaid" and "Medicare."

Heavy Use of Alcohol

Heavy use of alcohol was defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on each of 5 or more days in the past 30 days. Heavy alcohol users also were defined as binge users of alcohol.

Feeder question: "How long has it been since you last drank an alcoholic beverage?"

SEE: "Alcohol Use" and "Binge Use of Alcohol."

Heroin Use

Measures of use of heroin in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used heroin?"

Feeder question: "These next questions are about heroin. Have you ever, even once, used heroin?"

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Hispanic

Hispanic was defined as anyone of Hispanic, Latino, or Spanish origin. Respondents were classified as Hispanic in the race/ethnicity measure regardless of race.

SEE: "American Indian or Alaska Native," "Asian," "Black," "Race/Ethnicity," "Two or More Races," and "White."

Illicit Drugs

Illicit drugs include marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. Illicit drug use refers to use of any of these drugs. Responses to questions about the use of the following drugs, which were added to the survey in 2006, were not included in these measures: GHB (gamma hydroxybutyrate), Adderall®, Ambien®, nonprescription cough or cold medicines, ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), and 5-MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy").

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," and "Recency of Use."

Illicit Drugs Other Than Marijuana

These drugs include cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. This measure includes marijuana users who used any of the above drugs in addition to using marijuana, as well as users of those drugs who have not used marijuana. Responses to questions about the use of the following drugs, which were added to the survey in 2006, were not included in these measures: GHB (gamma hydroxybutyrate),

Adderall®, Ambien®, non-prescription cough or cold medicines, ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), and 5-MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy").

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," and "Recency of Use."

Incidence

Substance use incidence refers to the use of a substance for the first time (new use). Incidence estimates are based on questions about age at first use of substances, year and month of first use for recent initiates, the respondent's date of birth, and the interview date.

Incidence statistics in this report reflect first use occurring within the 12 months prior to the interview. This is referred to as past year incidence. For these statistics, respondents who are immigrants are included regardless of whether their first use occurred inside or outside the United States.

See Section B.4.1 in Appendix B for additional details.

Income

SEE: "Family Income."

Inhalant Use

Measures of use of inhalants in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any inhalant for kicks or to get high?"

Feeder questions: "These next questions are about liquids, sprays, and gases that people sniff or inhale to get high or to make them feel good... Have you ever, even once, inhaled [INHALANT NAME] for kicks or to get high?" Respondents were asked about the following inhalants: (a) amyl nitrite, "poppers," locker room odorizers, or "rush"; (b) correction fluid, degreaser, or cleaning fluid; (c) gasoline or lighter fluid; (d) glue, shoe polish, or toluene; (e) halothane, ether, or other anesthetics; (f) lacquer thinner or other paint solvents; (g) lighter gases, such as butane or propane; (h) nitrous oxide or whippets; (i) spray paints; (j) some other aerosol spray; and (k) any other inhalants besides the ones that have been listed.

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Large Metro

SEE: "County Type."

Lifetime Daily Cigarette Use

A respondent was defined as being a lifetime daily cigarette user if he or she ever had a period in his or her life of smoking part or all of a cigarette every day for at least 30 days.

SEE: "Cigarette Use" and "Past Month Daily Cigarette Use."

Lifetime Use

Lifetime use indicates use of a specific drug at least once in the respondent's lifetime. This measure includes respondents who also reported last using the drug in the past 30 days or past 12 months.

SEE: "Current Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Low Precision

Prevalence estimates based on only a few respondents or with relatively large standard errors were not shown in the tables, but have been replaced with an asterisk (*) and noted as "low precision." These estimates have been omitted because one cannot place a high degree of confidence in their accuracy. See Table B.1 in Appendix B for a complete list of the rules used to determine low precision.

LSD Use

Measures of use of lysergic acid diethylamide (LSD) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used LSD?"

SEE: "Current Use," "Ecstasy Use," "Hallucinogen Use," "Lifetime Use," "Past Month Use," "Past Year Use," "PCP Use," "Prevalence," and "Recency of Use."

Major Depressive Episode

A person was defined as having had a lifetime major depressive episode (MDE) if he or she had at least five or more of the following nine symptoms in the same 2-week period in his or her lifetime, in which at least one of the symptoms was a depressed mood or loss of interest or pleasure in daily activities: (1) depressed mood most of the day, nearly every day; (2) markedly diminished interest or pleasure in all or almost all activities most of the day, nearly every day; (3) significant weight loss when not dieting or weight gain or decrease or increase in appetite nearly every day; (4) insomnia or hypersomnia nearly every day; (5) psychomotor agitation or retardation nearly every day; (6) fatigue or loss of energy nearly every day; (7) feelings of worthlessness nearly every day; (8) diminished ability to think or concentrate or indecisiveness nearly every day; and (9) recurrent thoughts of

death or recurrent suicide ideation. This definition is based on the definition found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (APA, 1994). A person was defined as having an MDE in the past year if he or she had a lifetime MDE and a period of time in the past 12 months when he or she felt depressed or lost interest or pleasure in daily activities for 2 weeks or longer, while also having some of the other symptoms defined above for a lifetime MDE. See Section B.4.5 of Appendix B for additional details.

Marijuana Use

Measures of use of marijuana in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used marijuana or hashish?" Responses to questions about use of cigars with marijuana in them (blunts) were not included in these measures.

Feeder question: "The next questions are about marijuana and hashish. Marijuana is also called pot or grass. Marijuana is usually smoked—either in cigarettes called joints, or in a pipe. It is sometimes cooked in food. Hashish is a form of marijuana that is also called *hash*. It is usually smoked in a pipe. Another form of hashish is hash oil. Have you ever, even once, used marijuana or hash?"

SEE: "Blunts," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Prior Year Marijuana Use," and "Recency of Use."

Medicaid

Medicaid is a public assistance program that pays for medical care for low-income and disabled persons. Respondents were asked specifically about the Medicaid program in the State where they lived. Respondents aged 12 to 19 who reported that they were covered by the State Children's Health Insurance Program (SCHIP) in their State also were classified as being covered by Medicaid. Respondents aged 12 to 19 were asked specifically about the SCHIP program in their State. Respondents aged 65 or older who reported that they were covered by Medicaid were asked to verify that their answer was correct.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Health Insurance Status" and "Medicare."

Medicare

Medicare is a health insurance program for persons aged 65 or older and for certain disabled persons. Respondents under the age of 65 who reported that they were covered by Medicare were asked to verify that their answer was correct.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Health Insurance Status" and "Medicaid."

Mental Health Treatment

SEE: "Treatment for Mental Health Problems."

Methamphetamine Use

Measures of use of methamphetamine (also known as crank, crystal, ice, or speed), Desoxyn®, or Methedrine® in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used methamphetamine, Desoxyn, or Methedrine?" See Section B.4.6 of Appendix B for additional details.

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," "Source of Psychotherapeutic Drugs," and "Stimulant Use."

Midwest Region

The States included are those in the East North Central Division—Illinois, Indiana, Michigan, Ohio, and Wisconsin—and the West North Central Division—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

SEE: "Geographic Division" and "Region."

Native Hawaiian or Other Pacific Islander

Native Hawaiian or Other Pacific Islander, not of Hispanic, Latino, or Spanish origin; does not include respondents reporting two or more races. (Respondents reporting that they were Native Hawaiian or Other Pacific Islander and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

SEE: "Hispanic" and "Race/Ethnicity."

Need for Alcohol Use Treatment

Respondents were classified as needing treatment for an alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on alcohol; (2) abuse of alcohol; or (3) received treatment for an alcohol use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Need for Illicit Drug or Alcohol Use Treatment

Respondents were classified as needing treatment for an illicit drug or alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs or alcohol; (2) abuse of illicit drugs or alcohol; or (3) received treatment for an illicit drug or alcohol use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Need for Illicit Drug Use Treatment

Respondents were classified as needing treatment for an illicit drug use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs; (2) abuse of illicit drugs; or (3) received treatment for an illicit drug use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Nicotine (Cigarette) Dependence

A respondent was defined with nicotine (cigarette) dependence if he or she met either the dependence criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) or the Fagerstrom Test of Nicotine Dependence (FTND). See Section B.4.2 of Appendix B for additional details.

SEE: "Cigarette Use," "Dependence," and "Prevalence."

Noncash Assistance

Noncash assistance refers to assistance that is not in the form of direct monetary payments due to low income, such as help getting a job, placement in an education or job training program, or help with transportation, child care, or housing. In 2006, a majority of respondents received two questions regarding noncash assistance: (a) their personal receipt of noncash assistance, and (b) whether another family member living in the household received noncash assistance. The remaining respondents (3,847 of 67,802) received a reduced set of income questions where the latter question was excluded.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Welfare Assistance."

Noncore

A core set of questions (consisting of demographic items and modules on the use of tobacco, alcohol, marijuana, cocaine, crack cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives) is critical for basic trend measurement of prevalence estimates. This core set remains in the survey every year and comprises the first part of the interview. Supplemental or "noncore" questions, or modules, that can be revised, dropped, or added from year to year make up the remainder of the interview. Supplemental topics in the remaining self-administered sections include (but are not limited to) injection drug use, perceived risks of substance use, substance dependence or abuse, arrests, treatment for substance use problems, pregnancy and health care issues, and mental health issues. Supplemental demographic questions (which are interviewer-administered and follow the audio computer-assisted self-interviewing [ACASI] questions) address such topics as immigration, current school enrollment, employment and workplace issues, health insurance coverage, and income. It should be noted that some of the supplemental portions of the interview have remained in the survey, relatively unchanged, from year to year (e.g., current health insurance coverage, employment).

SEE: "Core."

Nonmedical Use of Psychotherapeutics

This section of the interview instrument deals with nonmedical use of four classes of prescription-type psychotherapeutics: pain

relievers, sedatives, stimulants, and tranquilizers. Nonmedical use is defined as use of at least one of these medications without a prescription belonging to the respondent or use that occurred simply for the experience or feeling the drug caused. Responses to questions about the nonmedical use of Adderall® (a stimulant) and Ambien® (a sedative), which were added to the survey in 2006, were not included in these measures.

Measures of use of nonmedical psychotherapeutic agents in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription [pain reliever, sedative, stimulant, or tranquilizer] that was not prescribed for you or that you took only for the experience or feeling it caused?"

Feeder question: "Now we have some questions about drugs that people are supposed to take only if they have a prescription from a doctor. We are only interested in your use of a drug if the drug was not prescribed for you, or if you took the drug only for the experience or feeling it caused."

NOTE: The pill card contains pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium®, Librium®, and other tranquilizers are shown when the section on tranquilizers is introduced.

SEE: "Current Use," "Lifetime Use," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Nonmetro

SEE: "County Type."

Northeast Region

The States included are those in the New England Division—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont—and the Middle Atlantic Division—New Jersey, New York, and Pennsylvania.

SEE: "Geographic Division" and "Region."

OxyContin® Use

Measures of use of the prescription pain reliever OxyContin® in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use:

"How long has it been since you last used OxyContin that was not prescribed for you or that you took only for the experience or feeling it caused?" For additional details, see Section B.5.1 of Appendix B of the 2004 NSDUH's national results report (OAS, 2005b).

SEE: "Current Use," "Lifetime Use," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Pain Reliever Use

Measures of the nonmedical use of prescription-type pain relievers in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription pain reliever that was not prescribed for you, or that you took only for the experience or feeling it caused?"

Feeder question: "These questions are about the use of pain relievers. We are not interested in your use of *over-the-counter* pain relievers such as aspirin, Tylenol, or Advil that can be bought in drug stores or grocery stores without a doctor's prescription. Card A shows pictures of some different types of prescription pain relievers and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription pain relievers that were not prescribed for you or that you took only for the experience or feeling they caused."

The following prescription pain relievers were listed on Pill Card A (Pain Relievers): (1) Darvocet®, Darvon®, or Tylenol® with Codeine; (2) Percocet®, Percodan®, or Tylox®; (3) Vicodin®, Lortab®, or Lorcet®/Lorcet Plus®; (4) Codeine; (5) Demerol®; (6) Dilaudid®; (7) Fioricet®; (8) Fiorinal®; (9) Hydrocodone; (10) Methadone; (11) Morphine; (12) OxyContin®; (13) Phenaphen® with Codeine; (14) Propoxyphene; (15) SK-65®; (16) Stadol® (no picture); (17) Talacen®; (18) Talwin®; (19) Talwin NX®; (20) Tramadol (no picture); and (21) Ultram®.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "OxyContin® Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Past Month Daily Cigarette Use

A respondent was defined as being a past month daily cigarette user if he or she smoked part or all of a cigarette on each of the past 30 days.

SEE: "Cigarette Use" and "Lifetime Daily Cigarette Use."

Past Month Use

This measure indicates use of a specific drug in the 30 days prior to the interview. Respondents who indicated past month use of a specific drug also were classified as lifetime and past year users.

SEE: "Current Use," "Lifetime Use," "Past Year Use," "Prevalence," and "Recency of Use."

Past Year Incidence

SEE: "Incidence."

Past Year Use

This measure indicates use of a specific drug in the 12 months prior to the interview. This definition includes those respondents who last used the drug in the 30 days prior to the interview. Respondents who indicated past year use of a specific drug also were classified as lifetime users.

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Prevalence," and "Recency of Use."

PCP Use

Measures of use of phencyclidine (PCP) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used PCP?"

SEE: "Current Use," "Ecstasy Use," "Hallucinogen Use," "Lifetime Use," "LSD Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."

Perceived Availability

Respondents were asked to assess how difficult or easy it would be for them to get various illicit drugs if they wanted these drugs. Response alternatives were (1) probably impossible, (2) very difficult, (3) fairly difficult, (4) fairly easy, and (5) very easy.

Perceived Need for Alcohol Use Treatment

Respondents were classified as perceiving a need for alcohol use treatment if they reported feeling a need for alcohol use treatment when asked, "During the past 12 months, did you need treatment or counseling for your alcohol use?" or if they indicated feeling a need for additional treatment specifically for alcohol use when

asked, "During the past 12 months, for which of the following drugs did you need additional treatment or counseling?"

SEE: "Prevalence" and "Treatment for a Substance Use Problem."

Perceived Need for Illicit Drug or Alcohol Use Treatment

Respondents were classified as perceiving a need for illicit drug or alcohol use treatment if they were classified as either perceiving a need for illicit drug use treatment or perceiving a need for alcohol use treatment.

SEE: "Perceived Need for Alcohol Use Treatment" and "Perceived Need for Illicit Drug Use Treatment."

Perceived Need for Illicit Drug Use Treatment

Respondents were classified as perceiving a need for illicit drug use treatment if they reported feeling a need for treatment for the use of one or more drugs when asked specifically about each of the individual drugs they had indicated using, "During the past 12 months, did you need treatment or counseling for your use of (drug)?" They also were classified as perceiving a need for illicit drug use treatment if they indicated feeling a need for additional treatment specifically for the use of one or more drugs when asked, "During the past 12 months, for which of the following drugs did you need additional treatment or counseling?" The response list of drugs included marijuana/hashish, cocaine or crack, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, sedatives, or some other drug.

SEE: "Prevalence" and "Treatment for a Substance Use Problem."

Perceived Risk/ Harmfulness

Respondents were asked to assess the extent to which people risk harming themselves physically and in other ways when they use various illicit drugs, alcohol, and cigarettes, with various levels of frequency. Response alternatives were (1) no risk, (2) slight risk, (3) moderate risk, and (4) great risk.

Percentages

In this report, all of the tables contain percentages based on weighted data.

SEE: "Rounding."

Pill Cards

The pill cards contain pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium®, Librium®, and other tranquilizers are shown when the questionnaire section on tranquilizers is introduced.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

Poverty Level (% of U.S. Census Bureau Poverty Threshold)

This measure is a comparison of a respondent's total family income with the U.S. Census Bureau's poverty thresholds (both measured in dollar amounts) in order to determine the poverty status of the respondent and his or her family. Information on family income, size, and composition (i.e., number of children) and the respondent's age is used to determine the respondent's poverty level. The poverty level is calculated as a percentage of the poverty threshold by dividing the respondent's reported total family income by the appropriate poverty threshold amount. Thus, if a family's total income is less than the family's poverty threshold, then that family and every individual in it is considered to be in poverty (i.e., less than 100 percent of the U.S. census poverty threshold). Accordingly, if a family's total income is greater than the poverty threshold but less than twice the poverty threshold, then that family and every individual in it is classified as being 100 to 199 percent of the U.S. census poverty threshold.

SEE: "Family Income."

Prevalence

Prevalence is a general term used to describe the estimates for lifetime, past year, and past month substance use, dependence or abuse, or other behaviors of interest within a given period (e.g., the past 12 months). Other behaviors of interest include delinquent behavior, driving under the influence of alcohol or drugs, perceived need for alcohol or illicit drug use treatment, serious psychological distress, treatment for mental health problems, treatment for a substance use problem, and unmet need for treatment for mental health problems.

SEE: "Abuse," "Current Use," "Delinquent Behavior," "Dependence," "Driving Under the Influence," "Need for Illicit Drug or Alcohol Use Treatment," "Nicotine (Cigarette) Dependence," "Perceived Need for Alcohol Use

Treatment," "Perceived Need for Illicit Drug or Alcohol Use Treatment," "Perceived Need for Illicit Drug Use Treatment," "Recency of Use," "Serious Psychological Distress," "Treatment for Mental Health Problems," "Treatment for a Substance Use Problem," and "Unmet Need for Treatment for Mental Health Problems."

Prior Year Marijuana Use

A respondent was defined as engaging in prior year marijuana use if he or she used marijuana or hashish 12 to 23 months prior to the interview date. Prior Year Marijuana Use is different from Past Year Marijuana Use because Past Year Marijuana Use indicates use in the past 12 calendar months prior to the interview date, whereas Prior Year Marijuana Use is defined as using marijuana in the year prior to the past year (12 calendar months prior to the interview date) or within 12 to 23 months prior to the interview date.

SEE: "Marijuana Use."

Psychotherapeutic Drugs

Psychotherapeutic drugs are prescription-type medications with legitimate medical uses as pain relievers, tranquilizers, stimulants, and sedatives. The interview instrument covers nonmedical use of these drugs, which involves use without a prescription belonging to the respondent or use that occurred simply for the experience or feeling the drug caused.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Race/Ethnicity

Race/ethnicity is used to refer to the respondent's self-classification of racial and ethnic origin and identification. For Hispanic origin, respondents were asked, "Are you of Hispanic, Latino, or Spanish origin or descent?" For race, respondents were asked, "Which of these groups best describes you?" Response alternatives were (1) white, (2) black/African American, (3) American Indian or Alaska Native, (4) Native Hawaiian, (5) Other Pacific Islander, (6) Asian, and (7) Other. Categories for a combined race/ethnicity variable included Hispanic; non-Hispanic groups where respondents indicated only one race (white, black, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Asian); and

non-Hispanic groups where respondents reported two or more races. These categories are based on classifications developed by the U.S. Census Bureau.

SEE: "American Indian or Alaska Native," "Asian," "Black," "Hispanic," "Native Hawaiian or Other Pacific Islander," "Two or More Races," and "White."

Recency of Use

The recency question for each drug was the source for the lifetime, past year, and past month prevalence estimates.

The question was essentially the same for all classes of drugs. The question was: "How long has it been since you last used [drug name]?" For the four classes of psychotherapeutics, the phrase "that was not prescribed for you or only for the experience or feeling it caused" was added after the name of the drug.

For tobacco products (cigarettes, snuff, chewing tobacco, or cigars), a question first was asked about use in the past 30 days. If the respondent did not use the product in the past 30 days, the recency question was asked as above, with the response alternatives (1) more than 30 days ago but within the past 12 months; (2) more than 12 months ago but within the past 3 years; and (3) more than 3 years ago. For the remaining drugs, the response alternatives were (1) within the past 30 days; (2) more than 30 days ago but within the past 12 months; and (3) more than 12 months ago.

SEE: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," and "Prevalence."

Region

Four regions, Northeast, Midwest, South, and West, are based on classifications developed by the U.S. Census Bureau.

SEE: "Geographic Division," "Midwest Region," "Northeast Region," "South Region," and "West Region."

Rounding

The decision rules for the rounding of percentages were as follows. If the second number to the right of the decimal point was greater than or equal to 5, the first number to the right of the decimal point was rounded up to the next higher number. If the second number to the right of the decimal point was less than 5, the first number to the right of the decimal point remained the same. Thus, a prevalence estimate of 16.55 percent would be rounded to 16.6 percent, while an estimate of 16.44 percent would be rounded to 16.4 percent. Although the percentages in the tables generally total

100 percent, the use of rounding sometimes produces a total of slightly less than or more than 100 percent.

SEE: "Percentages."

Sedative Use

Measures of the nonmedical use of prescription-type sedatives in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription sedative that was not prescribed for you, or that you took only for the experience or feeling it caused?" Responses to questions about use of the prescription sedative Ambien®, which were added to the survey in 2006, were not included in these measures.

Feeder question: "These next questions ask about the use of sedatives or barbiturates. These drugs are also called *downers* or *sleeping pills*. People take these drugs to help them relax or to help them sleep. We are not interested in the use of *over-the-counter* sedatives such as Sominex, Unisom, Nytol, or Benadryl that can be bought in drug stores or grocery stores without a doctor's prescription. Card D shows pictures of different kinds of prescription sedatives and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription sedatives that were not prescribed for you or that you took only for the experience or feeling they caused."

The following prescription sedatives were listed on Pill Card D (Sedatives): (1) Methaqualone (includes Sopor®, Quaalude®) (no picture); (2) Nembutal®, Pentobarbital (no picture), Seconal®, Secobarbital (no picture), or Butalbital (no picture); (3) Restoril® or Temazepam; (4) Amytal®; (5) Butisol®; (6) Chloral Hydrate (no picture); (7) Dalmane®; (8) Halcion®; (9) Phenobarbital; (10) Placidyl®; and (11) Tuinal®.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Self-Help Group

NSDUH has collected data on self-help groups because they may be potential locations of treatment for a substance use problem. Respondents who reported that they received treatment for their use of alcohol or drugs in the past 12 months were asked whether they received treatment in a self-help group, such as Alcoholics

Anonymous or Narcotics Anonymous; these groups were not considered specialty substance use treatment facilities. Beginning with the 2006 survey, respondents also were asked whether they attended self-help groups in the past 12 months to receive help for their alcohol or drug use, regardless of whether they previously reported receiving any treatment in the past 12 months.

SEE: "Specialty Substance Use Treatment Facility" and "Treatment for a Substance Use Problem."

Serious Psychological Distress

Serious psychological distress (SPD) is defined as having a score of 13 or higher on the K6 scale, which measures symptoms of psychological distress during the 1 month in the past 12 months when respondents were at their worst emotionally. In 2005 and 2006, all respondents aged 18 or older were administered a short-form version of the SPD module featuring only the six questions pertaining to the K6 scale. In 2004, half of the respondents aged 18 or older were administered a short-form version of the SPD module, while the remaining adults were administered a long-form version of the SPD module. Due to differences in the 2004 SPD prevalence estimates based on the two versions of the module, estimates from the short-form module are presented in this report for 2004. Because of these changes, 2004 through 2006 estimates presented in this report are not comparable with estimates published in the 2004 and earlier reports. See Section B.4.4 in Appendix B for additional details.

SEE: "Prevalence."

Significance

For tables in which trends over time were shown, statistically significant differences between estimates from two different time points (e.g., 2005 and 2006) were identified at two levels: 0.05 and 0.01. Thus, estimates with different values that did not meet the criteria for statistical significance were not considered to be different from one another. In the text of this report, a significance level of 0.05 was used to determine whether estimates from different demographic subgroups were statistically different.

Small Metro

SEE: "County Type."

Smokeless Tobacco Use

Measures of use of smokeless tobacco in the respondent's lifetime, the past year, and the past month were developed from responses to the questions about snuff and chewing tobacco use in the past 30 days and the recency of use (if not in the past 30 days): "Now think

about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you used snuff, even once?" "How long has it been since you last used snuff?" "Now think about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you used chewing tobacco, even once?" and "How long has it been since you last used chewing tobacco?"

Feeder questions: "These next questions are about your use of snuff, sometimes called dip... Have you ever used snuff, even once?" and "These next questions are only about chewing tobacco... Have you ever used chewing tobacco, even once?"

SEE: "Cigar Use," "Cigarette Use," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," and "Tobacco Product Use."

Source of Psychotherapeutic Drugs

Measures of the source of psychotherapeutic drugs (prescription pain relievers, prescription tranquilizers, prescription stimulants, methamphetamine, and prescription sedatives) used nonmedically and how respondents obtained these drugs the last time they used them nonmedically. For all of these drugs except methamphetamine, response options for the source of the medications were as follows: (a) got a prescription from just one doctor; (b) got prescriptions from more than one doctor; (c) wrote a fake prescription; (d) stole from a doctor's office, clinic, hospital, or pharmacy; (e) got from a friend or relative for free; (f) bought from a friend or relative; (g) took from a friend or relative without asking; (h) bought from a drug dealer or other stranger; (i) bought on the Internet; and (j) got in some other way (includes other sources specified by respondents). Methamphetamine users were presented with options (e) through (j) only.

If respondents last used a psychotherapeutic drug nonmedically in the past 30 days and reported getting that drug from only one source, the source of psychotherapeutic drug measure was based on that answer. For respondents who reported getting a psychotherapeutic drug from multiple sources in the past 30 days or who last misused that drug more than 30 days ago but in the past 12 months, the source of psychotherapeutic drug measure was based on their answer to a question about how they got that drug the last time they used it nonmedically.

Measures of the source of methamphetamine differ from all other measures regarding the source of psychotherapeutic drugs in that they include respondents who reported methamphetamine use in the stimulants module and respondents who reported methamphetamine use in the special drugs module who did not initially report methamphetamine use in the stimulants module because they did not consider it to be a prescription drug. All other measures of the source of psychotherapeutic drugs only include respondents who reported psychotherapeutic drug use in their respective drug modules.

Feeder questions from the drug modules: "Earlier, the computer recorded that, during the past 30 days, you used [prescription pain relievers, prescription tranquilizers, prescription stimulants, methamphetamine, prescription sedatives] that were not prescribed for you or that you took only for the experience or feeling it caused. How did you get these [fill in relevant drug name from above]? Please enter all the ways that you got the [fill in relevant drug name from above] you used in the past 30 days."

"Now think about the last time you used [a prescription pain reliever, a prescription tranquilizer, a prescription stimulant, methamphetamine, a prescription sedative] that was not prescribed for you or that you took only for the experience or feeling it caused. How did you get this [fill in relevant drug name from above]?"

Feeder questions from the special drugs module: "Earlier, the computer recorded that you have never used Methamphetamine, Desoxyn, or Methedrine."

"Why did you report earlier that you had never used Methamphetamine?"

SEE: "Methamphetamine Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Psychotherapeutic Drugs," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

South Region

The States included are those in the South Atlantic Division—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; the East South Central Division—Alabama, Kentucky, Mississippi, and Tennessee; and the West South Central Division—Arkansas, Louisiana, Oklahoma, and Texas.

SEE: "Geographic Division" and "Region."

Specialty Substance Use Treatment Facility

Defined as drug or alcohol rehabilitation facilities (inpatient or outpatient), hospitals (inpatient services only), and mental health centers.

SEE: "Need for Illicit Drug or Alcohol Use Treatment," "Self-Help Group," and "Treatment for a Substance Use Problem."

Stealing

Respondents were asked how many times during the past 12 months they had stolen or tried to steal anything worth more than $50. Response alternatives were (1) 0 times, (2) 1 or 2 times, (3) 3 to 5 times, (4) 6 to 9 times, or (5) 10 or more times.

This item was asked of the 12 to 17 age group and of those aged 18 or older.

SEE: "Delinquent Behavior" and "Gang Fighting."

Stimulant Use

Measures of nonmedical use of prescription-type stimulants in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription stimulant that was not prescribed for you or that you took only for the experience or feeling it caused?" However, measures of stimulant use do not include data from new questions that were added to the survey in 2006 about the use of the prescription stimulant Adderall®.

Feeder question: "These next questions are about the use of drugs such as amphetamines that are known as stimulants, *upper*s, or *speed*. People sometimes take these drugs to lose weight, to stay awake, or for attention deficit disorders. We are not interested in the use of *over-the-counter* stimulants such as Dexatrim or No-Doz that can be bought in drug stores or grocery stores without a doctor's prescription. Card C shows pictures of some different kinds of prescription stimulants and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription stimulants that were not prescribed for you or that you took only for the experience or feeling it caused."

The following prescription stimulants were listed on Pill Card C (Stimulants): (1) Methamphetamine (crank, crystal, ice, or speed) (no picture), Desoxyn®, or Methedrine® (no picture); (2)

Amphetamines (no picture), Benzedrine®, Biphetamine®, Fastin®, or Phentermine; (3) Ritalin® or Methylphenidate; (4) Cylert®; (5) Dexedrine®; (6) Dextroamphetamine (no picture); (7) Didrex®; (8) Eskatrol®; (9) Ionamin®; (10); Mazanor®; (11) Obedrin-LA® (no picture); (12) Plegine®; (13) Preludin®; (14) Sanorex®; and (15) Tenuate®.

SEE: "Current Use," "Lifetime Use," "Methamphetamine Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," and "Tranquilizer Use."

Substance Use Treatment

SEE: "Treatment for a Substance Use Problem."

Supplemental Security Income (SSI)

Supplemental Security Income (SSI) is a governmental program that makes assistance payments to low-income, aged, blind, and disabled persons.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Welfare Assistance."

Tobacco Product Use

This measure indicates use of any tobacco product: cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. Tobacco product use in the past year includes past month pipe tobacco use. Tobacco product use in the past year does not include use of pipe tobacco more than 30 days ago but within 12 months of the interview because the survey did not capture this information. Measures of tobacco product use in the respondent's lifetime, the past year, or the past month also do not include use of cigars with marijuana in them (blunts).

SEE: "Blunts," "Cigar Use," "Cigarette Use," and "Smokeless Tobacco Use."

Total Family Income

SEE: "Family Income."

Tranquilizer Use

Measures of the nonmedical use of prescription-type tranquilizers in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription tranquilizer that was not prescribed for you, or that you took only for the experience or feeling it caused?"

Feeder question: "These next questions ask about the use of tranquilizers. Tranquilizers are usually prescribed to relax people, to calm people down, to relieve anxiety, or to relax muscle spasms. Some people call tranquilizers *nerve pills*. Card B shows pictures of some different kinds of prescription tranquilizers. These pictures show only pills, but we are interested in your use of any form of prescription tranquilizers that were not prescribed for you, or that you took only for the experience or feeling they caused."

The following prescription tranquilizers were listed on Pill Card B (Tranquilizers): (1) Klonopin® or Clonazepam; (2) Xanax®, Alprazolam, Ativan®, or Lorazepam; (3) Valium® or Diazepam; (4) Atarax®; (5) BuSpar®; (6) Equanil®; (7) Flexeril®; (8) Librium®; (9) Limbitrol®; (10) Meprobamate; (11) Miltown®; (12) Rohypnol®; (13) Serax®; (14) Soma®; (15) Tranxene®; and (16) Vistaril®.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," and "Stimulant Use."

Treatment for Depression

Treatment for depression is defined as seeing or talking to a medical doctor or other professional or using prescription medication in the past year for depression.

SEE: "Major Depressive Episode."

Treatment for Mental Health Problems

For adults aged 18 or older, treatment for mental health problems is defined as treatment or counseling for any problem with emotions, nerves, or mental health in the 12 months prior to the interview in any inpatient or outpatient setting, or the use of prescription medication for treatment of a mental or emotional condition. Estimates for adults are based only on responses to items in the module on adult mental health service utilization. For

youths aged 12 to 17, treatment for mental health problems is defined as receiving treatment or counseling for emotional or behavioral problems from specific mental health or other health professionals in school, home, outpatient, or inpatient settings within the 12 months prior to the interview. Treatment for only a substance use problem is not included for adults or youths.

SEE: "Prevalence" and "Unmet Need for Treatment for Mental Health Problems."

Treatment for a Substance Use Problem

Respondents were asked if they had received treatment for illicit drug use, alcohol use, or both illicit drug and alcohol use in the past 12 months in any of the following locations: a hospital overnight as an inpatient, a residential drug or alcohol rehabilitation facility where they stayed overnight, a drug or alcohol rehabilitation facility as an outpatient, a mental health facility as an outpatient, an emergency room, a private doctor's office, prison or jail, a self-help group, or some other place.

SEE: "Alcohol Use," "Illicit Drugs," "Need for Illicit Drug or Alcohol Use Treatment," "Prevalence," "Self-Help Group," and "Specialty Substance Use Treatment Facility."

Two or More Races

Respondents were asked to report which racial group describes them. Response alternatives were (1) white, (2) black/African American, (3) American Indian or Alaska Native, (4) Native Hawaiian, (5) Other Pacific Islander, (6) Asian, and (7) Other. Respondents were allowed to choose more than one of these groups. Persons who chose both the "Native Hawaiian" and "Other Pacific Islander" categories (and no additional categories) were classified in a single category: Native Hawaiian or Other Pacific Islander. Otherwise, persons reporting two or more of the above groups and that they were not of Hispanic, Latino, or Spanish origin were included in a "Two or More Races" category. This category does not include respondents who reported more than one Asian subgroup but who reported "Asian" as their only race. Respondents reporting two or more races and reporting that they were of Hispanic, Latino, or Spanish origin were classified as Hispanic.

SEE: "Hispanic" and "Race/Ethnicity."

Unmet Need for Treatment for Mental Health Problems

Unmet need for treatment for mental health problems is defined as a perceived need for treatment for mental health problems in the past 12 months that was not received. This measure also includes persons who received some treatment for mental health problems in the past 12 months but also reported that they perceived a need for treatment that they did not receive. Unmet need among those who received treatment may be interpreted as delayed or insufficient treatment in the past 12 months.

Feeder question: "During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?"

SEE: "Prevalence" and "Treatment for Mental Health Problems."

Welfare Assistance

Household participation in one or more government (welfare) assistance programs during the prior calendar year was defined as one or more family members receiving Supplemental Security Income (SSI), food stamps, cash, or noncash assistance. SSI provides payments to low-income, aged, blind, and disabled persons. Food stamps are government-issued coupons used to purchase food. Cash assistance refers to cash payments through Temporary Assistance for Needy Families (TANF), welfare, or other public assistance. Noncash assistance refers to services, such as help getting a job, placement in an education or job-training program, or help with transportation, child care, or housing.

NOTE: For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

SEE: "Cash Assistance," "Food Stamps," "Noncash Assistance," and "Supplemental Security Income (SSI)."

West Region

The States included are those in the Mountain Division—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and the Pacific Division—Alaska, California, Hawaii, Oregon, and Washington.

SEE: "Geographic Division" and "Region."

White

White, not of Hispanic, Spanish, or Latino origin; does not include respondents reporting two or more races. (Respondents reporting that they were white and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

SEE: "Hispanic" and "Race/Ethnicity."

Appendix D: Other Sources of Data

A variety of surveys and data systems other than the National Survey on Drug Use and Health (NSDUH) collect data on substance use and mental health problems. It is useful to consider the results of these other studies when discussing NSDUH data. This appendix briefly describes several of these other data systems and presents selected comparisons with NSDUH results. In addition, this appendix describes surveys of populations not covered by NSDUH. Survey descriptions are presented in alphabetical order

When considering the information presented here, it is important to understand the methodological differences between the different surveys and the impact that these differences could have on estimates of the presence of substance use and mental health problems. Several studies have compared NSDUH estimates with estimates from other studies and have evaluated how differences may have been affected by differences in survey methodology (Gfroerer, Wright, & Kopstein, 1997; Grucza, Abbacchi, Przybeck, & Gfroerer, 2007; Hennessy & Ginsberg, 2001; Miller et al., 2004). These comparisons suggest that the goals and approaches of surveys are often different, making comparisons between them difficult. Some methodological differences that have been identified as affecting comparisons include populations covered, sampling methods, modes of data collection, questionnaires, and estimation methods.

D.1 Other National Surveys of Substance Use and Mental Health

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual, State-based telephone survey of the civilian, noninstitutionalized adult population aged 18 or older and is sponsored by the Centers for Disease Control and Prevention (CDC). Since 2002, BRFSS has collected data from all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam using a computer-assisted telephone interviewing (CATI) design. BRFSS collects information on access to health care, health status indicators, health risk behaviors (including cigarette and alcohol use), and the use of clinical preventive services by State. More than 350,000 adults are interviewed each year. National data are calculated using a median score across States.

NSDUH has shown consistently higher rates of binge drinking than BRFSS. The use of audio computer-assisted self-interviewing (ACASI) in NSDUH, which is considered to be more anonymous and yields higher reporting of sensitive behaviors, was offered as an explanation for the lower rates in BRFSS (Miller et al., 2004). For further details about BRFSS, see the CDC website at http://www.cdc.gov/brfss/ (CDC, 2007a).

Epidemiologic Catchment Area Survey (ECA)

The Epidemiologic Catchment Area (ECA) Study (1981-83) was the first survey to administer a structured psychiatric interview and provide population-based estimates of psychiatric disorders. Prevalences were estimated by collecting data from households and group quarters (e.g., prisons, nursing homes, mental hospitals) in five local catchment areas (Baltimore,

Los Angeles, New Haven, North Carolina, and St. Louis) that had been previously designated as Community Mental Health Center catchment areas. There were three waves of data collection with 20,861 respondents; the first and third waves were interviewer-assisted personal interviews, and the second wave was a telephone interview conducted with household participants only (Eaton et al., 1984). The ECA utilized the Diagnostic Interview Schedule (DIS), a structured clinical instrument that can be used by nonclinically trained interviewers to generate diagnoses of psychiatric and substance use disorders using the *Diagnostic and Statistical Manual of Mental Disorders,* third edition (DSM-III) (American Psychiatric Association [APA], 1980). A supplemental sample of institutional settings, such as nursing homes, psychiatric hospitals, and prisons, also was included to capture those respondents with a high probability of having a mental disorder. For further details about the ECA, see http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/06153.xml (National Institute of Mental Health [NIMH], 1992-1994).

Harvard School of Public Health's College Alcohol Study (CAS)

The Harvard School of Public Health's College Alcohol Study (CAS) is an ongoing survey of students at 4-year colleges and universities in 40 States. The study surveyed a random sample of students at the same colleges in 1993, 1997, 1999, and 2001. The schools and students were selected to provide nationally representative samples of schools and students. In 1993, a national sample of 195 colleges was selected from the American Council on Education's list of accredited 4-year colleges by using probability proportionate to size of enrollment; of the 195 colleges, 140 agreed to participate, for a school-level response rate of 72 percent (Wechsler, Dowdall, Davenport, & Castillo, 1995). Of these 140 colleges, 130 participated in 1997, 128 in 1999, and 120 in 2001. Student-level response rates to the two-stage mail survey were 70 percent in 1993, 59 percent in 1997 and 1999, and 52 percent in 2001. The researchers provided a short survey to nonrespondents in order to better weight the data (Wechsler et al., 2002). For further details, see the CAS website at http://www.hsph.harvard.edu/cas/Home.html (Harvard School of Public Health, 2005).

Monitoring the Future (MTF)

The Monitoring the Future (MTF) study is a national survey that tracks substance use trends and related attitudes among America's adolescents. This survey is conducted annually by the Institute for Social Research at the University of Michigan through a grant awarded by the National Institute on Drug Abuse (NIDA). The MTF and NSDUH are the Federal Government's largest and primary tools for tracking youth substance use. The MTF is composed of three substudies: (a) an annual survey of high school seniors initiated in 1975; (b) ongoing panel studies of representative samples from each graduating class that have been conducted by mail since 1976; and (c) annual surveys of 8^{th} and 10^{th} graders initiated in 1991. In the spring, students complete a self-administered, machine-readable questionnaire during a regular class period. An average of about 400 public and private schools and about 50,000 students are sampled annually. The latest MTF was conducted in 2006 (Johnston, O'Malley, Bachman, & Schulenberg, 2006c, 2007b).

Comparisons between the MTF estimates and estimates based on students sampled in NSDUH generally have shown NSDUH substance use prevalence levels to be lower than MTF

estimates, with differences tending to be more pronounced for 8th graders (Table D.1).[16] The lower prevalences in NSDUH may be due to more underreporting in the household setting as compared with the MTF school setting. However, MTF does not survey dropouts, a group that NSDUH has shown to have higher rates of illicit drug use (Gfroerer et al., 1997). Both surveys showed that rates of substance use were generally stable between 2005 and 2006. For further details, see the MTF website at http://www.monitoringthefuture.org/ (University of Michigan, 2006).

National Comorbidity Survey (NCS)

The National Comorbidity Survey (NCS) was sponsored by NIMH, NIDA, and the W.T. Grant Foundation. It was designed to measure the prevalence of the illnesses in DSM-III-R (APA, 1987) in the general population. The first wave of the NCS was a household survey collecting data from 8,098 respondents aged 15 to 54. These responses were weighted to produce nationally representative estimates. A random sample of 4,414 respondents also were administered an additional module that captured information on nicotine dependence. The interviews took place between 1990 and 1992. The NCS used a modified version of the Composite International Diagnostic Interview (the UM-CIDI) to generate DSM-III-R diagnoses.

There have been several recent extensions to the original NCS, including a 10-year follow-up of the baseline sample (NCS-II), a replication study conducted in 2001 and 2002 with a newly recruited nationally representative sample of 9,282 respondents aged 18 or older (NCS-R), and an adolescent sample with a targeted recruitment of more than 10,000 adolescents (NCS-A) along with their parents and teachers.

The NCS-R used an updated version of the CIDI that was designed to capture diagnoses of substance abuse or dependence using current DSM-IV criteria (APA, 1994). It should be noted that in several recent NCS-R studies (Kessler et al., 2005a; Kessler, Chiu, Demler, & Walters, 2005b), the diagnosis for abuse also includes those who meet the diagnosis for dependence. In contrast, NSDUH follows DSM-IV guidelines and measures abuse and dependence separately. To make the NCS definition of abuse comparable with that of NSDUH, the rate for dependence must be subtracted from the rate for abuse. Rates of alcohol dependence or abuse and rates of illicit drug dependence or abuse were generally lower in NCS-R than NSDUH. The NCS also produces nationally representative data on psychiatric conditions (Kessler et al., 2003a, 2003b). For further details, see the NCS website at http://www.hcp.med.harvard.edu/ncs/ (Harvard School of Medicine, 2005).

National Health Interview Survey (NHIS)

The National Health Interview Survey (NHIS) is a continuing nationwide sample survey that collects data using personal household interviews through an interviewer-administered computer-assisted personal interviewing (CAPI) system. The survey is sponsored by the National Center for Health Statistics (NCHS) and provides national estimates of selected health measures, including cigarette smoking and alcohol use among persons aged 18 or older. NHIS data have been collected since 1957. In 2006, data were derived from three components of the survey: the

[16] To examine estimates that are comparable with MTF data, NSDUH estimates presented in Table D.1 are based on data collected in the first 6 months of the survey year and are subset to ages 12 to 20.

Family Core, which collects information from all family members in each household; the Sample Adult Core, which collects information from one adult aged 18 or older in each family; and the Sample Child Core, which collects information from one child in each family with a child. In 2006, NHIS data were based on 53,043 persons in the Family Core, 17,040 adults in the Sample Adult Core, and 6,920 children in the Sample Child Core (CDC, 2007b). For further details about the NHIS, see the CDC website at http://www.cdc.gov/nchs/nhis.htm (CDC, 2007b).

National Longitudinal Alcohol Epidemiologic Survey (NLAES) and National Epidemiologic Survey on Alcohol and Related Conditions (NESARC)

The National Longitudinal Alcohol Epidemiologic Survey (NLAES) was conducted in 1991 and 1992 by the U.S. Bureau of the Census for the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Face-to-face, interviewer-administered interviews were conducted with 42,862 respondents aged 18 or older in the contiguous United States. Despite the survey name, the design was cross-sectional.

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) was conducted in 2001 and 2002, also by the U.S. Bureau of the Census for NIAAA, using a computerized interviewer-administered interview. The NESARC sample was designed to make inferences for persons aged 18 or older in the civilian, noninstitutionalized population of the United States, including Alaska, Hawaii, and the District of Columbia, and including persons living in noninstitutional group quarters. NESARC is designed to be a longitudinal survey. The first wave was conducted in 2001 and 2002, with a final sample size of 43,093 respondents aged 18 or older. The second wave was conducted from 2004 to 2005 (Grant & Dawson, 2006).

The study contains comprehensive assessments of drug use, dependence, and abuse and associated mental disorders. NESARC included an extensive set of questions, based on DSM-IV criteria (APA, 1994), designed to assess the presence of symptoms of alcohol and drug dependence and abuse in persons' lifetimes and during the prior 12 months. In addition, DSM-IV diagnoses of major mental disorders were generated using the Alcohol Use Disorder and Associated Disabilities Interview Schedule-version 4 (AUDADIS-IV), which is a structured diagnostic interview that captures major DSM-IV axis I and axis II disorders.

Recent research indicates that (a) prevalence estimates for substance use were generally higher in NSDUH than in NESARC; (b) rates of past year substance use disorder (SUD) for cocaine and heroin use were higher in NSDUH than in NESARC; (c) rates of past year SUD for use of alcohol, marijuana, and hallucinogens were similar between NSDUH and NESARC; and (d) prevalence estimates for past year SUD conditional on past year use were substantially lower in NSDUH for the use of marijuana, hallucinogens, and cocaine (Grucza et al., 2007). A number of methodological variables might have contributed to such discrepancies, including factors related to privacy and anonymity (NSDUH is self-administered, while NESARC is interviewer administered, which may have resulted in higher use estimates in NSDUH) and differences in SUD diagnostic instrumentation (which may have resulted in higher SUD prevalence among past year substance users in NESARC). For further details about NLAES or NESARC, see the NIAAA website at http://www.niaaa.nih.gov/ (NIAAA, 2007).

National Longitudinal Study of Adolescent Health (Add Health)

The National Longitudinal Study of Adolescent Health (Add Health) was conducted to measure the effects of family, peer group, school, neighborhood, religious institution, and community influences on health risks, such as tobacco, drug, and alcohol use. Initiated in 1994 under a grant from the National Institute of Child Health and Human Development (NICHD) with cofunding from 17 other Federal agencies, Add Health is the largest, most comprehensive survey of adolescents ever undertaken. Data at the individual, family, school, and community levels were collected in two waves between 1994 and 1996. In Wave 1 (conducted in 1994-95), roughly 90,000 students from grades 7 through 12 at 144 schools around the United States answered brief, machine-readable questionnaires during a regular class period. Interviews also were conducted with about 20,000 students and their parents in the students' homes using a combined CAPI and ACASI design. In Wave 2, students were interviewed a second time in their homes. In 2001 and 2002, 4,882 of the original Add Health respondents, now aged 18 to 26, were re-interviewed in a third wave to investigate the influence that adolescence has on young adulthood. Identifying information was obtained from participants in order to track them over time. For further details, see the Add Health website at http://www.cpc.unc.edu/addhealth (University of North Carolina, Carolina Population Center, 2005).

National Survey of Parents and Youth (NSPY)

The National Survey of Parents and Youth (NSPY) was sponsored by NIDA to evaluate the Office of National Drug Control Policy's (ONDCP's) National Youth Anti-Drug Media Campaign. NSPY was a national, household-based survey of youths aged 9 to 18 years old and their parents. Data were collected using a combination of computer-assisted interviewing technologies, including CAPI for nonsensitive portions of the survey and ACASI for the sensitive portions.

NSPY employed a panel survey design with nine waves of data collection for youths between November 1999 and June 2004. Wave 1 included 3,298 youths and 2,284 of their parents, who were interviewed between November 1999 and May 2000. Wave 9 was conducted between January and June 2004 with 3,142 youths and 2,381 parents.

Data from NSPY and NSDUH produced similar estimates of marijuana use for youths For example, Wave 9 of NSPY data indicated that 16.7 percent of youths aged 12 to 18 had used marijuana in the past year, and the 2004 NSDUH yielded an estimate of 17.1 percent among this age group for this time period (Orwin et al., 2006). One explanation for the similarity in estimates is that both surveys used ACASI. For further details, see the NSPY Center website at https://www.nspycenter.com/default.asp (AMSAQ, Inc., & Westat, 2007).

Partnership Attitude Tracking Study (PATS)

The Partnership Attitude Tracking Study (PATS), an annual national research study that tracks attitudes about illegal drugs, is sponsored by the Partnership for a Drug-Free America (PDFA). PATS consists of two nationally projectable samples—a teenage sample for students in grades 7 through 12 and a parent sample. Adolescents complete self-administered, machine-readable questionnaires during a regular class period with their teacher remaining in the room. In

2002, PATS included questions on prescription drug abuse, and in 2005, it included questions on use of over-the-counter cough medicine to get high. The teenage sample is administered to approximately 7,000 youths annually. The latest PATS was conducted in 2005 (PDFA, 2006a).

In general, NSDUH estimates of prevalence for youths aged 12 to 17 are lower than PATS estimates for youths in grades 7 through 12. The differences in prevalence estimates are likely to be due to the different study designs. The youth portion of PATS is a school-based survey, which may elicit more reporting of sensitive behaviors than the home-based NSDUH. In addition, the PATS survey is conducted with a sample of students in the 7th through 12th grades, which is a slightly older sample than that of the NSDUH 12- to 17-year-old sample (PDFA, 2006b). For further details about PATS, see the PDFA website at http://www.drugfree.org/ (PDFA, 2006a).

Youth Risk Behavior Survey (YRBS)

The Youth Risk Behavior Survey (YRBS) is a component of the CDC's Youth Risk Behavior Surveillance System (YRBSS), which measures the prevalence of six priority health risk behavior categories: (a) behaviors that contribute to unintentional injuries and violence; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infections; (e) unhealthy dietary behaviors; and (f) physical inactivity. The YRBSS includes national, State, territorial, and local school-based surveys of high school students conducted every 2 years. The national school-based survey uses a three-stage cluster sample design to produce a nationally representative sample of students in grades 9 through 12 who attend public and private schools. The State and local surveys use a two-stage cluster sample design to produce representative samples of students in grades 9 through 12 in their jurisdictions. The YRBS is conducted during the spring, with students completing a self-administered, machine-readable questionnaire during a regular class period. The latest YRBS was conducted in 2005 (Eaton et al., 2006).

In general, the YRBS school-based survey has found higher rates of substance use for youths than those found in NSDUH (Table D.2). The lower prevalence rates in NSDUH are likely due to the differences in study design; specifically, the YRBS is school-based, which likely has resulted in higher rates of reported use as compared with the home-based NSDUH. For further details about the YRBS, see the CDC website at http://www.cdc.gov/HealthyYouth/yrbs/index.htm (CDC, 2007c).

D.2 Surveys of Populations Not Covered by NSDUH

Department of Defense (DoD) Survey of Health Related Behaviors among Military Personnel

The 2005 Department of Defense (DoD) Survey of Health Related Behaviors among Military Personnel was the 9th in a series of studies conducted since 1980. The sample consisted of 16,146 active-duty Armed Forces personnel worldwide who anonymously completed self-administered questionnaires that assessed substance use and other health behaviors (Bray et al., 2006). In recent administrations of this survey, comparisons with NSDUH data have consistently

shown that, even after accounting for demographic differences between the military and civilian populations, the military personnel had higher rates of heavy alcohol use than their civilian counterparts, similar rates of cigarette use, and lower rates of illicit drug use. For further details, see the DoD Lifestyle Assessment Program (DLAP) website at http://dodwws.rti.org/index.cfm (DoD & RTI International, 2006).

Survey of Inmates in State and Federal Correctional Facilities (SISCF)

The Survey of Inmates in State and Federal Correctional Facilities (SISCF) is conducted by the Bureau of Justice Statistics (BJS) every 5 years, providing information on individual characteristics of prison inmates, current offenses and sentences, family background, prior drug and alcohol use and treatment, as well as other characteristics. The SISCF is the only national source of detailed information on criminal offenders, particularly special populations such as drug and alcohol users and offenders who have mental health problems. The latest administration of this survey was conducted in 2004. Inmates were from a universe of 1,585 facilities. Systematic random sampling was used to select the inmates for computer-assisted personal interviewing. The final numbers interviewed were 14,999 State prisoners and 3,686 Federal prisoners.

Prior drug use among State prisoners remained stable on all measures between 1997 and 2004, while the percentage of Federal inmates who reported prior drug use rose on most measures (Mumola & Karberg, 2006). For the first time, half of Federal inmates reported drug use in the month before their offense. In 2004, measures of drug dependence and abuse based on criteria in DSM-IV were introduced. Fifty-three percent of the State and 45 percent of Federal prisoners met the DSM-IV criteria for drug abuse or dependence. The survey results indicate substantially higher rates of drug use among State and Federal prisoners as compared with NSDUH's rates for the general household population. For further details about the SISCF, see http://www.icpsr.umich.edu/NACJD/sisfcf/ (BJS, 2007).

Table D.1 Use of Specific Substances in Lifetime, Past Year, and Past Month among 8th, 10th, and 12th Graders in NSDUH and MTF: Percentages, 2005 and 2006

	SURVEY/TIME PERIOD											
	MTF						NSDUH (January – June)					
	Lifetime		Past Year		Past Month		Lifetime		Past Year		Past Month	
Drug/Current Grade Level	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Marijuana												
8th grade	16.5	15.7	12.2	11.7	6.6	6.5	8.0	8.7	6.3	6.9	2.6	3.3
10th grade	34.1[a]	31.8	26.6	25.2	15.2	14.2	24.5	25.8	19.3	20.3	9.0	10.1
12th grade	44.8	42.3	33.6	31.5	19.8	18.3	38.7	39.7	26.8	27.2	15.1	14.4
Cocaine												
8th grade	3.7	3.4	2.2	2.0	1.0	1.0	0.5	0.6	0.4	0.3	0.2	0.1
10th grade	5.2	4.8	3.5	3.2	1.5	1.5	2.7	2.8	2.2	2.1	0.6	0.7
12th grade	8.0	8.5	5.1	5.7	2.3	2.5	6.3	7.5	3.9	5.2	1.1	1.9
Inhalants												
8th grade	17.1	16.1	9.5	9.1	4.2	4.1	11.9	11.7	5.2	4.9	1.4	2.0
10th grade	13.1	13.3	6.0	6.5	2.2	2.3	11.4	11.5	4.6	4.5	1.2	1.5
12th grade	11.4	11.1	5.0	4.5	2.0	1.5	11.3	10.3	3.6	3.3	0.3	0.6
Cigarettes												
8th grade	25.9	24.6	--	--	9.3	8.7	17.4	18.2	10.3	10.6	5.0	4.9
10th grade	38.9[b]	36.1	--	--	14.9	14.5	37.3	35.5	24.1	23.6	15.9	15.6
12th grade	50.0[a]	47.1	--	--	23.2	21.6	50.2	49.4	34.9	36.7	23.9	25.8
Alcohol												
8th grade	41.0	40.5	33.9	33.6	17.1	17.2	27.6	29.9	21.1	22.6	8.0	9.1
10th grade	63.2	61.5	56.7	55.8	33.2	33.8	53.9	55.5	45.5	46.7	22.3	23.6
12th grade	75.1[a]	72.7	68.6[a]	66.5	47.0	45.3	70.7	72.1	62.5	64.0	38.7	38.7

-- Not available.

NOTE: NSDUH data have been subset to persons aged 12 to 20 to be more comparable with MTF data.

[a] Difference between estimate and 2006 estimate is statistically significant at the .05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the .01 level.

MTF = Monitoring the Future.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006 (January-June).
The Monitoring the Future Study, University of Michigan, 2005 and 2006.

Table D.2 Lifetime and Past Month Substance Use among Students in Grades 9 to 12 in YRBS and NSDUH: 2003 and 2005

Substance/ Period of Use	YRBS		NSDUH (January – June)	
	2003	2005	2003	2005
Marijuana				
Lifetime Use	40.2	38.4	32.5	28.2
Past Month Use	22.4	20.2	13.2	11.2
Cocaine				
Lifetime Use	8.7	7.6	5.3	3.9
Past Month Use	4.1	3.4	1.2	0.8
Inhalants				
Lifetime Use	12.1	12.4	11.8	12.2
Past Month Use	3.9	--	0.9	1.0
Cigarettes				
Lifetime Use	58.4	54.3	46.0	39.3
Past Month Use	21.9	23.0	20.2	17.4
Alcohol				
Lifetime Use	74.9	74.3	63.1	58.0
Past Month Use	44.9	43.3	29.1	26.2

YRBS = Youth Risk Behavior Survey.

-- Not available.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, January-June for 2003 and 2005.
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Appendix F: Sample Size and Population Tables

Table F.1 Survey Sample Size for Respondents Aged 12 or Older, by Gender and Detailed Age Category: 2005 and 2006

Age Category	Total		GENDER			
			Male		Female	
	2005	2006	2005	2006	2005	2006
TOTAL	68,308	67,802	32,786	32,713	35,522	35,089
12	3,633	3,570	1,824	1,777	1,809	1,793
13	3,791	3,838	1,918	2,002	1,873	1,836
14	3,903	3,905	1,989	2,062	1,914	1,843
15	3,840	3,984	1,907	2,024	1,933	1,960
16	3,784	3,892	1,952	1,982	1,832	1,910
17	3,583	3,682	1,788	1,871	1,795	1,811
18	3,062	3,055	1,575	1,573	1,487	1,482
19	2,894	2,754	1,429	1,366	1,465	1,388
20	2,792	2,640	1,271	1,230	1,521	1,410
21	2,725	2,830	1,282	1,329	1,443	1,501
22	2,784	2,653	1,301	1,236	1,483	1,417
23	2,772	2,717	1,268	1,267	1,504	1,450
24	2,737	2,684	1,303	1,237	1,434	1,447
25	2,745	2,615	1,268	1,184	1,477	1,431
26-29	3,209	3,188	1,521	1,533	1,688	1,655
30-34	3,647	3,452	1,685	1,621	1,962	1,831
35-39	3,164	3,022	1,477	1,396	1,687	1,626
40-44	3,535	3,164	1,622	1,436	1,913	1,728
45-49	3,400	3,211	1,518	1,445	1,882	1,766
50-54	1,511	1,698	706	787	805	911
55-59	1,279	1,476	592	696	687	780
60-64	1,045	1,107	494	495	551	612
65 or Older	2,473	2,665	1,096	1,164	1,377	1,501

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

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Table F.2 Numbers (in Thousands) of Persons Aged 12 or Older, by Gender and Detailed Age Category: 2005 and 2006

Age Category	Total		GENDER			
			Male		Female	
	2005	2006	2005	2006	2005	2006
TOTAL	243,220	246,022	117,923	119,362	125,297	126,659
12	4,006	3,908	1,975	1,901	2,031	2,007
13	4,225	4,144	2,181	2,194	2,045	1,951
14	4,340	4,279	2,244	2,280	2,096	1,999
15	4,358	4,541	2,178	2,289	2,181	2,252
16	4,314	4,331	2,258	2,159	2,056	2,172
17	4,112	4,189	2,114	2,147	1,998	2,042
18	4,567	4,589	2,450	2,493	2,117	2,095
19	4,293	4,176	2,196	2,235	2,097	1,941
20	4,108	4,028	1,963	2,002	2,145	2,027
21	4,017	4,293	2,048	2,155	1,970	2,138
22	4,055	3,950	2,038	1,970	2,017	1,981
23	3,886	3,947	1,888	1,928	1,998	2,019
24	3,715	3,921	1,856	1,895	1,859	2,026
25	3,844	3,836	1,897	1,818	1,948	2,019
26-29	15,529	16,495	7,929	8,110	7,599	8,385
30-34	19,329	18,615	9,410	9,375	9,919	9,240
35-39	19,939	20,901	10,052	10,258	9,887	10,643
40-44	23,384	22,381	11,440	10,949	11,944	11,432
45-49	21,931	22,030	10,604	10,920	11,327	11,111
50-54	19,715	20,879	9,553	9,996	10,163	10,883
55-59	17,154	17,504	7,953	8,732	9,200	8,772
60-64	13,228	13,432	6,717	6,331	6,511	7,101
65 or Older	35,170	35,653	14,978	15,229	20,191	20,424

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table F.3 Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Demographic Characteristics: 2005 and 2006

Demographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	68,308	67,802	22,534	22,871	22,511	21,948	23,263	22,983
GENDER								
Male	32,786	32,713	11,378	11,718	10,697	10,422	10,711	10,573
Female	35,522	35,089	11,156	11,153	11,814	11,526	12,552	12,410
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	58,504	57,844	18,999	19,150	18,943	18,487	20,562	20,207
White	45,340	44,759	14,165	14,251	14,521	14,009	16,654	16,499
Black or African American	8,140	8,207	3,065	3,123	2,693	2,810	2,382	2,274
American Indian or Alaska Native	907	874	316	291	308	313	283	270
Native Hawaiian or Other Pacific Islander	288	305	87	96	119	123	82	86
Asian	2,132	1,956	621	586	779	693	732	677
Two or More Races	1,697	1,743	745	803	523	539	429	401
Hispanic or Latino	9,804	9,958	3,535	3,721	3,568	3,461	2,701	2,776
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	21,971	21,646	7,231	7,310	6,980	6,733	7,760	7,603
Female, White, Not Hispanic	23,369	23,113	6,934	6,941	7,541	7,276	8,894	8,896
Male, Black, Not Hispanic	3,595	3,780	1,501	1,581	1,144	1,227	950	972
Female, Black, Not Hispanic	4,545	4,427	1,564	1,542	1,549	1,583	1,432	1,302
Male, Hispanic	4,789	4,894	1,759	1,908	1,732	1,662	1,298	1,324
Female, Hispanic	5,015	5,064	1,776	1,813	1,836	1,799	1,403	1,452
EDUCATION[1]								
< High School	7,851	7,741	N/A	N/A	4,508	4,291	3,343	3,450
High School Graduate	15,225	14,833	N/A	N/A	7,943	7,738	7,282	7,095
Some College	13,107	12,885	N/A	N/A	7,173	7,103	5,934	5,782
College Graduate	9,591	9,472	N/A	N/A	2,887	2,816	6,704	6,656
CURRENT EMPLOYMENT[1]								
Full-Time	25,400	24,780	N/A	N/A	10,827	10,633	14,573	14,147
Part-Time	8,296	8,162	N/A	N/A	5,584	5,494	2,712	2,668
Unemployed	2,368	2,290	N/A	N/A	1,668	1,643	700	647
Other[2]	9,710	9,699	N/A	N/A	4,432	4,178	5,278	5,521

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.
[2] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table F.4 Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Demographic Characteristics: 2005 and 2006

Demographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	243,220	246,022	25,355	25,392	32,486	32,740	185,379	187,890
GENDER								
Male	117,923	119,362	12,950	12,969	16,335	16,494	88,638	89,899
Female	125,297	126,659	12,405	12,423	16,151	16,246	96,741	97,991
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	211,087	212,600	20,963	20,836	26,735	26,912	163,389	164,851
White	167,791	168,390	15,399	15,245	20,090	20,186	132,302	132,959
Black or African American	28,597	29,112	3,869	3,895	4,431	4,486	20,298	20,731
American Indian or Alaska Native	1,265	1,232	163	136	217	181	885	915
Native Hawaiian or Other Pacific Islander	708	939	79	115	136	181	493	643
Asian	10,116	10,291	1,055	1,031	1,519	1,531	7,543	7,730
Two or More Races	2,610	2,635	399	413	342	347	1,869	1,874
Hispanic or Latino	32,133	33,422	4,392	4,556	5,751	5,827	21,990	23,038
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	81,485	81,759	7,873	7,787	10,086	10,138	63,526	63,833
Female, White, Not Hispanic	86,306	86,631	7,526	7,458	10,004	10,048	68,776	69,126
Male, Black, Not Hispanic	13,010	13,200	1,954	2,004	2,087	2,178	8,969	9,018
Female, Black, Not Hispanic	15,587	15,912	1,915	1,891	2,343	2,309	11,329	11,712
Male, Hispanic	16,491	17,175	2,242	2,327	3,063	3,089	11,186	11,759
Female, Hispanic	15,642	16,247	2,150	2,229	2,688	2,739	10,804	11,280
EDUCATION[1]								
< High School	35,702	36,651	N/A	N/A	6,659	6,521	29,043	30,130
High School Graduate	68,517	69,100	N/A	N/A	11,224	11,269	57,293	57,830
Some College	55,222	55,259	N/A	N/A	10,462	10,619	44,760	44,640
College Graduate	58,424	59,620	N/A	N/A	4,140	4,331	54,284	55,289
CURRENT EMPLOYMENT[1]								
Full-Time	120,583	121,576	N/A	N/A	15,335	15,778	105,248	105,798
Part-Time	28,375	28,890	N/A	N/A	8,242	8,277	20,133	20,612
Unemployed	7,604	7,055	N/A	N/A	2,574	2,494	5,030	4,560
Other[2]	61,304	63,109	N/A	N/A	6,335	6,190	54,968	56,919

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.
[2] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table F.5 Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Geographic Characteristics: 2005 and 2006

Geographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	68,308	67,802	22,534	22,871	22,511	21,948	23,263	22,983
GEOGRAPHIC DIVISION								
Northeast	13,711	13,499	4,564	4,612	4,546	4,324	4,601	4,563
New England	5,480	5,442	1,795	1,844	1,797	1,798	1,888	1,800
Middle Atlantic	8,231	8,057	2,769	2,768	2,749	2,526	2,713	2,763
Midwest	19,154	18,988	6,339	6,374	6,297	6,046	6,518	6,568
East North Central	12,710	12,649	4,215	4,303	4,155	3,960	4,340	4,386
West North Central	6,444	6,339	2,124	2,071	2,142	2,086	2,178	2,182
South	20,818	20,841	6,884	7,142	6,900	6,777	7,034	6,922
South Atlantic	10,959	11,032	3,606	3,770	3,675	3,615	3,678	3,647
East South Central	3,660	3,616	1,233	1,254	1,179	1,182	1,248	1,180
West South Central	6,199	6,193	2,045	2,118	2,046	1,980	2,108	2,095
West	14,625	14,474	4,747	4,743	4,768	4,801	5,110	4,930
Mountain	7,314	7,207	2,398	2,318	2,390	2,418	2,526	2,471
Pacific	7,311	7,267	2,349	2,425	2,378	2,383	2,584	2,459
COUNTY TYPE								
Large Metro	29,960	29,970	9,852	10,166	9,750	9,420	10,358	10,384
Small Metro	23,418	22,917	7,532	7,629	8,131	7,864	7,755	7,424
250K - 1 Mil. Pop.	15,037	14,501	4,950	4,901	5,085	4,933	5,002	4,667
< 250K Pop.	8,381	8,416	2,582	2,728	3,046	2,931	2,753	2,757
Nonmetro	14,930	14,915	5,150	5,076	4,630	4,664	5,150	5,175
Urbanized	5,893	5,965	1,929	1,980	2,026	1,981	1,938	2,004
Less Urbanized	7,184	7,080	2,539	2,418	2,097	2,160	2,548	2,502
Completely Rural	1,853	1,870	682	678	507	523	664	669

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table F.6 Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Geographic Characteristics: 2005 and 2006

Geographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	243,220	246,022	25,355	25,392	32,486	32,740	185,379	187,890
GEOGRAPHIC DIVISION								
Northeast	45,631	45,851	4,546	4,513	5,710	5,863	35,376	35,475
New England	11,965	12,023	1,175	1,165	1,495	1,526	9,295	9,332
Middle Atlantic	33,666	33,829	3,370	3,349	4,215	4,337	26,081	26,143
Midwest	54,525	54,700	5,666	5,671	7,449	7,384	41,410	41,645
East North Central	38,108	38,267	4,013	3,980	5,123	5,103	28,973	29,184
West North Central	16,417	16,433	1,653	1,690	2,326	2,281	12,437	12,461
South	87,602	88,991	9,065	9,152	11,705	11,682	66,831	68,157
South Atlantic	46,106	47,049	4,637	4,649	5,830	5,872	35,638	36,528
East South Central	14,534	14,614	1,449	1,486	1,949	1,894	11,135	11,234
West South Central	26,962	27,327	2,979	3,017	3,925	3,915	20,058	20,395
West	55,463	56,480	6,078	6,056	7,623	7,811	41,762	42,612
Mountain	16,437	16,878	1,759	1,793	2,347	2,356	12,331	12,729
Pacific	39,027	39,602	4,319	4,263	5,276	5,456	29,432	29,883
COUNTY TYPE								
Large Metro	131,068	132,920	13,667	13,676	17,215	17,489	100,186	101,755
Small Metro	71,608	71,040	7,462	7,606	10,318	10,183	53,828	53,250
250K - 1 Mil. Pop.	47,708	46,794	5,100	5,122	6,777	6,710	35,831	34,962
< 250K Pop.	23,899	24,246	2,361	2,484	3,541	3,473	17,997	18,288
Nonmetro	40,545	42,062	4,227	4,110	4,953	5,068	31,366	32,885
Urbanized	15,380	16,369	1,581	1,655	2,107	2,159	11,692	12,555
Less Urbanized	20,402	21,111	2,142	1,988	2,355	2,402	15,904	16,721
Completely Rural	4,763	4,583	503	467	491	507	3,769	3,609

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Appendix G: Selected Prevalence Tables

Table G.1 Types of Illicit Drug Use in Lifetime among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	108,255[b]	110,205	110,057	112,085	111,774
Marijuana and Hashish	94,946[a]	96,611	96,772	97,545	97,825
Cocaine	33,910	34,891	34,153	33,673	35,298
Crack	8,402	7,949	7,840	7,928	8,554
Heroin	3,668	3,744	3,145[a]	3,534	3,785
Hallucinogens	34,314	34,363	34,333	33,728	35,281
LSD	24,516	24,424	23,398	22,433	23,346
PCP	7,418	7,107	6,762	6,603	6,618
Ecstasy	10,150[b]	10,904[b]	11,130[a]	11,495	12,262
Inhalants	22,870	22,995	22,798	22,745	22,879
Nonmedical Use of Psychotherapeutics[2]	46,558[b]	47,882[a]	48,013	48,709	49,842
Pain Relievers	29,611[b]	31,207[b]	31,768[a]	32,692	33,472
OxyContin®	1,924[b]	2,832[b]	3,072[b]	3,481[b]	4,098
Tranquilizers	19,267[b]	20,220	19,852[a]	21,041	21,303
Stimulants	21,072	20,798	19,982	19,080	20,118
Sedatives	9,960[a]	9,510	9,891[a]	8,982	8,822
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	70,300[a]	71,128	70,657	71,822	72,906

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.2 Types of Illicit Drug Use in Lifetime among Persons Aged 12 or Older: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	46.0	46.4	45.8	46.1	45.4
Marijuana and Hashish	40.4	40.6	40.2	40.1	39.8
Cocaine	14.4	14.7	14.2	13.8	14.3
Crack	3.6	3.3	3.3	3.3	3.5
Heroin	1.6	1.6	1.3	1.5	1.5
Hallucinogens	14.6	14.5	14.3	13.9	14.3
LSD	10.4[b]	10.3[b]	9.7	9.2	9.5
PCP	3.2[b]	3.0	2.8	2.7	2.7
Ecstasy	4.3[b]	4.6[a]	4.6	4.7	5.0
Inhalants	9.7	9.7	9.5	9.4	9.3
Nonmedical Use of Psychotherapeutics[2]	19.8	20.1	20.0	20.0	20.3
Pain Relievers	12.6[b]	13.1	13.2	13.4	13.6
OxyContin®	0.8[b]	1.2[b]	1.3[b]	1.4[b]	1.7
Tranquilizers	8.2	8.5	8.3	8.7	8.7
Stimulants	9.0[b]	8.8[a]	8.3	7.8	8.2
Sedatives	4.2[b]	4.0[a]	4.1[a]	3.7	3.6
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	29.9	29.9	29.4	29.5	29.6

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.3 Types of Illicit Drug Use in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	35,132	34,993	34,807	35,041	35,775
Marijuana and Hashish	25,755	25,231	25,451	25,375	25,378
Cocaine	5,902	5,908	5,658	5,523	6,069
Crack	1,554	1,406	1,304	1,381	1,479
Heroin	404	314[a]	398	379	560
Hallucinogens	4,749[b]	3,936	3,878	3,809	3,956
LSD	999[b]	558	592	563	666
PCP	235	219	210	164	187
Ecstasy	3,167[b]	2,119	1,915	1,960	2,130
Inhalants	2,084	2,075	2,255	2,187	2,218
Nonmedical Use of Psychotherapeutics[2]	14,680[b]	14,986[b]	14,643[b]	15,172[a]	16,287
Pain Relievers	10,992[b]	11,671[a]	11,256[b]	11,815[a]	12,649
OxyContin®	--	--	1,213	1,226	1,323
Tranquilizers	4,849	5,051	5,068	5,249	5,058
Stimulants	3,181	2,751[b]	2,918[a]	2,771[b]	3,394
Sedatives	981	831	737	750	926
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	20,423	20,305	19,658[b]	20,109[a]	21,254

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.4 Types of Illicit Drug Use in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	14.9	14.7	14.5	14.4	14.5
Marijuana and Hashish	11.0[a]	10.6	10.6	10.4	10.3
Cocaine	2.5	2.5	2.4	2.3	2.5
Crack	0.7	0.6	0.5	0.6	0.6
Heroin	0.2	0.1[a]	0.2	0.2	0.2
Hallucinogens	2.0[b]	1.7	1.6	1.6	1.6
LSD	0.4[b]	0.2	0.2	0.2	0.3
PCP	0.1	0.1	0.1	0.1	0.1
Ecstasy	1.3[b]	0.9	0.8	0.8	0.9
Inhalants	0.9	0.9	0.9	0.9	0.9
Nonmedical Use of Psychotherapeutics[2]	6.2	6.3	6.1[b]	6.2[a]	6.6
Pain Relievers	4.7[b]	4.9	4.7[b]	4.9	5.1
OxyContin®	--	--	0.5	0.5	0.5
Tranquilizers	2.1	2.1	2.1	2.2	2.1
Stimulants	1.4	1.2[a]	1.2	1.1[b]	1.4
Sedatives	0.4	0.3	0.3	0.3	0.4
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	8.7	8.5	8.2	8.3	8.6

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.5 Types of Illicit Drug Use in the Past Month among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	19,522	19,470	19,071[a]	19,720	20,357
Marijuana and Hashish	14,584	14,638	14,576	14,626	14,813
Cocaine	2,020[a]	2,281	2,021[a]	2,397	2,421
Crack	567	604	467	682	702
Heroin	166[a]	119[b]	166[a]	136[a]	338
Hallucinogens	1,196	1,042	929	1,088	1,006
LSD	112	133	141	104	130
PCP	58	56	49	48	30
Ecstasy	676	470	450	502	528
Inhalants	635	570[a]	638	611	761
Nonmedical Use of Psychotherapeutics[2]	6,210[a]	6,336	6,007[b]	6,405	6,991
Pain Relievers	4,377[b]	4,693	4,404[b]	4,658[a]	5,220
OxyContin®	--	--	325	334	276
Tranquilizers	1,804	1,830	1,616	1,817	1,766
Stimulants	1,218	1,191	1,189	1,067	1,191
Sedatives	436	294	265	272	385
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	8,777[a]	8,849	8,247[b]	8,963	9,615

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.6 Types of Illicit Drug Use in the Past Month among Persons Aged 12 or Older: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	8.3	8.2	7.9	8.1	8.3
Marijuana and Hashish	6.2	6.2	6.1	6.0	6.0
Cocaine	0.9	1.0	0.8	1.0	1.0
Crack	0.2	0.3	0.2	0.3	0.3
Heroin	0.1	0.1[b]	0.1	0.1[a]	0.1
Hallucinogens	0.5[a]	0.4	0.4	0.4	0.4
LSD	0.0	0.1	0.1	0.0	0.1
PCP	0.0	0.0	0.0	0.0	0.0
Ecstasy	0.3[a]	0.2	0.2	0.2	0.2
Inhalants	0.3	0.2[a]	0.3	0.3	0.3
Nonmedical Use of Psychotherapeutics[2]	2.6	2.7	2.5[b]	2.6	2.8
Pain Relievers	1.9[a]	2.0	1.8[a]	1.9	2.1
OxyContin®	--	--	0.1	0.1	0.1
Tranquilizers	0.8	0.8	0.7	0.7	0.7
Stimulants	0.5	0.5	0.5	0.4	0.5
Sedatives	0.2	0.1	0.1	0.1	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	3.7	3.7	3.4[b]	3.7	3.9

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.7 Types of Illicit Drug Use in the Past Month among Persons Aged 12 to 17: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	11.6[b]	11.2[b]	10.6[a]	9.9	9.8
Marijuana and Hashish	8.2[b]	7.9[b]	7.6[b]	6.8	6.7
Cocaine	0.6	0.6[a]	0.5	0.6	0.4
Crack	0.1	0.1[a]	0.1	0.1	0.0
Heroin	0.0	0.1	0.1	0.1	0.1
Hallucinogens	1.0[b]	1.0[b]	0.8	0.8	0.7
LSD	0.2[a]	0.2	0.2	0.1	0.1
PCP	0.1	0.1	0.0	0.1	0.0
Ecstasy	0.5[a]	0.4	0.3	0.3	0.3
Inhalants	1.2	1.3	1.2	1.2	1.3
Nonmedical Use of Psychotherapeutics[2]	4.0[b]	4.0[b]	3.6	3.3	3.3
Pain Relievers	3.2[a]	3.2[a]	3.0	2.7	2.7
OxyContin®	--	--	0.3[b]	0.1	0.1
Tranquilizers	0.8[b]	0.9[b]	0.6	0.6	0.5
Stimulants	0.8	0.9[a]	0.7	0.7	0.6
Sedatives	0.2	0.2	0.1	0.1	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	5.7[b]	5.7[b]	5.3	4.9	4.9

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.8 Types of Illicit Drug Use in the Past Month among Persons Aged 18 to 25: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	20.2	20.3	19.4	20.1	19.8
Marijuana and Hashish	17.3[a]	17.0	16.1	16.6	16.3
Cocaine	2.0	2.2	2.1	2.6	2.2
Crack	0.2	0.2	0.3	0.3	0.2
Heroin	0.1	0.1[a]	0.1	0.2	0.2
Hallucinogens	1.9	1.7	1.5	1.5	1.7
LSD	0.1	0.2	0.3	0.2	0.2
PCP	0.0	0.1	0.1	0.0	0.0
Ecstasy	1.1	0.7[a]	0.7[a]	0.8	1.0
Inhalants	0.5	0.4	0.4	0.5	0.4
Nonmedical Use of Psychotherapeutics[2]	5.4[b]	6.0	6.1	6.3	6.4
Pain Relievers	4.1[b]	4.7	4.7	4.7	4.9
OxyContin®	--	--	0.4	0.4	0.4
Tranquilizers	1.6[a]	1.7	1.8	1.9	2.0
Stimulants	1.2	1.3	1.4	1.3	1.3
Sedatives	0.2	0.2	0.2	0.2	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	7.9[b]	8.4	8.1[a]	8.8	8.9

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.9 Types of Illicit Drug Use in the Past Month among Persons Aged 26 or Older: Percentages, 2002-2006

Drug	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	5.8	5.6	5.5	5.8	6.1
Marijuana and Hashish	4.0	4.0	4.1	4.1	4.2
Cocaine	0.7	0.8	0.7	0.8	0.8
Crack	0.3	0.3	0.2[a]	0.3	0.3
Heroin	0.1	0.0[a]	0.1	0.0[b]	0.1
Hallucinogens	0.2	0.1	0.1	0.2	0.1
LSD	0.0	0.0	0.0	0.0	0.0
PCP	0.0	*	0.0	0.0	*
Ecstasy	0.1	0.1	0.1	0.1	0.1
Inhalants	0.1	0.1[a]	0.1	0.1	0.2
Nonmedical Use of Psychotherapeutics[2]	2.0	1.9	1.7[b]	1.9	2.2
Pain Relievers	1.3	1.3	1.2[b]	1.3	1.5
OxyContin®	--	--	0.1	0.1	0.1
Tranquilizers	0.6	0.6	0.5	0.6	0.5
Stimulants	0.4	0.3	0.3	0.2	0.3
Sedatives	0.2	0.1	0.1	0.1	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	2.7	2.6	2.3[b]	2.6	2.9

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

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Table G.10 Illicit Drug Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2005 and 2006

Age Category	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	46.1	45.4	14.4	14.5	8.1	8.3
12	11.7	12.1	7.3	6.9	2.5	3.1
13	16.9	16.3	11.4	9.9	4.9	4.6
14	22.6	23.2	15.4	15.8	6.7	7.0
15	30.3	31.9	21.9	22.8	11.1	11.1
16	38.1	37.3	29.4	28.3	15.8	14.9
17	45.9	43.1	33.5	32.2	18.2	17.1
18	51.9	50.1	36.5	37.6	20.5	20.7
19	57.0	54.9	38.8	37.2	22.6	22.4
20	59.8	59.7	38.6	38.2	24.1	23.6
21	59.7	61.7	35.8	36.0	20.7	20.1
22	61.6	62.3	34.0	34.3	20.0	19.5
23	63.5	61.9	33.5	30.9	19.5	18.1
24	60.8	62.4	28.3	31.4	16.6	17.9
25	60.4	60.5	26.7	28.3	16.4	15.5
26-29	59.9	60.4	22.8	24.7	12.9	14.1
30-34	54.1	55.3	17.6	17.5	9.6	10.0
35-39	58.2	56.2	13.6	14.2	7.6	8.0
40-44	61.9	60.9	13.0	13.6	7.2	8.3
45-49	63.5	61.6	11.8	11.9	6.6	6.7
50-54	55.6	54.6	8.3	9.1	5.2	6.0
55-59	44.1	43.4	5.6	4.9	3.4	2.4
60-64	28.2	28.2	3.2	3.4	1.8	2.1
65 or Older	10.9	9.8	1.7	1.1	0.8	0.7

*Low precision; no estimate reported.
NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.11 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	46.1	45.4	14.4	14.5	8.1	8.3
AGE						
12-17	27.7	27.6	19.9	19.6	9.9	9.8
18-25	59.2	59.0	34.2	34.4	20.1	19.8
26 or Older	46.3	45.5	10.2	10.4	5.8	6.1
GENDER						
Male	50.8	50.3	16.8	17.4	10.2	10.5
Female	41.6	40.9	12.1	11.8	6.1	6.2
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	47.4	47.1	14.5	14.8	8.2	8.5
White	48.9	49.0	14.5	14.8	8.1	8.5
Black or African American	44.7	42.9	16.0	16.4	9.7	9.8
American Indian or Alaska Native	60.9	58.8	21.3	20.1	12.8	13.7
Native Hawaiian or Other Pacific Islander	54.3	40.9	15.5	13.4	8.7	7.5
Asian	28.1	23.7	7.1	8.9	3.1	3.6
Two or More Races	45.8[a]	55.4	19.1	18.1	12.2	8.9
Hispanic or Latino	37.3	35.0	13.9	13.1	7.6	6.9

*Low precision; no estimate reported.
NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.12 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	27.7	27.6	19.9	19.6	9.9	9.8
GENDER						
Male	28.4	28.2	19.7	19.5	10.1	9.8
Female	26.9	27.0	20.0	19.7	9.7	9.7
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	27.4	27.9	19.9	19.7	10.0	10.0
White	27.3	27.7	20.5	20.2	10.1	10.0
Black or African American	29.9	28.5	20.4	18.6	11.0	10.2
American Indian or Alaska Native	49.5	46.0	29.6	*	19.2	18.7
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	15.9[a]	24.2	7.6[a]	13.7	3.3	6.7
Two or More Races	29.6	32.0	21.7	24.3	9.7	11.8
Hispanic or Latino	28.9	26.4	19.6	18.8	9.4	8.9
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	27.9	27.8	20.1	19.8	10.4	9.7
Female, White, Not Hispanic	26.7	27.5	20.9	20.7	9.8	10.3
Male, Black, Not Hispanic	31.0	30.0	20.5	19.7	12.1	10.8
Female, Black, Not Hispanic	28.9	26.9	20.2	17.3	9.9	9.5
Male, Hispanic	31.2	26.8	20.9	18.0	9.7	9.1
Female, Hispanic	26.5	26.0	18.2	19.6	9.1	8.6

*Low precision; no estimate reported.
NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.13 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	48.2	47.5	13.8	14.0	7.9	8.1
GENDER						
Male	53.6	53.0	16.5	17.1	10.3	10.6
Female	43.2	42.4	11.2	11.0	5.7	5.8
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	49.6	49.2	13.9	14.2	8.0	8.3
White	51.1	51.2	13.9	14.2	7.9	8.4
Black or African American	47.0	45.1	15.3	16.1	9.5	9.7
American Indian or Alaska Native	62.5	60.4	20.1	18.3	11.9	13.1
Native Hawaiian or Other Pacific Islander	*	*	13.9	13.2	8.0	7.4
Asian	29.5[a]	23.6	7.0	8.4	3.1	3.2
Two or More Races	48.8[a]	59.8	18.6	16.9	12.6	8.4
Hispanic or Latino	38.7	36.4	13.0	12.2	7.3	6.6
EDUCATION						
< High School	37.7	37.2	15.4	15.0	9.8	9.2
High School Graduate	46.2	45.4	14.2	14.4	8.6	8.6
Some College	53.8	54.1	15.6	16.3	8.9	9.1
College Graduate	51.7	50.1	10.6	10.6	5.0[a]	5.9
CURRENT EMPLOYMENT						
Full-Time	56.6	56.0	14.7	15.1	8.2	8.8
Part-Time	49.9	48.1	18.0	16.8	10.4	9.4
Unemployed	60.6	60.4	27.8	30.5	17.1	18.5
Other[1]	29.5	29.4	8.3	8.6	5.0	5.0

*Low precision; no estimate reported.

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

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Table G.14 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 or Older, by Gender: Numbers in Thousands, 2002-2006

Gender/Substance	2002	2003	2004	2005	2006
TOTAL					
TOBACCO PRODUCTS[1]	71,499	70,757	70,257[a]	71,519	72,873
Cigarettes	61,136	60,434	59,896	60,532	61,565
Smokeless Tobacco	7,787	7,725	7,154[b]	7,682	8,231
Cigars	12,751	12,837	13,727	13,640	13,708
Pipe Tobacco	1,816[a]	1,619[b]	1,835[a]	2,190	2,321
ALCOHOL	119,820[b]	118,965[b]	120,934[b]	126,028	125,309
Binge Alcohol Use[2]	53,787[b]	53,770[b]	54,725	55,090	56,575
Heavy Alcohol Use[2]	15,860	16,144	16,689	16,035	16,946
MALE					
TOBACCO PRODUCTS[1]	41,991	41,288[a]	41,569[a]	42,175	43,389
Cigarettes	32,636	32,263	32,278	32,312	33,220
Smokeless Tobacco	7,242	7,096[a]	6,730[b]	7,174	7,843
Cigars	10,669	10,372	11,375	11,355	11,092
Pipe Tobacco	1,487[a]	1,400[b]	1,579[a]	1,877	2,023
ALCOHOL	65,210[b]	65,927[a]	66,317	68,497	68,025
Binge Alcohol Use[2]	35,456[a]	35,565[a]	36,195	36,025	37,298
Heavy Alcohol Use[2]	12,216	11,958	12,388	12,172	12,775
FEMALE					
TOBACCO PRODUCTS[1]	29,509	29,469	28,688	29,344	29,484
Cigarettes	28,500	28,171	27,618	28,220	28,345
Smokeless Tobacco	545	628	424	508	388
Cigars	2,082[b]	2,465	2,352	2,285	2,616
Pipe Tobacco	330	219	256	313	298
ALCOHOL	54,610[b]	53,038[b]	54,616[b]	57,531	57,283
Binge Alcohol Use[2]	18,331	18,205	18,530	19,065	19,276
Heavy Alcohol Use[2]	3,645[a]	4,186	4,301	3,863	4,172

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.15 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 or Older, by Gender: Percentages, 2002-2006

Gender/Substance	2002	2003	2004	2005	2006
TOTAL					
TOBACCO PRODUCTS[1]	30.4	29.8	29.2	29.4	29.6
Cigarettes	26.0[a]	25.4	24.9	24.9	25.0
Smokeless Tobacco	3.3	3.3	3.0[a]	3.2	3.3
Cigars	5.4	5.4	5.7	5.6	5.6
Pipe Tobacco	0.8	0.7[b]	0.8[a]	0.9	0.9
ALCOHOL	51.0	50.1	50.3	51.8	50.9
Binge Alcohol Use[2]	22.9	22.6	22.8	22.7	23.0
Heavy Alcohol Use[2]	6.7	6.8	6.9	6.6	6.9
MALE					
TOBACCO PRODUCTS[1]	37.0	35.9	35.7	35.8	36.4
Cigarettes	28.7	28.1	27.7	27.4	27.8
Smokeless Tobacco	6.4	6.2	5.8[b]	6.1	6.6
Cigars	9.4	9.0	9.8	9.6	9.3
Pipe Tobacco	1.3[a]	1.2[b]	1.4	1.6	1.7
ALCOHOL	57.4	57.3	56.9	58.1	57.0
Binge Alcohol Use[2]	31.2	30.9	31.1	30.5	31.2
Heavy Alcohol Use[2]	10.8	10.4	10.6	10.3	10.7
FEMALE					
TOBACCO PRODUCTS[1]	24.3	24.0	23.1	23.4	23.3
Cigarettes	23.4	23.0	22.3	22.5	22.4
Smokeless Tobacco	0.4	0.5	0.3	0.4	0.3
Cigars	1.7[a]	2.0	1.9	1.8	2.1
Pipe Tobacco	0.3	0.2	0.2	0.3	0.2
ALCOHOL	44.9	43.2[b]	44.0	45.9	45.2
Binge Alcohol Use[2]	15.1	14.8	14.9	15.2	15.2
Heavy Alcohol Use[2]	3.0	3.4	3.5	3.1	3.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.16 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 to 17, by Gender: Percentages, 2002-2006

Gender/Substance	2002	2003	2004	2005	2006
TOTAL					
TOBACCO PRODUCTS[1]	15.2[b]	14.4[b]	14.4[b]	13.1	12.9
Cigarettes	13.0[b]	12.2[b]	11.9[b]	10.8	10.4
Smokeless Tobacco	2.0[a]	2.0	2.3	2.1	2.4
Cigars	4.5	4.5	4.8[b]	4.2	4.1
Pipe Tobacco	0.6	0.6	0.7	0.6	0.7
ALCOHOL	17.6[a]	17.7[a]	17.6[a]	16.5	16.6
Binge Alcohol Use[2]	10.7	10.6	11.1[a]	9.9	10.3
Heavy Alcohol Use[2]	2.5	2.6	2.7	2.4	2.4
MALE					
TOBACCO PRODUCTS[1]	16.0[b]	15.6[b]	15.3[a]	14.2	14.0
Cigarettes	12.3[b]	11.9[b]	11.3[a]	10.7	10.0
Smokeless Tobacco	3.4[a]	3.7	4.0	3.7	4.2
Cigars	6.2	6.2	6.6[b]	5.8	5.5
Pipe Tobacco	0.7	0.9	0.9	0.8	0.9
ALCOHOL	17.4	17.1	17.2	15.9	16.3
Binge Alcohol Use[2]	11.4	11.1	11.6	10.4	10.7
Heavy Alcohol Use[2]	3.1	2.9	3.2	3.0	2.8
FEMALE					
TOBACCO PRODUCTS[1]	14.4[b]	13.3[b]	13.5[b]	11.9	11.8
Cigarettes	13.6[b]	12.5[b]	12.5[b]	10.8	10.7
Smokeless Tobacco	0.4	0.3	0.4	0.4	0.4
Cigars	2.7	2.7	2.8	2.5	2.7
Pipe Tobacco	0.4	0.3	0.5	0.4	0.4
ALCOHOL	17.9	18.3[a]	18.0	17.2	17.0
Binge Alcohol Use[2]	9.9	10.1	10.5	9.4	9.9
Heavy Alcohol Use[2]	1.9	2.3	2.1	1.8	1.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.17 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 18 to 25, by Gender: Percentages, 2002-2006

Gender/Substance	2002	2003	2004	2005	2006
TOTAL					
TOBACCO PRODUCTS[1]	45.3[a]	44.8	44.6	44.3	43.9
Cigarettes	40.8[b]	40.2[b]	39.5	39.0	38.4
Smokeless Tobacco	4.8	4.7[a]	4.9	5.1	5.2
Cigars	11.0[b]	11.4	12.7	12.0	12.1
Pipe Tobacco	1.1	0.9[b]	1.2	1.5	1.3
ALCOHOL	60.5[a]	61.4	60.5[a]	60.9	61.9
Binge Alcohol Use[2]	40.9	41.6	41.2	41.9	42.2
Heavy Alcohol Use[2]	14.9	15.1	15.1	15.3	15.6
MALE					
TOBACCO PRODUCTS[1]	52.1	51.7	51.7	51.6	51.0
Cigarettes	44.4[b]	44.2[a]	43.5	42.9	41.9
Smokeless Tobacco	9.4	8.9[a]	9.5	9.7	9.9
Cigars	16.8[b]	17.3[a]	19.7	18.3	18.7
Pipe Tobacco	1.7[a]	1.4[b]	2.1	2.3	2.2
ALCOHOL	65.2	66.9	64.9	66.3	65.9
Binge Alcohol Use[2]	50.2	51.3	50.1	51.7	50.2
Heavy Alcohol Use[2]	21.1	21.2	21.2	21.7	21.0
FEMALE					
TOBACCO PRODUCTS[1]	38.4	37.8	37.4	36.9	36.8
Cigarettes	37.1[a]	36.2	35.5	35.0	34.9
Smokeless Tobacco	0.3	0.4	0.4	0.5	0.4
Cigars	5.2	5.5	5.8	5.6	5.5
Pipe Tobacco	0.4	0.4	0.4	0.6	0.5
ALCOHOL	55.7[a]	55.8[a]	56.0[a]	55.4[b]	57.9
Binge Alcohol Use[2]	31.7[b]	31.8[a]	32.3[a]	31.9[a]	34.0
Heavy Alcohol Use[2]	8.7[b]	9.0[a]	8.8[a]	8.8[a]	10.0

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.18 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 26 or Older, by Gender: Percentages, 2002-2006

Gender/Substance	2002	2003	2004	2005	2006
TOTAL					
TOBACCO PRODUCTS[1]	29.9	29.3	28.5	29.0	29.4
Cigarettes	25.2	24.7	24.1	24.3	24.7
Smokeless Tobacco	3.2	3.2	2.7[a]	3.0	3.2
Cigars	4.6	4.5	4.6	4.7	4.6
Pipe Tobacco	0.8	0.6[a]	0.7[a]	0.8	0.9
ALCOHOL	53.9	52.5	53.0	55.1[a]	53.7
Binge Alcohol Use[2]	21.4	21.0	21.1	21.0	21.4
Heavy Alcohol Use[2]	5.9	5.9	6.1	5.6	6.0
MALE					
TOBACCO PRODUCTS[1]	37.3	36.0	35.7	36.0	36.9
Cigarettes	28.3	27.5	27.2	27.0	27.8
Smokeless Tobacco	6.3	6.0	5.3[a]	5.8	6.3
Cigars	8.5	7.9	8.4	8.6	8.1
Pipe Tobacco	1.3	1.2[a]	1.3	1.6	1.7
ALCOHOL	61.9	61.5	61.3	62.7	61.2
Binge Alcohol Use[2]	30.7	30.1	30.4	29.6	30.7
Heavy Alcohol Use[2]	10.0	9.5	9.8	9.3	10.0
FEMALE					
TOBACCO PRODUCTS[1]	23.2	23.1	22.0	22.6	22.5
Cigarettes	22.5	22.1	21.3	21.9	21.8
Smokeless Tobacco	0.5	0.6	0.3	0.4	0.3
Cigars	1.0[b]	1.3	1.1	1.1	1.4
Pipe Tobacco	0.2	0.1	0.1	0.2	0.2
ALCOHOL	46.6	44.3[b]	45.4	48.0	46.7
Binge Alcohol Use[2]	13.0	12.6	12.6	13.2	12.8
Heavy Alcohol Use[2]	2.2	2.6	2.7	2.3	2.4

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

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Table G.19 Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 20, by Gender: Percentages, 2002-2006

Gender/Alcohol Use	2002	2003	2004	2005	2006
TOTAL					
Lifetime	56.2[b]	55.8[b]	54.9	53.9	53.9
Past Year	47.0	46.8	46.6	46.3	46.1
Past Month	28.8	29.0	28.7	28.2	28.3
Binge Alcohol Use[1]	19.3	19.2	19.6	18.8	19.0
Heavy Alcohol Use[1]	6.2	6.1	6.3	6.0	6.2
MALE					
Lifetime	56.5[b]	55.0	54.9	53.7	54.0
Past Year	46.6	45.6	46.3	45.6	46.0
Past Month	29.6	29.9	29.6	28.9	29.2
Binge Alcohol Use[1]	21.8	21.7	22.1	21.3	21.3
Heavy Alcohol Use[1]	8.1	7.9	8.2	7.6	7.9
FEMALE					
Lifetime	56.0[b]	56.6[b]	54.8	54.2	53.7
Past Year	47.5	48.0[a]	46.9	46.9	46.2
Past Month	28.0	28.1	27.8	27.5	27.4
Binge Alcohol Use[1]	16.7	16.5	17.0	16.1	16.5
Heavy Alcohol Use[1]	4.2	4.3	4.3	4.3	4.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.20 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month, by Detailed Age Category: Percentages, 2005 and 2006

Age Category	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2005	2006	2005	2006	2005	2006
TOTAL	51.8	50.9	22.7	23.0	6.6	6.9
12	2.5	1.9	1.3[a]	0.6	0.1	*
13	5.8	5.7	2.6	2.3	0.4	0.5
14	10.6	11.8	5.2	6.2	1.0	0.7
15	19.6	19.2	10.8	11.5	2.4	1.7
16	27.0	27.3	16.8	18.2	4.2	4.5
17	33.2	32.3	22.7	22.0	6.5	6.7
18	44.4	46.2	30.8	32.7	10.6	12.8
19	52.1	52.4	38.1	37.2	14.0	14.4
20	57.6	56.9	39.9	39.0	14.5	14.0
21	69.4	70.2	49.9	49.3	19.8	19.5
22	66.2[b]	70.8	46.6	48.9	19.2	17.3
23	69.5	69.7	47.7	47.2	16.5	17.2
24	64.8	66.5	41.7	43.3	14.3	16.1
25	67.0	65.5	42.0	41.2	14.0	13.2
26-29	63.7	63.5	35.3	38.3	10.7	11.9
30-34	61.6	60.3	31.0	30.5	8.8	8.4
35-39	62.4[a]	59.1	27.7	27.6	7.0	7.3
40-44	60.1[a]	56.7	26.5	25.4	7.2	6.7
45-49	60.2	58.9	23.3	23.8	6.3	7.0
50-54	58.3	55.9	19.0	22.0	5.5	6.7
55-59	50.8	53.0	14.2	13.8	3.3	4.6
60-64	47.5	48.0	11.9	12.8	3.1	2.7
65 or Older	40.0	38.4	8.3	7.6	1.7	1.6

*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.21 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 12 to 20, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2005	2006	2005	2006	2005	2006
TOTAL	28.2	28.3	18.8	19.0	6.0	6.2
GENDER						
Male	28.9	29.2	21.3	21.3	7.6	7.9
Female	27.5	27.4	16.1	16.5	4.3	4.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	28.7	29.0	19.0	19.5	6.4	6.5
White	32.3	32.3	22.3	22.7	7.8	8.2
Black or African American	19.0	18.6	9.1	8.6	1.8	1.3
American Indian or Alaska Native	21.7[a]	31.3	18.1	23.6	6.0	4.7
Native Hawaiian or Other Pacific Islander	12.0	*	8.4	*	1.4	*
Asian	15.5	19.7	7.4[a]	11.8	1.2	1.3
Two or More Races	24.0	27.5	16.6	20.7	7.1	6.3
Hispanic or Latino	25.9	25.3	17.9	16.5	4.2	4.8
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	32.6	33.2	24.7	25.2	9.8	10.3
Female, White, Not Hispanic	31.9	31.4	19.7	20.0	5.8	5.9
Male, Black, Not Hispanic	20.4	18.7	11.4	9.7	2.5	1.5
Female, Black, Not Hispanic	17.6	18.4	6.8	7.5	1.1	1.0
Male, Hispanic	27.9	26.7	21.5	19.4	5.9	6.6
Female, Hispanic	23.7	23.8	13.9	13.2	2.5	2.7

*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

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Table G.22 Cigarette Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2005 and 2006

Age Category	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	66.6	66.3	29.1	29.1	24.9	25.0
12	5.8	5.6	3.0	3.1	1.3[a]	0.7
13	14.0	12.1	8.6	6.9	3.4	2.6
14	20.7	20.0	11.9	12.8	6.2	6.7
15	31.0	30.1	19.9	18.6	12.2	11.3
16	40.0	38.1	26.8	26.4	17.6	17.0
17	48.3	46.9	33.1	32.8	23.7	22.9
18	56.4	55.4	42.0	42.1	32.0	32.4
19	63.4	62.1	44.8	46.9	35.7	36.9
20	68.1	65.3	48.6	47.3	39.8	37.9
21	68.9	68.5	50.1	49.2	41.6	39.9
22	69.5	70.3	49.5	49.4	41.8	41.3
23	70.5	70.9	49.4	49.3	41.5	41.6
24	71.5	70.8	46.5	46.0	40.1	38.5
25	72.9	71.3	47.9	46.5	40.7	39.9
26-29	72.6	71.8	42.5	43.2	35.8	36.4
30-34	69.4	70.4	36.1	36.3	30.8	32.0
35-39	70.8	69.3	33.3	31.5	28.9	28.0
40-44	73.9	72.5	33.0	31.9	30.5	29.4
45-49	76.2	75.7	32.8	32.6	29.7	29.6
50-54	75.8	72.5	27.1	29.3	24.5	26.7
55-59	74.1	74.2	22.6	25.3	19.5	22.7
60-64	74.2	75.3	20.8	20.1	19.0	18.6
65 or Older	65.2	67.5	11.4	11.1	10.0	9.5

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.23 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	26.7	25.8	17.3	17.0	10.8	10.4
GENDER						
Male	26.3	25.8	16.9	16.7	10.7	10.0
Female	27.2	25.9	17.8	17.4	10.8	10.7
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	26.8	26.2	17.4	17.4	11.1	10.9
White	28.8	28.5	19.8	19.5	12.8	12.4
Black or African American	21.7	20.0	10.6	10.8	6.5	6.0
American Indian or Alaska Native	40.4	40.2	25.0	*	18.0	21.2
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	13.3	14.7	6.4	11.0	3.0	5.2
Two or More Races	29.2	27.2	16.7	19.2	11.0	12.7
Hispanic or Latino	26.3	24.3	16.8	15.1	9.1	8.2
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	28.3	28.1	19.1	18.9	12.5	11.8
Female, White, Not Hispanic	29.4	28.8	20.6	20.0	13.0	13.0
Male, Black, Not Hispanic	21.5	19.8	11.5	11.0	7.4	5.9
Female, Black, Not Hispanic	21.9	20.2	9.6	10.5	5.6	6.2
Male, Hispanic	26.8	25.4	16.9	15.2	9.2	8.6
Female, Hispanic	25.9	23.1	16.6	15.0	9.1	7.7

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.24 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2005	2006	2005	2006	2005	2006
TOTAL	71.2	70.9	30.5	30.5	26.5	26.7
GENDER						
Male	76.9	76.6	33.8	34.4	29.5	30.0
Female	65.9	65.6	27.4	26.9	23.8	23.6
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	72.8	72.8	30.6	30.7	26.9	27.0
White	76.5	76.5	31.2	31.3	27.3	27.5
Black or African American	61.0	60.0	30.1	30.1	27.3	27.2
American Indian or Alaska Native	73.4	77.3	44.5	46.2	38.7	40.1
Native Hawaiian or Other Pacific Islander	*	*	37.5	*	31.1	*
Asian	44.3	45.8	18.7	18.8	14.6	15.6
Two or More Races	67.6	75.2	38.6	36.6	34.5	33.8
Hispanic or Latino	59.9	58.4	29.7	29.4	24.2	24.7
EDUCATION						
< High School	65.7	66.2	39.1	39.4	34.8	35.6
High School Graduate	72.0	71.5	35.3	35.2	31.8	31.9
Some College	74.1	74.0	32.4	32.3	28.1	27.7
College Graduate	70.9	70.2	17.9	18.0	13.8	14.3
CURRENT EMPLOYMENT						
Full-Time	73.8	73.1	32.6	33.0	28.3	28.8
Part-Time	70.3	69.7	30.2	29.9	25.2	25.4
Unemployed	72.6	72.5	49.2	51.9	43.8	47.8
Other[1]	66.3	67.0	24.3	23.6	21.5	20.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.25 Perceived Risk and Availability of Substances among Persons Aged 12 to 17: Percentages, 2002-2006

Risk/Availability	2002	2003	2004	2005	2006
PERCEPTIONS OF GREAT RISK[1]					
Cigarettes					
Smoke One or More Packs Per Day	63.1[b]	64.2[b]	67.5	68.3	68.7
Marijuana					
Smoke Once a Month	32.4[b]	34.9	35.0	34.0	34.7
Smoke Once or Twice a Week	51.5[b]	54.4	54.7	55.0	54.2
Cocaine					
Use Once a Month	50.5[a]	51.4[b]	49.6	48.8	49.0
Use Once or Twice a Week	79.8	80.7[b]	79.8	79.9	79.2
Heroin					
Try Once or Twice	58.5[a]	58.8[a]	57.0	56.5	57.2
Use Once or Twice a Week	82.5[b]	82.6[b]	81.4	81.8	81.2
LSD					
Try Once or Twice	52.6	53.4[b]	52.6	51.7	51.6
Use Once or Twice a Week	76.2[b]	76.9[b]	76.4[b]	76.1[a]	74.7
Alcohol					
Have Four or Five Drinks Nearly Every Day	62.2[b]	61.6[b]	61.8[b]	63.8	64.6
Have Five or More Drinks Once or Twice a Week	38.2	38.5	38.1[a]	38.4	39.4
PERCEIVED AVAILABILITY[2]					
Fairly or Very Easy to Obtain[3]					
Marijuana	55.0[b]	53.6[b]	52.2[b]	51.0	50.1
Cocaine	25.0	25.0	24.4[b]	24.9	25.9
Crack	26.5	26.2	25.0[a]	25.3	26.2
Heroin	15.8[b]	15.3	14.0	14.0	14.4
LSD	19.4[b]	17.6[b]	16.9[b]	15.7[b]	14.0
Approached in the Past Month by Someone Selling Drugs	16.7[b]	16.1	16.3[a]	15.5	15.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Response categories for the Perception of Risk questions include "No risk," "Slight risk," "Moderate risk," and "Great risk." The estimates in this table correspond to persons reporting "Great risk." Respondents with unknown Perception of Risk data were excluded.
[2] Respondents with unknown Perceived Availability data were excluded.
[3] Response categories for the Perceived Availability questions include "Probably impossible," "Very difficult," "Fairly difficult," "Fairly easy," and "Very easy." The estimates in this table correspond to persons reporting "Fairly easy" or "Very easy."

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

70417 (8.29A)

Table G.26 Past Year Initiation of Substance Use among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Substance	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	2,656	2,627	2,784	2,908	2,789
Marijuana and Hashish	2,196	1,973	2,142	2,114	2,063
Cocaine	1,032	986	998	872	977
Crack	337	269	215	230	245
Heroin	117	92	118	108	91
Hallucinogens	1,152	886[b]	934[a]	953	1,116
LSD	338	200	235	243	264
PCP	123[b]	105	106	77	69
Ecstasy	1,206[b]	642[b]	607[b]	615[b]	860
Inhalants	849	871	857	877	783
Nonmedical Use of Psychotherapeutics[2]	2,552	2,583	2,836	2,526	2,576
Pain Relievers	2,320	2,456[a]	2,422[a]	2,193	2,150
OxyContin®	--	--	615	526	533
Tranquilizers	1,184	1,071	1,180	1,286	1,112
Stimulants	783	715	793	647[a]	845
Sedatives	209	194	240	247	267
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	2,569	2,523	2,664	2,768	2,719
CIGARETTES	1,940[b]	1,983[b]	2,122[b]	2,282	2,449
Daily Cigarette Use[3]	1,016	1,064	1,101	965	1,051
SMOKELESS TOBACCO	951[b]	928[b]	999[b]	1,134[a]	1,329
CIGARS	2,858	2,736[a]	3,058	3,349	3,061
ALCOHOL	3,942[b]	4,082[a]	4,396	4,274	4,381

*Low precision; no estimate reported.
-- Not available.
NOTE: Past Year Initiates are defined as persons who used the substance(s) for the first time in the 12 months prior to date of interview.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.
[3] Daily Cigarette Use is defined as ever smoking every day for at least 30 days.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.27 Substance Dependence or Abuse for Specific Substances in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Past Year Dependence or Abuse	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	7,116	6,835	7,298	6,833	7,020
Marijuana and Hashish	4,294	4,198	4,469	4,090	4,172
Cocaine	1,488	1,515	1,571	1,549	1,671
Heroin	214	189	270	227	323
Hallucinogens	426	321	449	371	380
Inhalants	180	169	233	221	176
Nonmedical Use of Psychotherapeutics[2]	2,018	1,923	2,048	1,959	2,035
Pain Relievers	1,509	1,424	1,388	1,546	1,635
Tranquilizers	509	435	573	419	402
Stimulants	436	378	470	409	390
Sedatives	154	158	128	97	121
ALCOHOL	18,100	17,805	18,654	18,658	18,799
BOTH ILLICIT DRUGS AND ALCOHOL[1]	3,210	3,054	3,445	3,273	3,205
ILLICIT DRUGS OR ALCOHOL[1]	22,006	21,586	22,506	22,218	22,613

*Low precision; no estimate reported.
NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.28 Substance Dependence or Abuse for Specific Substances in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2006

Past Year Dependence or Abuse	2002	2003	2004	2005	2006
ILLICIT DRUGS[1]	3.0	2.9	3.0	2.8	2.9
Marijuana and Hashish	1.8	1.8	1.9	1.7	1.7
Cocaine	0.6	0.6	0.7	0.6	0.7
Heroin	0.1	0.1	0.1	0.1	0.1
Hallucinogens	0.2	0.1	0.2	0.2	0.2
Inhalants	0.1	0.1	0.1	0.1	0.1
Nonmedical Use of Psychotherapeutics[2]	0.9	0.8	0.9	0.8	0.8
Pain Relievers	0.6	0.6	0.6	0.6	0.7
Tranquilizers	0.2	0.2	0.2[a]	0.2	0.2
Stimulants	0.2	0.2	0.2	0.2	0.2
Sedatives	0.1	0.1	0.1	0.0	0.0
ALCOHOL	7.7	7.5	7.8	7.7	7.6
BOTH ILLICIT DRUGS AND ALCOHOL[1]	1.4	1.3	1.4	1.3	1.3
ILLICIT DRUGS OR ALCOHOL[1]	9.4	9.1	9.4	9.1	9.2

*Low precision; no estimate reported.
NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

Table G.29 Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	TYPE OF PAST YEAR DEPENDENCE OR ABUSE					
	Illicit Drugs[1]		Alcohol		Illicit Drugs or Alcohol[1]	
	2005	2006	2005	2006	2005	2006
TOTAL	2.8	2.9	7.7	7.6	9.1	9.2
AGE						
12-17	4.7	4.6	5.5	5.4	8.0	8.0
18-25	8.4	7.9	17.5	17.6	21.8	21.3
26 or Older	1.6	1.7	6.2	6.2	7.1	7.2
GENDER						
Male	3.5	3.7	10.3	10.3	12.0	12.3
Female	2.1	2.0	5.2	5.1	6.4	6.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	2.8	2.8	7.6	7.5	9.1	9.1
White	2.7	2.6	8.0	7.8	9.4	9.2
Black or African American	3.9	4.0	6.4	6.7	8.5	9.0
American Indian or Alaska Native	7.2	6.4	18.3	15.1	21.0	19.0
Native Hawaiian or Other Pacific Islander	3.0	2.1	9.5	10.8	11.0	12.0
Asian	1.2	1.4	3.8	3.2	4.5	4.3
Two or More Races	5.5	4.3	7.5	9.0	10.9	12.0
Hispanic or Latino	2.6[a]	3.4	8.1	8.5	9.3	10.0

*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.30 Received Substance Use Treatment at Any Treatment Location or at a Specialty Facility in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Location/Substance for Which Treatment Was Received in Past Year	2002	2003	2004	2005	2006
ANY TREATMENT LOCATION					
Illicit Drugs[1]	2,013[a]	1,802[b]	2,192	2,172	2,457
Alcohol	2,405	2,359	2,658	2,843	2,764
Both Illicit Drugs and Alcohol[1]	1,319	1,255	1,467	1,522	1,566
Illicit Drugs or Alcohol[1,2]	3,483[a]	3,327[a]	3,791	3,930	4,031
SPECIALTY FACILITY					
Illicit Drugs[1]	1,412	1,103[b]	1,427	1,280	1,576
Alcohol	1,549	1,298	1,535	1,626	1,557
Both Illicit Drugs and Alcohol[1]	709	595	718	748	731
Illicit Drugs or Alcohol[1,2]	2,346	1,874[b]	2,327	2,308	2,537

*Low precision; no estimate reported.

NOTE: Received Substance Use Treatment refers to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. Treatment at Any Treatment Location includes treatment received at any location, such as a hospital, rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Estimates include persons who received treatment specifically for illicit drugs or alcohol, as well as persons who received treatment but did not specify for what substance(s).

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

70417 (8.32B)

Table G.31 Received Substance Use Treatment at Any Treatment Location or at a Specialty Facility in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2006

Location/Substance for Which Treatment Was Received in Past Year	2002	2003	2004	2005	2006
ANY TREATMENT LOCATION					
Illicit Drugs[1]	0.9	0.8[b]	0.9	0.9	1.0
Alcohol	1.0	1.0	1.1	1.2	1.1
Both Illicit Drugs and Alcohol[1]	0.6	0.5	0.6	0.6	0.6
Illicit Drugs or Alcohol[1,2]	1.5	1.4[a]	1.6	1.6	1.6
SPECIALTY FACILITY					
Illicit Drugs[1]	0.6	0.5[b]	0.6	0.5	0.6
Alcohol	0.7	0.5	0.6	0.7	0.6
Both Illicit Drugs and Alcohol[1]	0.3	0.3	0.3	0.3	0.3
Illicit Drugs or Alcohol[1,2]	1.0	0.8[b]	1.0	0.9	1.0

*Low precision; no estimate reported.

NOTE: Received Substance Use Treatment refers to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. Treatment at Any Treatment Location includes treatment received at any location, such as a hospital, rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Estimates include persons who received treatment specifically for illicit drugs or alcohol, as well as persons who received treatment but did not specify for what substance(s).

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

70417 (8.33A)

Table G.32 Needed and Received Treatment for a Substance Use Problem in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2006

Substance/Substance Treatment Status	2002	2003	2004	2005	2006
NEEDED TREATMENT FOR ILLICIT DRUGS[1]	7,748	7,333	8,053	7,550	7,756
Received Treatment at a Specialty Facility	1,412	1,103[b]	1,427	1,280	1,576
Did Not Receive Treatment at a Specialty Facility	6,335	6,230	6,626	6,269	6,180
NEEDED TREATMENT FOR ALCOHOL	18,638	18,215[a]	19,360	19,378	19,520
Received Treatment at a Specialty Facility	1,549	1,298	1,535	1,626	1,557
Did Not Receive Treatment at a Specialty Facility	17,089	16,917	17,824	17,752	17,963
NEEDED TREATMENT FOR ILLICIT DRUGS OR ALCOHOL[1]	22,811	22,165[a]	23,476	23,172	23,591
Received Treatment at a Specialty Facility	2,346	1,874[b]	2,327	2,308	2,537
Did Not Receive Treatment at a Specialty Facility	20,465	20,290	21,149	20,864	21,054

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

NOTE: Respondents were classified as needing treatment for a substance use problem if they met at least one of three criteria during the past year: (1) dependent on the substance; (2) abuse of the substance; or (3) received treatment for the substance use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers)

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

70417 (8.33B)

Table G.33 Needed and Received Treatment for a Substance Use Problem in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2006

Substance/Substance Treatment Status	2002	2003	2004	2005	2006
NEEDED TREATMENT FOR ILLICIT DRUGS[1]	3.3	3.1	3.3	3.1	3.2
Received Treatment at a Specialty Facility	0.6	0.5[b]	0.6	0.5	0.6
Did Not Receive Treatment at a Specialty Facility	2.7	2.6	2.8[a]	2.6	2.5
NEEDED TREATMENT FOR ALCOHOL	7.9	7.7	8.0	8.0	7.9
Received Treatment at a Specialty Facility	0.7	0.5	0.6	0.7	0.6
Did Not Receive Treatment at a Specialty Facility	7.3	7.1	7.4	7.3	7.3
NEEDED TREATMENT FOR ILLICIT DRUGS OR ALCOHOL[1]	9.7	9.3	9.8	9.5	9.6
Received Treatment at a Specialty Facility	1.0	0.8[b]	1.0	0.9	1.0
Did Not Receive Treatment at a Specialty Facility	8.7	8.5	8.8	8.6	8.6

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

NOTE: Respondents were classified as needing treatment for a substance use problem if they met at least one of three criteria during the past year: (1) dependent on the substance; (2) abuse of the substance; or (3) received treatment for the substance use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers)

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.

70501 (5.51B)

Table G.34 Needed and Received Treatment for an Illicit Drug or Alcohol Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	NEEDED TREATMENT FOR AN ILLICIT DRUG OR ALCOHOL PROBLEM IN THE PAST YEAR						Percentage Who Received Treatment at a Specialty Facility among Persons Who Needed Treatment	
	Total		Received Treatment at a Specialty Facility		Did Not Receive Treatment at a Specialty Facility			
	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	9.5	9.6	0.9	1.0	8.6	8.6	10.0	10.8
AGE								
12-17	8.3	8.2	0.7	0.7	7.6	7.5	8.6	8.7
18-25	22.2	21.8	1.6	1.5	20.6	20.3	7.2	7.0
26 or Older	7.5	7.6	0.9	1.0	6.6	6.7	11.6	12.9
GENDER								
Male	12.6	12.7	1.3	1.4	11.3	11.4	10.2	10.7
Female	6.6	6.6	0.6	0.7	6.0	5.9	9.5	10.9
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	9.5	9.4	0.9	1.0	8.5	8.5	9.7	10.1
White	9.6	9.5	0.8	0.9	8.8	8.6	8.5	9.6
Black or African American	9.6	9.6	1.8	1.4	7.9	8.2	18.4	14.2
American Indian or Alaska Native	21.5	20.2	1.9	2.3	19.7	18.0	8.7	*
Native Hawaiian or Other Pacific Islander	11.0	12.3	0.3	0.8	10.7	11.5	*	*
Asian	4.5	4.4	0.0	0.3	4.5	4.2	1.0	6.2
Two or More Races	11.0	12.4	1.0	1.1	10.0	11.3	8.8	8.6
Hispanic or Latino	9.9	10.7	1.2	1.5	8.8	9.1	11.7	14.3

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an illicit drug or alcohol problem if they met at least one of three criteria during the past year: (1) dependent on illicit drugs or alcohol; (2) abuse of illicit drugs or alcohol; or (3) received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

70501 (5.53A)

Table G.35 Perceived Need for Illicit Drug or Alcohol Treatment and Whether Made an Effort to Get Treatment in the Past Year among Persons Aged 12 or Older Classified as Needing But Not Receiving Treatment for an Illicit Drug or Alcohol Problem, by Demographic Characteristics: Numbers in Thousands, 2005 and 2006

Demographic Characteristic	Total Needing But Not Receiving Treatment[1]		FELT NEED FOR TREATMENT[2]						Did Not Feel Need for Treatment[2]	
			Total		Made Effort		Made No Effort			
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	20,864	21,054	1,161	940	296	314	865	625	19,703	20,114
AGE										
12-17	1,915	1,906	67	55	13	16	54	39	1,848	1,851
18-25	6,699	6,640	276	249	81	49	195	200	6,423	6,391
26 or Older	12,251	12,508	818	636	203	249	615	386	11,433	11,872
GENDER										
Male	13,383	13,584	751	633	176	216	575	418	12,631	12,950
Female	7,482	7,470	410	306	120	99	290	207	7,072	7,163

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs or alcohol, but have not received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Felt Need for Treatment includes persons who did not receive but felt they needed treatment for an illicit drug or alcohol problem, as well as persons who received treatment at a location other than a specialty facility but felt they needed additional treatment.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

70501 (5.53B)

Table G.36 Perceived Need for Illicit Drug or Alcohol Treatment and Whether Made an Effort to Get Treatment in the Past Year among Persons Aged 12 or Older Classified as Needing But Not Receiving Treatment for an Illicit Drug or Alcohol Problem, by Demographic Characteristics: Percentages, 2005 and 2006

Demographic Characteristic	Total Needing But Not Receiving Treatment[1]		FELT NEED FOR TREATMENT[2]						Did Not Feel Need for Treatment[2]	
			Total		Made Effort		Made No Effort			
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
TOTAL	100.0	100.0	5.6	4.5	1.4	1.5	4.1[a]	3.0	94.4	95.5
AGE										
12-17	100.0	100.0	3.5	2.9	0.7	0.8	2.8	2.0	96.5	97.1
18-25	100.0	100.0	4.1	3.8	1.2	0.7	2.9	3.0	95.9	96.2
26 or Older	100.0	100.0	6.7	5.1	1.7	2.0	5.0[a]	3.1	93.3	94.9
GENDER										
Male	100.0	100.0	5.6	4.7	1.3	1.6	4.3	3.1	94.4	95.3
Female	100.0	100.0	5.5	4.1	1.6	1.3	3.9	2.8	94.5	95.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs or alcohol, but have not received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.
[2] Felt Need for Treatment includes persons who did not receive but felt they needed treatment for an illicit drug or alcohol problem, as well as persons who received treatment at a location other than a specialty facility but felt they needed additional treatment.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

Table G.37 Serious Psychological Distress in the Past Year among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2004-2006

Demographic Characteristic	2004	2005	2006
TOTAL	12.2[a]	11.3	11.3
AGE			
18-25	20.2[b]	18.6[a]	17.7
26-49	14.0	12.5	13.0
50 or Older	6.9	7.1	6.9
GENDER			
Male	9.4	8.4	8.7
Female	14.8	14.0	13.7

*Low precision; no estimate reported.

NOTE: Estimates for 2004 in this table are based on a subsample of respondents aged 18 or older. Due to the use of alternative 2004 subsample data, these 2004 estimates may differ from 2004 estimates published in prior NSDUH reports. See Section B.4.4 in Appendix B of the *Results from the 2006 National Survey on Drug Use and Health: National Findings.*

NOTE: Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. Due to questionnaire changes, these estimates are not comparable with SPD estimates published in 2004 and prior years. See Section B.4.4 in Appendix B of the *Results from the 2006 National Survey on Drug Use and Health: National Findings.*

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004, 2005, and 2006.

Table G.38 Received Mental Health Treatment/Counseling in the Past Year and Had at Least One Major Depressive Episode (MDE) in the Past Year among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2003-2006

Past Year Mental Health Measure/ Demographic Characteristic	2003	2004	2005	2006
MENTAL HEALTH TREATMENT/COUNSELING[1,2]	13.2	12.8	13.0	12.9
Age				
18-25	11.1	10.8	11.2	10.8
26-49	14.5	14.4	13.9	14.0
50 or Older	12.3	11.7	12.5	12.4
Gender				
Male	8.5	8.8	8.9	8.9
Female	17.5	16.6	16.8	16.6
MAJOR DEPRESSIVE EPISODE[3,4]	--	8.0[a]	7.3	7.2
Age				
18-25	--	10.1[b]	9.7	9.0
26-49	--	9.8[a]	8.4	8.5
50 or Older	--	5.0	5.1	5.1
Gender				
Male	--	5.6	5.2	5.3
Female	--	10.3[a]	9.3	9.0

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.
[2] Due to revised editing of 2003 and 2004 outpatient mental health treatment/counseling data, these 2003 estimates may differ slightly from 2003 estimates published in prior NSDUH reports. See Section B.5.2 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings.*
[3] Major Depressive Episode (MDE) is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Respondents with unknown past year MDE data were excluded.
[4] Estimates for 2004 in this table are based on a subsample of respondents aged 18 or older, while 2005 and 2006 estimates are based on all respondents aged 18 or older. See Section B.4.5 in Appendix B of the *Results from the 2006 National Survey on Drug Use and Health: National Findings.*

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003, 2004, 2005, and 2006.

Table G.39 Received Mental Health Treatment/Counseling and Had at Least One Major Depressive Episode (MDE) in the Past Year among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2002-2006

Past Year Mental Health Measure/ Demographic Characteristic	2002	2003	2004	2005	2006
MENTAL HEALTH TREATMENT/COUNSELING[1]	19.3[b]	20.6	22.5[a]	21.8	21.3
Age					
12-13	19.8	20.5	22.3	21.5	20.8
14-15	19.9[a]	21.6	23.3	23.7	21.9
16-17	18.2[b]	19.8	22.0	20.1	21.0
Gender					
Male	18.0[a]	19.0	20.1	20.0	19.6
Female	20.7[b]	22.4	25.0[b]	23.6	23.0
MAJOR DEPRESSIVE EPISODE[2]	--	--	9.0[b]	8.8[a]	7.9
Age					
12-13	--	--	5.4	5.2	4.9
14-15	--	--	9.2[a]	9.5[b]	7.9
16-17	--	--	12.3[a]	11.5	10.7
Gender					
Male	--	--	5.0[a]	4.5	4.2
Female	--	--	13.1[a]	13.3[b]	11.8

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2006 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2006 estimate is statistically significant at the 0.01 level.

[1] Mental Health Treatment/Counseling for youths is defined as having received treatment or counseling from any of 10 specific sources for emotional or behavioral problems NOT caused by drug or alcohol use. (See Table 6.22 for a list of the 10 sources.) Youths who answered none of the source of treatment questions with a "yes" and answered "no" four or fewer times were excluded from this analysis.

[2] Major Depressive Episode (MDE) is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of the symptoms for depression as described in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Respondents with unknown past year MDE data were excluded.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, 2005, and 2006.