Results from the 2004 National Survey on Drug Use and Health: National Findings

REVISIONS AS OF 9/8/2005

Several updates have been incorporated into this report since it was printed. These changes were made in the Web documents and are listed below, by page and paragraph.

In several places, the printed version of this report indicates that 2004 estimates are similar to 2002 estimates. However, statistical testing indicates a significant difference between 2004 and 2002, so the text in this updated Web document was revised to remove the reference to no change from the 2002 data. This occurs on p. 1 in bullets 3 and 6, p. 12 in bullets 1 and 2, p. 30 in bullet 3, and p. 61 in bullet 1 under Feelings about Peer Substance Use.

On p. 35, bullet 1 was changed to correct the statement; there was only one exception (not two) to the stable trend.

On p. 69, bullet 2, the estimate for persons who drank before age 21 was changed from 9.2 to 9.6.

On p. 161, definition of Ecstasy Use, the spelling of "methylenedioxymethamphetamine" was corrected.

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 2004 National Survey on Drug Use and Health (NSDUH). This survey, formerly called the National Household Survey on Drug Abuse (NHSDA), is a project of the Substance Abuse and Mental Health Services Administration (SAMHSA). This survey was initiated in 1971 and is the primary source of information on the use of illicit drugs, alcohol, and tobacco by the civilian, noninstitutionalized population of the United States aged 12 years old or older. The survey interviews approximately 67,500 persons each year.

Illicit Drug Use

- In 2004, 19.1 million Americans, or 7.9 percent of the population aged 12 or older, were current illicit drug users. Current drug use means use of an illicit drug during the month prior to the survey interview.

- The rate of illicit drug use among persons aged 12 or older in 2004 was similar to the rates in 2002 and 2003 (8.3 and 8.2 percent). Among youths aged 12 to 17, the rate declined between 2002 and 2004 (11.6 percent in 2002, 11.2 percent in 2003, and 10.6 percent in 2004).

- Marijuana was the most commonly used illicit drug in 2004, with a rate of 6.1 percent (14.6 million current users). There were 2.0 million current cocaine users, 467,000 of whom used crack. Hallucinogens were used by 929,000 persons, and there were an estimated 166,000 heroin users. All of these estimates are similar to estimates for 2003.

- Between 2002 and 2004, past month marijuana use declined for male youths aged 12 to 17 (9.1 percent in 2002, 8.6 percent in 2003, and 8.1 percent in 2004), but it remained level for female youths (7.2, 7.2, and 7.1 percent, respectively) during the same time span.

- The number of current users of Ecstasy had decreased between 2002 and 2003, from 676,000 to 470,000, but the number did not change between 2003 and 2004 (450,000).

- In 2004, 6.0 million persons were current users of psychotherapeutic drugs taken nonmedically (2.5 percent). These include 4.4 million who used pain relievers, 1.6 million who used tranquilizers, 1.2 million who used stimulants, and 0.3 million who used sedatives. These estimates are all similar to the corresponding estimates for 2003.

- There were significant increases in the lifetime prevalence of use from 2003 to 2004 in several categories of pain relievers among those aged 18 to 25. Specific pain relievers with statistically significant increases in lifetime use were Vicodin®, Lortab®, or Lorcet® (from 15.0 to 16.5 percent); Percocet®, Percodan®, or Tylox® (from 7.8 to 8.7 percent); hydrocodone products (from 16.3 to 17.4 percent); OxyContin® (from 3.6 to 4.3 percent); and oxycodone products (from 8.9 to 10.1 percent).

- Among youths aged 12 to 17, rates of current illicit drug use varied significantly by major racial/ethnic groups in 2004. The rate was highest among American Indian or Alaska Native youths (26.0 percent). Rates were 12.2 percent for youths reporting two or more races, 11.1 percent for white youths, 10.2 percent for Hispanic youths, 9.3 percent for black youths, and 6.0 percent for Asian youths.

- In 2004, 19.2 percent of unemployed adults aged 18 or older were current illicit drug users compared with 8.0 percent of those employed full time and 10.3 percent of those employed part time. However, of the 16.4 million illicit drug users aged 18 or older in 2004, 12.3 million (75.2 percent) were employed either full or part time.

Alcohol Use

- 121 million Americans aged 12 or older were current drinkers of alcohol in 2004 (50.3 percent). 55 million (22.8 percent) participated in binge drinking, defined as five or more drinks on at least one occasion in the 30 days prior to the survey. 16.7 million (6.9 percent) were heavy drinkers, defined as binge drinking on 5 or more days in the past month. These numbers are all similar to the corresponding estimates for 2002 and 2003.

- The highest prevalence of binge and heavy drinking in 2004 was for young adults aged 18 to 25 (41.2 and 15.1 percent, respectively). The peak rate of both measures occurred at age 21 (48.2 and 19.2 percent, respectively).

- The rate of underage drinking remained the same in 2004 as in 2002 and 2003. About 10.8 million persons aged 12 to 20 reported drinking alcohol in the month prior to the survey interview in 2004 (28.7 percent of this age group). Of these, nearly 7.4 million (19.6 percent) were binge drinkers, and 2.4 million (6.3 percent) were heavy drinkers.

- Among persons aged 12 to 20 in 2004, past month alcohol use rates were 16.4 percent among Asians, 19.1 percent among blacks, 24.3 percent among American Indians or Alaska Natives, 26.4 percent among those reporting two or more races, 26.6 percent among Hispanics, and 32.6 percent among whites.

- Among pregnant women aged 15 to 44, 11.2 percent reported past month alcohol use and 4.5 percent reported past month binge drinking, based on combined 2003 and 2004 data.

- 32.5 million persons aged 12 or older in 2004 (13.5 percent) drove under the influence of alcohol at least once in the 12 months prior to the interview. This was similar to the rate in 2003.

- Young adults aged 18 to 22 enrolled full time in college were more likely than their peers not enrolled full time (this category includes part-time college students and persons not enrolled in college) to use alcohol, binge drink, and drink heavily in 2004. Binge and heavy use rates for college students were 43.4 and 18.6 percent, respectively, compared with 39.4 and 13.5 percent, respectively, for other persons aged 18 to 22.

Tobacco Use

- 70.3 million Americans were current users of a tobacco product in 2004. This is 29.2 percent of the population aged 12 or older. 59.9 million (24.9 percent) smoked cigarettes, 13.7 million (5.7 percent) smoked cigars, 7.2 million (3.0 percent) used smokeless tobacco, and 1.8 million (0.8 percent) smoked tobacco in pipes.

- The rate of tobacco use declined between 2002 and 2004, from 30.4 to 29.2 percent, primarily due to a decline in cigarette use from 26.0 to 24.9 percent. The rate of cigar use remained steady, but smokeless tobacco use dropped from 3.3 to 3.0 percent.

- Young adults aged 18 to 25 continued to have the highest rate of past month cigarette use (39.5 percent). The rate did not change significantly between 2002 and 2004. The rate of cigarette use among youths aged 12 to 17 declined from 13.0 percent in 2002 to 11.9 percent in 2004.

- A higher proportion of males than females aged 12 or older smoked cigarettes in 2004 (27.7 vs. 22.3 percent). Among youths aged 12 to 17, however, girls (12.5 percent) were more likely than boys (11.3 percent) to smoke.

- Based on 2003 and 2004 data combined, 18.0 percent of pregnant women aged 15 to 44 smoked cigarettes in the past month compared with 30.0 percent of women in that age group who were not pregnant. However, among those aged 15 to 17, this pattern did not hold. The rate of cigarette smoking among pregnant women aged 15 to 17 was 26.0 percent compared with 19.6 percent among nonpregnant women of that age (not a statistically significant difference).

- In completely rural nonmetropolitan counties, current cigarette use among persons aged 12 or older declined from 31.8 percent in 2002 to 22.8 percent in 2004.

- Among the 93.4 million persons who had ever smoked cigarettes daily in their lifetime, nearly half (46.2 percent) had stopped smoking in 2004; that is, they did not smoke at all in the past 30 days. The remaining 53.8 percent were still current smokers.

Initiation of Substance Use (Incidence)

- Based on a new approach to estimating incidence, the 2004 NSDUH shows that the illicit drug category with the largest number of new users was nonmedical use of pain relievers. 2.4 million persons used pain relievers nonmedically for the first time within the past 12 months. The average age at first use among these new initiates was 23.3 years.

- In 2004, 2.1 million persons had used marijuana for the first time within the past 12 months. This estimate was not significantly different from the number in 2003 (2.0 million). The average age at first use among the 2.1 million recent marijuana initiates was 18.0 years. Most (63.8 percent) of the recent initiates were younger than age 18 when they first used.

- In 2004, 4.4 million persons had used alcohol for the first time within the past 12 months. The number of alcohol initiates increased from 3.9 million in 2002 and 4.1 million in 2003. Most (86.9 percent) of the 4.4 million recent alcohol initiates in 2004 were younger than age 21 at the time of initiation.

- The number of persons who smoked cigarettes for the first time within the past 12 months was 2.1 million in 2004, not significantly different from the estimates in 2002 (1.9 million) or 2003 (2.0 million). About two thirds of new smokers in 2004 were under the age of 18 when they first smoked cigarettes (67.8 percent).

Youth Prevention-Related Measures

- The percentage of youths aged 12 to 17 indicating that smoking marijuana once a month was a great risk increased from 32.4 percent in 2002 to 34.9 percent in 2003, but did not change between 2003 and 2004 (35.0 percent). There were declines between 2003 and 2004 in the percentages of youths perceiving a great risk in using cocaine and heroin. Perceived risk of cigarette use increased between 2003 and 2004, but there was no change in the perceived risk of having four or five drinks of alcohol nearly every day or having five or more drinks once or twice a week.

- The percentage of youths reporting that it would be easy to obtain marijuana declined between 2002 and 2003, from 55.0 to 53.6 percent, and again between 2003 and 2004, to 52.2 percent. The percentage of youths reporting that LSD would be easy to obtain also decreased between 2002 and 2004, from 19.4 to 16.9 percent, as did the perceived availability of heroin (15.8 to 14.0 percent).

- Most youths (89.8 percent) reported that their parents would strongly disapprove of their trying marijuana or hashish once or twice. Among these youths, only 5.1 percent had used marijuana in the past month. However, among youths who perceived that their parents would only somewhat disapprove or neither approve nor disapprove of their trying marijuana, 30.0 percent used marijuana.

Substance Dependence, Abuse, and Treatment

- 22.5 million Americans aged 12 or older in 2004 were classified with past year substance dependence or abuse (9.4 percent of the population), about the same number as in 2002 and 2003. Of these, 3.4 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.9 million were dependent on or abused illicit drugs but not alcohol, and 15.2 million were dependent on or abused alcohol but not illicit drugs.

- In 2004, 19.9 percent of unemployed adults aged 18 or older were classified with dependence or abuse, while 10.5 percent of full-time employed adults and 11.9 percent of part-time employed adults were classified as such. However, most adults with substance dependence or abuse were employed either full or part time. Of the 20.3 million adults classified with dependence or abuse, 15.7 million (77.6 percent) were employed.

- In 2004, 3.8 million people aged 12 or older (1.6 percent of the population) received treatment in the past 12 months for a drug or alcohol use problem. Of these, 2.3 million received treatment at a specialty facility for substance use treatment, including 1.7 million at a rehabilitation facility as an outpatient, 947,000 at a rehabilitation facility as an inpatient, 775,000 at a hospital as an inpatient, and 982,000 at a mental health center as an outpatient. Nonspecialty treatment locations were self-help groups (2.1 million persons), private doctor's offices (490,000 persons), emergency rooms (453,000 persons), and prisons or jails (310,000 persons). (Note that the estimates of treatment by location include persons reporting more than one location.)

- Persons dependent on or abusing a substance in the past 12 months, or who received specialty treatment for a substance use problem within the past 12 months, are classified as needing treatment. In 2004, the number of persons aged 12 or older needing treatment for an alcohol or illicit drug use problem was 23.48 million (9.8 percent). Of these, 2.33 million received treatment at a specialty facility in the past year. Thus, 21.15 million people needed but did not receive treatment at a specialty facility in 2004. The number needing but not receiving treatment did not change significantly from 2002 to 2004.

- Of the 21.1 million people who needed but did not receive treatment in 2004, an estimated 1.2 million (5.8 percent) reported that they felt they needed treatment for their alcohol or drug use problem. Of the 1.2 million persons who felt they needed treatment, 441,000 (35.8 percent) reported that they made an effort but were unable to get treatment, and 792,000 (64.2 percent) reported making no effort to get treatment.

- Among people who needed but did not receive treatment and felt they needed treatment for a substance use problem, the most often reported reasons for not receiving treatment were not ready to stop using (40.0 percent) and cost or insurance barriers (34.5 percent). However, among the people who made an effort but were unable to get treatment, 42.5 percent reported cost or insurance barriers, and only 25.3 percent reported that they were not ready to stop using. These results are based on 2003 and 2004 combined data.

- The number of persons needing treatment for an illicit drug use problem in 2004 (8.1 million) was higher than the number needing treatment in 2003 (7.3 million); similarly, the number of persons receiving treatment for drug use at a specialty facility was higher in 2004 (1.4 million) than in 2003 (1.1 million). These 2004 estimates were similar to the corresponding estimates in 2002 (7.7 million needing treatment, 1.4 million receiving treatment).

- 6.6 million people needed but did not receive treatment for an illicit drug use problem in 2004. Of these, 598,000 (9.0 percent) felt they needed treatment. This number increased from 362,000 in 2002 and from 426,000 in 2003. Of the 598,000 persons who felt they needed treatment in 2004, 194,000 (32.4 percent) reported that they made an effort but were unable to get treatment, and 404,000 (67.6 percent) reported making no effort to get treatment.

Prevalence and Treatment of Mental Health Problems

- In 2004, there were 35.1 million (14.7 percent) persons aged 12 or older who had at least one major depressive episode (MDE) in their lifetime. Of these, 19.3 million persons (8.1 percent of the population) had an MDE in the past 12 months, including 2.2 million youths aged 12 to 17 and 17.1 million adults aged 18 or older.
- The past year prevalence of MDE was highest for persons aged 18 to 25 (10.1 percent) and lowest for those aged 26 or older (7.6 percent). The rate among youths aged 12 to 17 was 9.0 percent. Females were more likely than males to have MDE in the past year (10.6 vs. 5.5 percent).
- Persons with past year MDE were more likely than those without MDE to have used an illicit drug in the past year (28.8 vs. 13.8 percent). Similarly, substance dependence or abuse was more prevalent among persons with MDE than among those without MDE (22.0 vs. 8.6 percent, respectively).
- Among persons aged 12 or older with past year MDE, 62.3 percent received treatment (i.e., saw or talked to a medical doctor or other professional or used prescription medication) for depression within the past 12 months.
- While MDE estimates describe persons with a specific mental disorder, the survey also produces estimates of serious psychological distress (SPD), which describe persons with a high level of distress due to any type of mental problem. In 2004, there were 21.4 million adults aged 18 or older with SPD. This represents 9.9 percent of all adults, a rate that increased since 2002 when it was 8.3 percent.
- SPD was highly correlated with substance dependence or abuse. Among adults with SPD in 2004, 21.3 percent (4.6 million) were dependent on or abused alcohol or illicit drugs, while the rate among adults without SPD was 7.9 percent.
- Among the 21.4 million adults with SPD in 2004, 10.3 million, or 48.1 percent, received treatment for a mental health problem in the past year.
- Among the 4.6 million adults with SPD and a substance use disorder in 2004, 47.5 percent (about 2.2 million) received treatment for mental health problems, and 11.0 percent (503,000) received specialty substance use treatment. Only 6.0 percent (274,000) received both types of treatment.
- In 2004, 27.5 million adults (12.8 percent) received treatment for mental health problems in the past year. This estimate is similar to the estimates in 2002 and 2003.
- The most prevalent type of treatment for mental health problems among adults in 2004 was prescription medication (10.5 percent of the population), followed by outpatient treatment (7.1 percent). 1.9 million adults (0.9 percent) received inpatient care for mental health problems at some time within the past 12 months.
- In 2004, 5.7 million youths aged 12 to 17 (22.5 percent) received treatment or counseling for emotional or behavior problems in the year prior to the interview. This is higher than the estimates for 2002 (19.3 percent) and 2003 (20.6 percent).

1. Introduction

This report presents the first information from the 2004 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 was called the National Household Survey on Drug Abuse (NHSDA). This initial report on the 2004 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 the co-occurrence of substance use and mental health problems, and new data on depression among youths and adults. State-level and substate-level estimates from NSDUH will be presented in separate reports.

A major focus of this report is changes in substance use between 2003 and 2004. Trends since 2002 also are discussed in a few instances. 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, 2003, and 2004 NSDUHs should not be compared with estimates from the 2001 and earlier NSDUHs to assess changes in substance use and mental health problems over time. A discussion of long-term trends is included in the final chapter of this report.

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 their places of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the 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, noninstitutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. The survey does not include homeless persons who do not use shelters, military personnel on active duty, and residents of institutional group quarters, such as jails and hospitals. Appendix E 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.

Consistent with the 2002 and 2003 surveys, the 2004 NSDUH employed a 50-State sample design with an independent, multistage area probability sample for each of the 50 States 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 were selected to support State estimates using small area estimation (SAE) techniques. The design also oversampled youths and young adults, so that each State's sample was approximately equally distributed among three major age groups: 12 to 17 years, 18 to 25 years, and 26 years or older.

Nationally, 130,130 addresses were screened for the 2004 survey, and 67,760 completed interviews were obtained. The survey was conducted from January through December 2004. Weighted response rates for household screening and for interviewing were 90.9 and 77.0 percent, respectively. See Appendix B for more information on NSDUH response rates.

1.2. Trend Measurement

Although the design of the 2002, 2003, and 2004 NSDUHs is similar to the design of the 1999 through 2001 surveys, there are important methodological differences that have an impact on the comparability of the 2002-2004 estimates with estimates from prior surveys. In addition to the name change, each NSDUH respondent is now given an incentive payment of $30. These changes, both implemented in 2002 and continued in 2003 and 2004, resulted in a substantial improvement in the survey response rate. The changes also affected respondents' reporting of many critical items that are the basis of prevalence measures reported by the survey each year. Comparability also could be affected by improved data collection quality control procedures that were introduced beginning in 2001 and by incorporation of new population data from the 2000 decennial census into NSDUH sample weighting procedures. **Analyses of the effects of each 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 this report discusses this issue in more detail.**

Limited trend assessment can be done using information on prior substance use collected in the 2002-2004 NSDUHs. Specifically, questions on age at first use of substances, in conjunction with respondents' ages and interview dates, provide data that can be used to estimate the rates of first-time use (incidence) for years prior to 2002. Trends for 1965 to 2003 in these incidence measures for youths and young adults are discussed in Chapter 5. However, these estimates are interpreted cautiously because they may be subject to significant bias due to long recall periods (Gfroerer, Hughes, Chromy, Heller, & Packer, 2004). Improved measures of recent patterns and trends in substance use initiation are included in Chapter 5 of this report. Long-term trends in some key measures of substance use, such as marijuana and cocaine, are assessed in Chapter 9 using data from prior NSDUHs by separately examining trends within periods during which the survey data are comparable. These periods are 1971-1998, 1999-2001, and 2002-2004.

1.3. Format of Report and Explanation of Tables

The results from the 2004 NSDUH are given in this report, which has separate chapters that discuss the national findings on seven topics: use of illicit drugs; use of alcohol; use of tobacco products; trends in initiation of substance use; prevention-related issues; substance dependence, abuse, and treatment; and mental health. A final chapter summarizes the results and discusses key findings in relation to other research and survey results, including trends prior to 2002. Technical appendices describe the survey (Appendix A), provide technical details on the statistical methods and measurement (Appendix B), discuss issues related to the methods changes in 2002 (Appendix C), offer key NSDUH definitions (Appendix D), discuss other sources of related data (Appendix E), list the references cited in the report (as well as other relevant references) (Appendix F), and present selected tabulations of estimates (Appendices G and H).

Tables, text, and figures present prevalence measures for the population in terms of both the number of substance users and the rate of use for illicit drugs, alcohol, and tobacco products. Tables show estimates of drug use prevalence 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 have footnotes indicating whether the 2003 and 2004 estimates were significantly different; in addition, figures have footnotes indicating whether the 2002 and 2004 estimates were significantly different.

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

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. Bureau of the Census, 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 for 2003 and 2004 also are made based on county type, which reflects different levels of urbanicity and metropolitan area inclusion of counties, based on metropolitan area definitions issued by 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 20,000 or more population 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.

1.4. Other NSDUH Reports and Data

This report provides a comprehensive summary of the 2004 NSDUH, including results, technical appendices, and selected data tables. A companion report, *Overview of Findings from the 2004 National Survey on Drug Use and Health*, is a shorter, more concise report that highlights the most important findings of the survey and includes only a brief discussion of the methods. A report on State-level estimates for 2004 will be available in early 2006.

In addition to the tables included in Appendices G and H of this report, a more extensive set of tables, including standard errors, is available upon request from OAS or through the Internet at http://www.oas.samhsa.gov. Tables included in Appendices G and H can be mapped back to the more extensive set of 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 8.1N 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, 2005) at http://www.icpsr.umich.edu/SAMHDA/index.html. Currently, files are available from the 1979 to 2003 surveys. The 2004 NSDUH public use file will be available by the end of 2005.

2. Illicit Drug Use

The National Survey on Drug Use and Health (NSDUH) obtains information on nine different categories of illicit drug use: any 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 amyl nitrite, cleaning fluids, gasoline, paint, and glue. The four categories of prescription-type drugs (pain relievers, tranquilizers, stimulants, and sedatives) cover numerous drugs available through prescriptions as well as drugs within these groupings that may be manufactured illegally, such as methamphetamine, which is included under stimulants. Respondents are asked to report only uses of drugs that were not prescribed for them or drugs they took only for the experience or feeling they caused; therefore, over-the-counter drugs and legitimate uses 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.

NSDUH now collects more extensive data on respondents' history of drug use, including age at first use, age at last use, and use during the year prior to the past 12 months (i.e., during the period from 12 to 23 months ago). These data are useful in tracking trends over time in that they allow year-to-year changes in new use (incidence), continuing use, and discontinuation of use (quitting) to be measured separately in order to assess their impact on past year use rates. Results for marijuana use based on these new data are included in this chapter. Additional analysis of incidence for all substances is presented in Chapter 5.

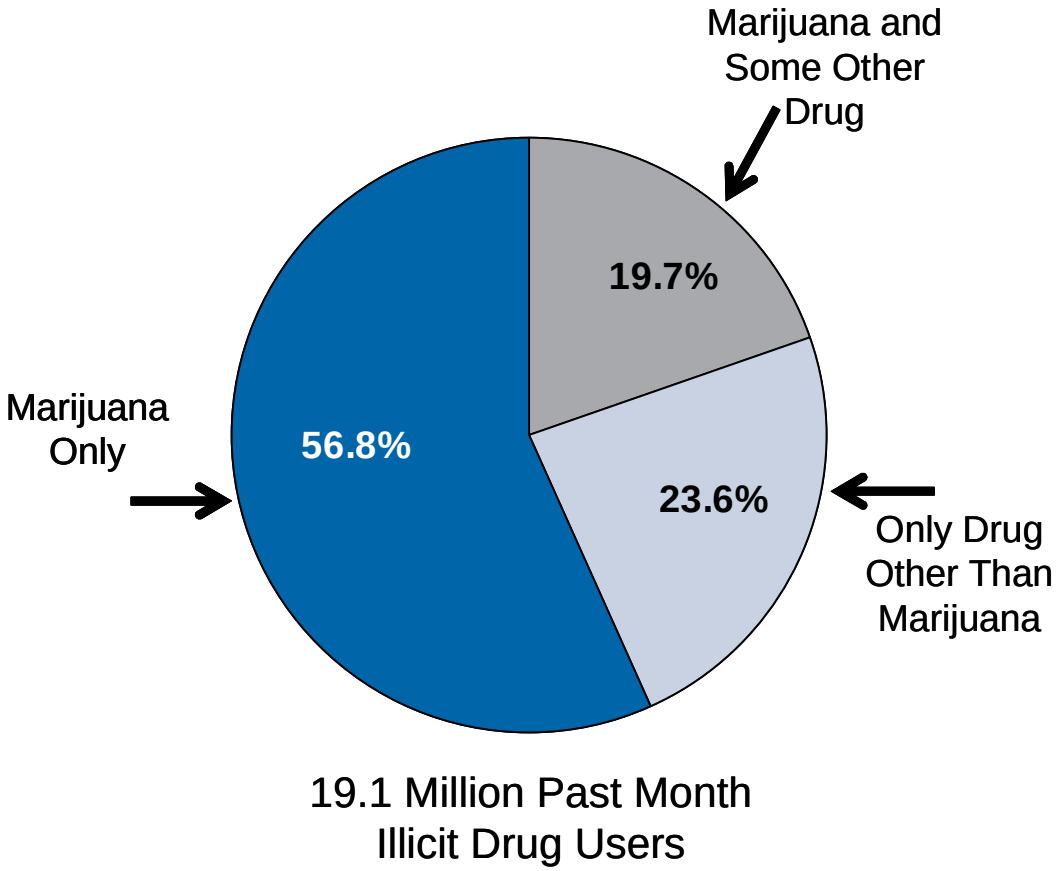
- In 2004, an estimated 19.1 million Americans aged 12 or older were current (past month) illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 7.9 percent of the population aged 12 years old or older.

- The overall rate of current illicit drug use among persons aged 12 or older in 2004 (7.9 percent) was similar to the rate in 2003 (8.2 percent) and in 2002 (8.3 percent).

- Marijuana was the most commonly used illicit drug (14.6 million past month users). In 2004, it was used by 76.4 percent of current illicit drug users. An estimated 56.8 percent of current illicit drug users used only marijuana, 19.7 percent used marijuana and another illicit drug, and the remaining 23.6 percent used only an illicit drug other than marijuana in the past month (Figure 2.1).

- Among persons aged 12 or older, the overall rate of past month marijuana use was about the same in 2004 (6.1 percent) as it was in 2003 (6.2 percent) and 2002 (6.2 percent).

Figure 2.1 Types of Drugs Used by Past Month Illicit Drug Users Aged 12 or Older: 2004

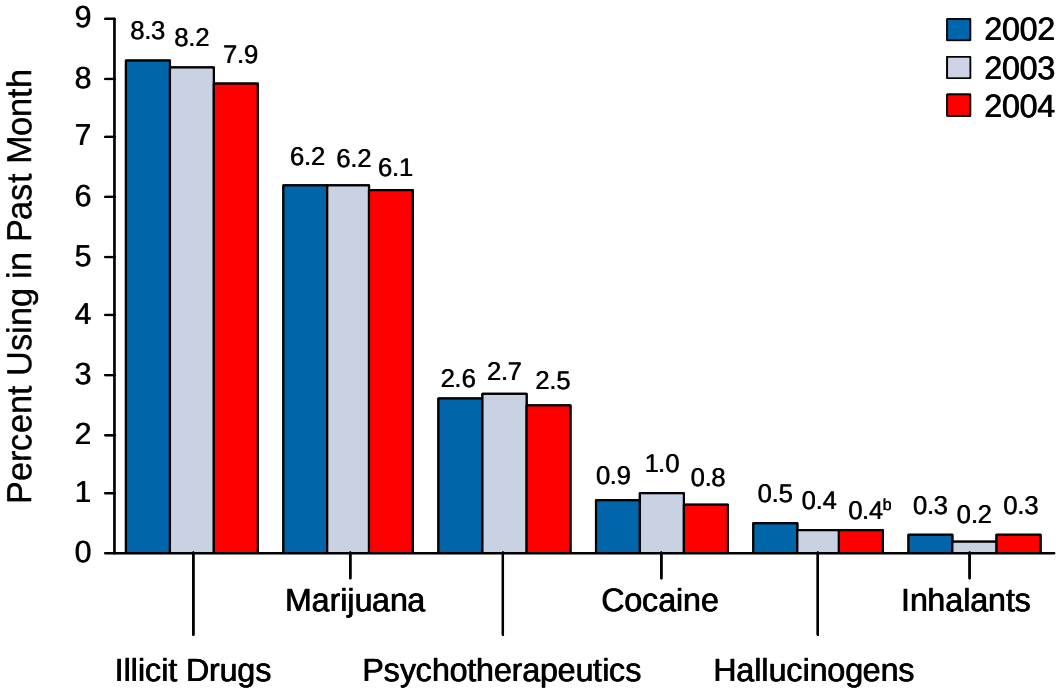


- In 2004, an estimated 2.0 million persons (0.8 percent) were current cocaine users (Figure 2.2); of these, 467,000 used crack during the same time period (0.2 percent). Hallucinogens were used by 929,000 persons (0.4 percent). There were an estimated 166,000 current heroin users (0.1 percent). All of these estimates are similar to estimates for 2003.

- An estimated 8.2 million people (3.4 percent of the population) were current users of illicit drugs other than marijuana in 2004. Most (6.0 million, 2.5 percent of the population) used psychotherapeutic drugs nonmedically (Figure 2.2). An estimated 4.4 million used pain relievers, 1.6 million used tranquilizers, 1.2 million used stimulants (including 583,000 using methamphetamine), and 0.3 million used sedatives. These estimates are all similar to the corresponding estimates for 2003.

- The number of current users of Ecstasy remained the same in 2004 (450,000) as it had been in 2003 (470,000), after it had decreased significantly between 2002 (676,000) and 2003. There were no significant changes in the past month use of other hallucinogens between 2003 and 2004. Although an estimated 23.4 million persons had tried LSD in their lifetime, only 141,000 were current users in 2004.

Figure 2.2 Past Month Use of Selected Illicit Drugs among Persons Aged 12 or Older: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

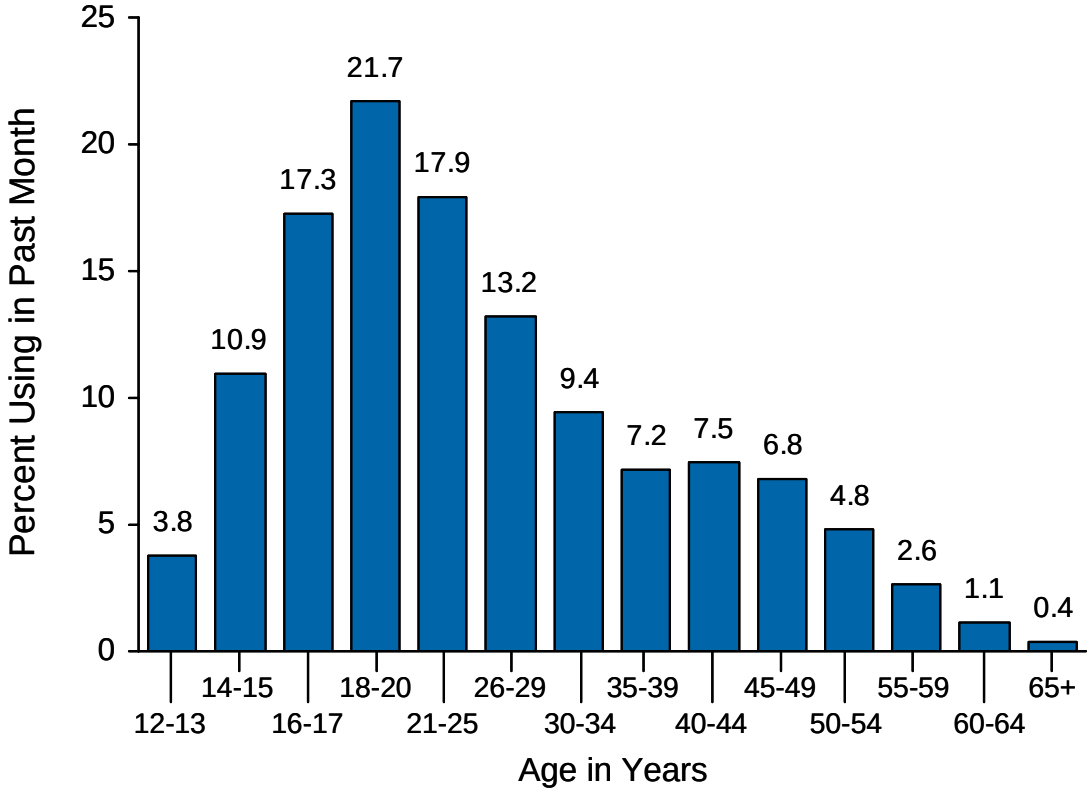
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- There was no significant change in past month, past year, or lifetime nonmedical use of pain relievers among persons aged 12 or older between 2003 and 2004. The rate of past month use was 2.0 percent in 2003 and 1.8 percent in 2004.

Age

- Rates of drug use showed substantial variation by age. For example, 3.8 percent of youths aged 12 or 13 reported current illicit drug use in 2004 (Figure 2.3). As in prior years, illicit drug use in 2004 tended to increase with age among young persons, peaking among 18 to 20 year olds (21.7 percent) and generally declining after that point with increasing age.

Figure 2.3 Past Month Illicit Drug Use among Persons Aged 12 or Older, by Age: 2004



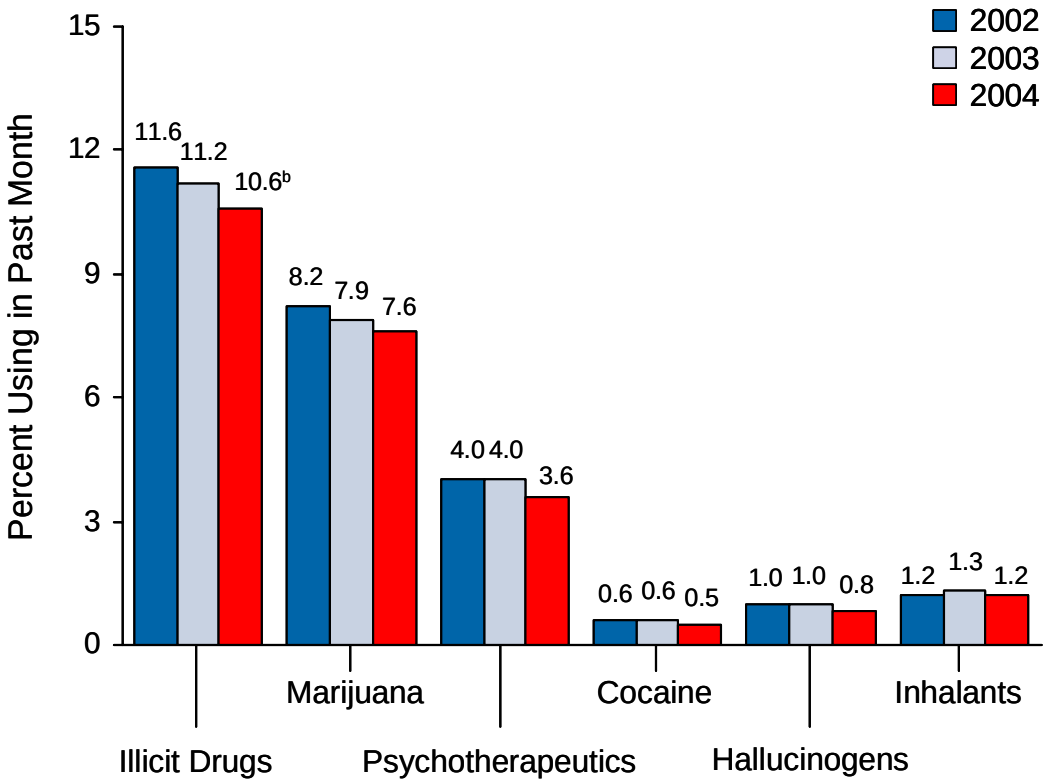
Youths Aged 12 to 17

- Among youths, the types of drugs used differed by age in 2004, as was the case in prior years. Among 12 or 13 year olds, 1.7 percent used prescription-type drugs nonmedically, 1.2 percent used inhalants, and 1.1 percent used marijuana. Among 14 or 15 year olds, marijuana was the dominant drug used (7.3 percent), followed by prescription-type drugs used nonmedically (4.1 percent) and inhalants (1.6 percent). Marijuana also was the most commonly used drug among 16 or 17 year olds (14.5 percent), followed by prescription-type drugs used nonmedically (5.1 percent), hallucinogens (1.7 percent), and cocaine (1.1 percent). Only 0.9 percent of youths aged 16 or 17 used inhalants.

- Among all youths aged 12 to 17 in 2004, 10.6 percent were current illicit drug users: 7.6 percent used marijuana, 3.6 percent used prescription-type drugs nonmedically, 1.2 percent used inhalants, 0.8 percent used hallucinogens, and 0.5 percent used cocaine.

- The rate of current illicit drug use among youths aged 12 to 17 gradually declined between 2002 and 2004. The rate was 11.6 percent in 2002, 11.2 percent in 2003, and 10.6 percent in 2004 (Figure 2.4). This represents a statistically significant change between 2002 and 2004, but not between 2002 and 2003 or between 2003 and 2004.

Figure 2.4 Past Month Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- The rate of current marijuana use among youths was 8.2 percent in 2002, 7.9 percent in 2003, and 7.6 percent in 2004, indicating a steady but not statistically significant decline. However, declines in past year and lifetime use of marijuana among youths from 2002 to 2004 were statistically significant.

Young Adults Aged 18 to 25

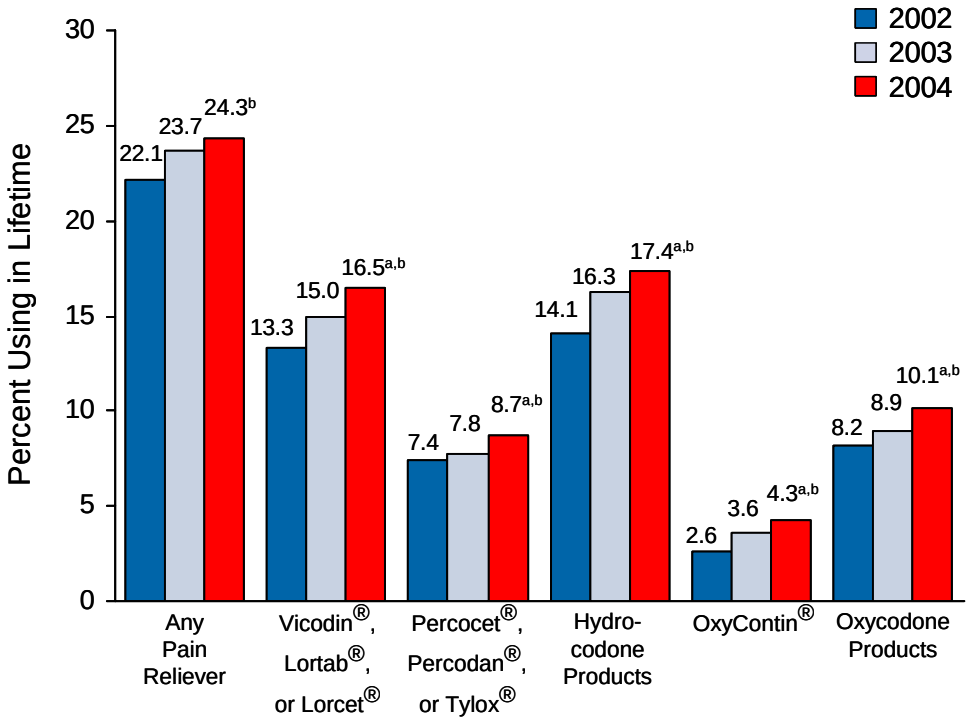
- Rates of current use of illicit drugs were highest for the young adult age group (18 to 25 years) at 19.4 percent, with 16.1 percent using marijuana, 6.1 percent using prescription-type drugs nonmedically, 2.1 percent using cocaine, and 1.5 percent using hallucinogens.

- There were no changes in past month use of any drugs among young adults between 2003 and 2004. However, declines between 2002 and 2004 occurred for marijuana (17.3 percent in 2002, 17.0 percent in 2003, and 16.1 percent in 2004) and hallucinogens (1.9, 1.7, and 1.5 percent, respectively).

- Past year use of Ecstasy among young adults declined from 5.8 percent in 2002 to 3.7 percent in 2003 and to 3.1 percent in 2004.

- Current nonmedical use of prescription-type drugs showed no signs of decreasing among young adults, remaining at 6.1 percent in 2004, compared with 6.0 percent in 2003 and 5.4 percent in 2002. There were increases in lifetime prevalence of use from 2002 to 2004 of several categories of pain relievers among those aged 18 to 25: Vicodin®, Lortab®, or Lorcet®; Percocet®, Percodan®, or Tylox®; hydrocodone products; OxyContin®; and oxycodone products (Figure 2.5).

Figure 2.5 Lifetime Nonmedical Use of Selected Pain Relievers among Young Adults Aged 18 to 25: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Adults Aged 26 or Older

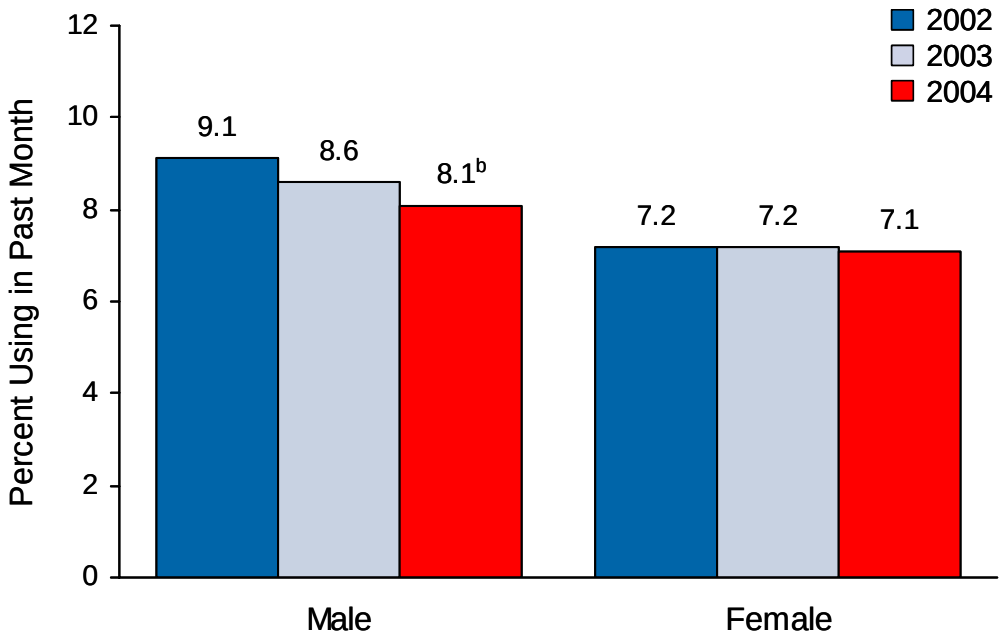
- Among adults aged 26 or older, 5.5 percent reported current illicit drug use in 2004: 4.1 percent used marijuana, and 1.7 percent used prescription-type drugs. In this age group, less than 1 percent used cocaine (0.7 percent), hallucinogens (0.1 percent), and inhalants (0.1 percent). Rates of lifetime, past year, and past month illicit drug use for adults aged 26 or older were unchanged between 2003 and 2004.

Gender

- As in 2002 and 2003, males were more likely in 2004 to report current illicit drug use than females (9.9 vs. 6.1 percent, respectively). Males were almost twice as likely to use marijuana as females (8.0 vs. 4.3 percent). However, rates of nonmedical use of any prescription-type psychotherapeutic were similar for males (2.6 percent) and females (2.4 percent).

- Among youths aged 12 to 17, the rate of current illicit drug use was similar for boys and girls (10.6 percent for both). While boys aged 12 to 17 had a higher rate of marijuana use than girls (8.1 vs. 7.1 percent) (Figure 2.6), the rate for nonmedical use of prescription-type psychotherapeutics was higher for girls (4.1 vs. 3.2 percent).

Figure 2.6 Past Month Marijuana Use among Youths Aged 12 to 17, by Gender: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Between 2002 and 2004, past month marijuana use declined for male youths (9.1 percent in 2002, 8.6 percent in 2003, and 8.1 percent in 2004), but it remained level for female youths (7.2, 7.2, and 7.1 percent) during the same time span.

Pregnant Women

- Among pregnant women aged 15 to 44 years, an estimated 4.6 percent reported using illicit drugs in the past month based on combined 2003 and 2004 NSDUH data. This rate was significantly lower than the rate among women aged 15 to 44 who were not pregnant (10.2 percent). The combined 2002-2003 rate of illicit drug use among pregnant women (4.3 percent) was not significantly different from the 2003-2004 combined rate.

Race/Ethnicity

- Rates of current illicit drug use varied significantly among the major racial/ethnic groups in 2004. The rate was highest among persons reporting two or more races (13.3 percent) and American Indians or Alaska Natives (12.3 percent). Rates were 8.1 percent for whites, 7.2 percent for Hispanics, and 8.7 percent for blacks. Asians had the lowest rate at 3.1 percent.

- Among youths aged 12 to 17, the rate of current illicit drug use was highest among American Indians or Alaska Natives, more than twice the overall rate among youths (26.0 vs. 10.6 percent). Rates for other groups were 12.2 percent among those reporting two or more races, 11.1 percent among whites, 10.2 percent among Hispanics, 9.3 percent among blacks, and 6.0 percent among Asians.

- There were no statistically significant changes between 2003 and 2004 in the rates of current illicit drug use for any racial/ethnic subgroup. This was the case both for all persons aged 12 or older and for youths aged 12 to 17.

- The overall decline in current marijuana use among male youths from 2002 to 2004 was consistent across major racial/ethnic groups. Among white male youths, rates were 9.7, 9.5, and 8.5 percent in 2002, 2003, and 2004, respectively. Rates were 8.7, 6.8, and 7.6 percent for black male youths and 8.6, 7.2, and 7.3 percent among Hispanic male youths in those 3 years.

Education

- Illicit drug use rates in 2004 were correlated with educational status. Among adults aged 18 or older, the rate of current illicit drug use was lower among college graduates (5.6 percent) compared with those who did not graduate from high school (8.6 percent), high school graduates (7.8 percent), and those with some college (8.7 percent). However, adults who had completed 4 years of college were more likely to have tried illicit drugs in their lifetime when compared with adults who had not completed high school (51.8 vs. 37.2 percent).

College Students

- In the college-aged population (persons aged 18 to 22 years old), the rate of current illicit drug use was slightly lower among full-time undergraduate college students (20.2 percent) than among other persons aged 18 to 22 years, including part-time students, students in other grades, and nonstudents (22.3 percent). The rate of current illicit drug use among college students and other 18 to 22 year olds did not change between 2002 and 2003 or between 2003 and 2004.

Employment

- Current employment status was correlated with rates of illicit drug use in 2004. An estimated 19.2 percent of unemployed adults aged 18 or older were current illicit drug users compared with 8.0 percent of those employed full time and 10.3 percent of those employed part time. These rates are all similar to the corresponding rates in 2003.

- Although the rate of drug use was higher among unemployed persons compared with those from other employment groups, most drug users were employed. Of the 16.4 million illicit drug users aged 18 or older in 2004, 12.3 million (75.2 percent) were employed either full or part time.

Geographic Area

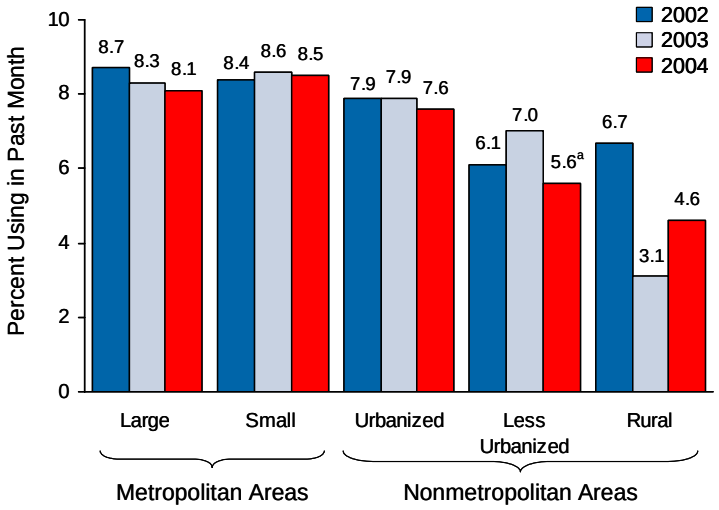
- Among persons aged 12 or older, the rate of current illicit drug use in 2004 was 8.9 percent in the West, 8.4 percent in the Northeast, 7.5 percent in the Midwest, and 7.3 percent in the South. Similar patterns were evident in 2003 and 2002.

- The rate of illicit drug use in metropolitan areas was higher than the rate in nonmetropolitan areas in 2004. Rates were 8.1 percent in large metropolitan counties, 8.5 percent in small metropolitan counties, and 6.3 percent in nonmetropolitan counties as a group (Figure 2.7). Within nonmetropolitan areas, counties that were urbanized had a rate of 7.6 percent, less urbanized counties had a rate of 5.6 percent, while completely rural counties had a rate of 4.6 percent.

- The rate of current illicit drug use in completely rural counties had declined between 2002 and 2003, from 6.7 to 3.1 percent, but was 4.6 percent in 2004. The rate in 2004 was not significantly different from the rate in 2003 or 2002.

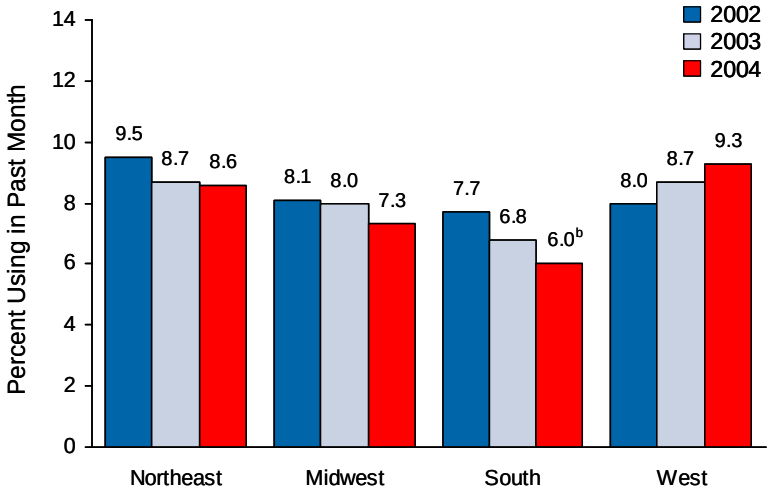
- Among youths aged 12 to 17, there was evidence of regional differences in trends of marijuana use between 2002 and 2004. Rates of current marijuana use were lower in 2004 than in 2002 in the Northeast, Midwest, and South (although the decrease was not statistically significant in the Northeast and Midwest) (Figure 2.8). However, in the West, rates were 8.0 percent in 2002, 8.7 percent in 2003, and 9.3 percent in 2004.

Figure 2.7 Past Month Illicit Drug Use among Persons Aged 12 or Older, by County Type: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Figure 2.8 Past Month Marijuana Use among Youths Aged 12 to 17, by Geographic Region: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Criminal Justice Populations

- In 2004, among the estimated 1.5 million adults aged 18 or older on parole or other supervised release from prison during the past year, 25.3 percent were current illicit drug users compared with 7.5 percent among adults not on parole or supervised release.

- Among the estimated 4.7 million adults on probation at some time in the past year, 26.2 percent reported current illicit drug use in 2004. This compares with a rate of 7.2 percent among adults not on probation in 2004.

Frequency of Use

- In 2004, 12.7 percent of past year marijuana users used marijuana on 300 or more days in the past 12 months. This translates into 3.2 million persons using marijuana on a daily or almost daily basis over a 12-month period, similar to the estimates in 2002 and 2003.

- The number of youths aged 12 to 17 using marijuana daily or almost daily in the past year declined from 358,000 in 2002 to 282,000 in 2003, but the estimate for 2004 was 342,000, which was not significantly different from the estimates for 2002 or 2003. Similarly, the number of youths using marijuana on 20 or more days in the past month declined from 603,000 in 2002 to 482,000 in 2003, but was 536,000 in 2004.

- The number of past month daily or almost daily cocaine users increased from 133,000 in 2003 to 263,000 in 2004. Most of these daily users were aged 26 or older (96,000 in 2003, 203,000 in 2004).

Association with Cigarette and Alcohol Use

- In 2004, the rate of current illicit drug use was approximately 8 times higher among youths aged 12 to 17 who smoked cigarettes (47.5 percent) than it was among youths who did not smoke cigarettes (5.6 percent).

- Illicit drug use also was associated with the level of alcohol use. Among youths aged 12 to 17 who were heavy drinkers (i.e., drank five or more drinks on the same occasion on at least 5 different days in the past 30 days), 65.6 percent also were current illicit drug users, whereas among nondrinkers, the rate was only 5.0 percent.

- Among youths who were both smokers and heavy drinkers, 70.1 percent used illicit drugs compared with only 3.5 percent among youths who did not drink or smoke.

Driving Under the Influence of Illicit Drugs

- In 2004, an estimated 10.6 million persons reported driving under the influence of an illicit drug during the past year. This corresponds to 4.4 percent of the population aged 12 or older, which was similar to the rates in 2002 (4.7 percent) and 2003 (4.6 percent). In 2004, the rate was highest (13.3 percent) among young adults aged 18 to 25, a decrease from 14.7 percent in 2002.

How Marijuana Is Obtained

- NSDUH includes questions asking marijuana users how, from whom, and from where they obtained the marijuana they used most recently. In 2004, most users (55.1 percent) got the drug for free or shared someone else's marijuana. About 40 percent of marijuana users bought it.

- Most marijuana users obtained the drug from a friend; 76.0 percent of those who bought their marijuana and 81.1 percent of those who obtained the drug for free had acquired it from a friend.

- More than half (52.7 percent) of users who bought their marijuana purchased it inside a home, apartment, or dorm. This also was the most common location for obtaining marijuana for free (65.1 percent).

- Among youths aged 12 to 17, 60.4 percent got the drug for free and 33.1 percent bought it. Among youths who bought their marijuana, 33.6 percent bought it inside a home, apartment, or dorm. Among youths who obtained their marijuana for free, 47.4 percent obtained it inside a home, apartment, or dorm.

- Among youths aged 12 to 17 who bought their marijuana, 10.5 percent obtained it inside a school building, and 4.0 percent bought it outside on school property.

Prior Marijuana Use History

- Among the 25.5 million past year users of marijuana in 2004, an estimated 2.1 million (8.4 percent) were first-time users during the past year and 19.2 million (75.5 percent) were "continuing" users (i.e., they had used during the prior year, which is the period from 12 to 23 months ago, and had continued to use in the past year). Additionally, 4.1 million (16.1 percent) "resumed" use in the past 12 months (i.e., they had used marijuana prior to 24 months ago, did not use during the prior year, but did use in the past 12 months). These percentages are similar to the percentages among past year marijuana users in 2003 (7.8 percent first-time users, 77.0 percent "continuing" users, and 15.1 percent "resumed" users).

- Among the 3.7 million past year marijuana users aged 12 to 17 in 2004, an estimated 1.3 million (34.2 percent) were first-time users, 2.1 million (57.0 percent) were "continuing" users, and 0.3 million (8.7 percent) had "resumed" their marijuana use in the past 12 months. These percentages are similar to the percentages among past year marijuana users in 2003.

- A measure of "discontinuation" of marijuana use is obtained as the percentage of those who did not use marijuana in the past 12 months among those who did use in the prior year. Based on this calculation, marijuana discontinuation rates in 2004 were 27.2 percent among persons aged 12 or older, and 19.9 percent among youths aged 12 to 17. These rates are essentially the same as the rates in 2003.

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. Prior to the administration of the alcohol use questions, an extensive list of examples of the kinds of beverages included is given to respondents. 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 as consumption. For this report, estimates for the prevalence of alcohol use are reported primarily at the following three levels for males and females and all ages:

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) at least once in the past 30 days (includes heavy use).

Heavy use - Five or more drinks on the same occasion on at least 5 different days in the past 30 days.

- About half (50.3 percent) of Americans aged 12 or older reported being current drinkers of alcohol in 2004. This translates to an estimated 121 million people and is similar to the 2002 and 2003 estimates.

- More than one fifth (22.8 percent) of persons aged 12 or older participated in binge drinking at least once in the 30 days prior to the survey in 2004. This translates to about 55 million people, comparable with the 2002 and 2003 estimates.

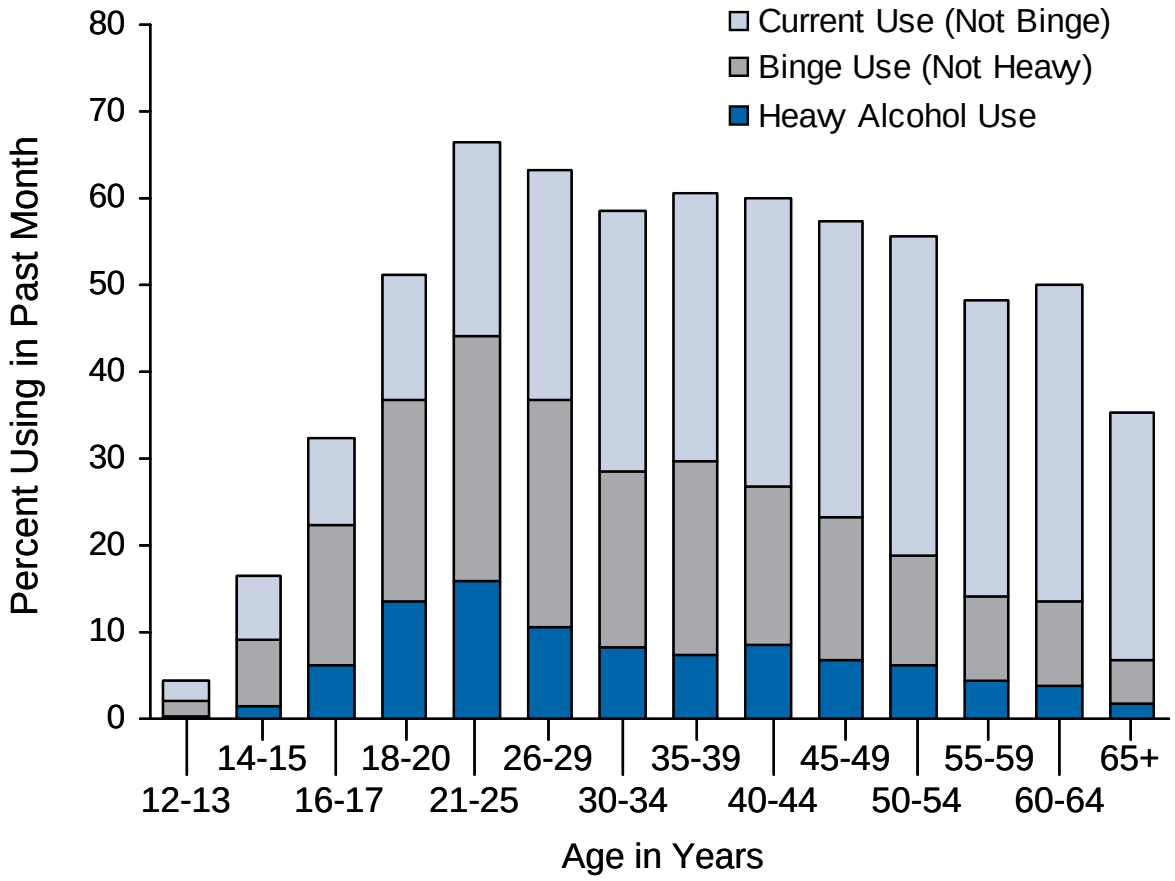
- In 2004, heavy drinking was reported by 6.9 percent of the population aged 12 or older, or 16.7 million people. These figures are similar to those of 2002 and 2003, when 6.7 and 6.8 percent, respectively, reported heavy drinking.

Age

- Among young people, the prevalence of current alcohol use in 2004 increased with age, from 2.3 percent at age 12 to 69.8 percent of persons at age 21 (Figure 3.1). Among older persons, the prevalence of alcohol use decreased with increasing age, from 63.2 percent among 26 to 29 year olds to 49.9 percent among 60 to 64 year olds and 35.3 percent among persons aged 65 or older.

- Rates of binge alcohol use also increased with age among young people, from 1.1 percent at age 12 to 26.6 percent at age 17. Binge alcohol use peaked at age 21 (48.2 percent) and then decreased beyond young adulthood (Figure 3.1).

Figure 3.1 Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Age: 2004



- Both binge and heavy drinking in 2004 were highest for the 18- to 25-year-old age group compared with other age groups, with the peak rate for both measures occurring at age 21. The rate of binge drinking was 41.2 percent for young adults aged 18 to 25 and 48.2 percent at age 21. Heavy alcohol use was reported by 15.1 percent of young adults aged 18 to 25 and by 19.2 percent of 21 year olds.

- Rates of binge and heavy drinking were relatively low among people aged 65 or older, with rates of 6.9 and 1.8 percent, respectively.

- Among youths aged 12 to 17, an estimated 17.6 percent used alcohol in the month prior to the survey interview (i.e., were current drinkers). An estimated 11.1 percent of youths aged 12 to 17 were binge drinkers, and 2.7 percent were heavy drinkers. These percentages for current, binge, and heavy drinking were similar to those obtained in 2002 and 2003.

Underage Alcohol Use

- In 2004, about 10.8 million underage persons aged 12 to 20 (28.7 percent) reported drinking alcohol in the past month. Nearly 7.4 million (19.6 percent) were binge drinkers, and 2.4 million (6.3 percent) were heavy drinkers. These figures were similar to the 2002 and 2003 estimates.

- More males than females aged 12 to 20 reported binge drinking (22.1 vs. 17.0 percent) and heavy drinking (8.2 vs. 4.3 percent) in 2004.

- Among persons aged 12 to 20, past month alcohol use rates ranged from 16.4 percent among Asians to 19.1 percent among blacks, 24.3 percent among American Indians or Alaska Natives, 26.4 percent among those reporting two or more races, 26.6 percent among Hispanics, and 32.6 percent among whites.

- Among persons aged 12 to 20, binge drinking was reported by 22.8 percent of whites, 19.0 percent of American Indians or Alaska Natives, 19.3 percent of Hispanics, and 18.0 percent of persons reporting two or more races. However, binge drinking was reported by only 9.9 percent of blacks and 8.0 percent of Asians. The binge drinking rate among underage Hispanics increased significantly from the 2003 rate of 16.9 percent.

- Across geographic regions in 2004, underage current alcohol use rates were higher in the Northeast (32.3 percent) and Midwest (31.4 percent) than in the South and the West (26.2 and 27.3 percent, respectively) (Figure 3.2). This pattern was similar to that in 2002 and 2003.

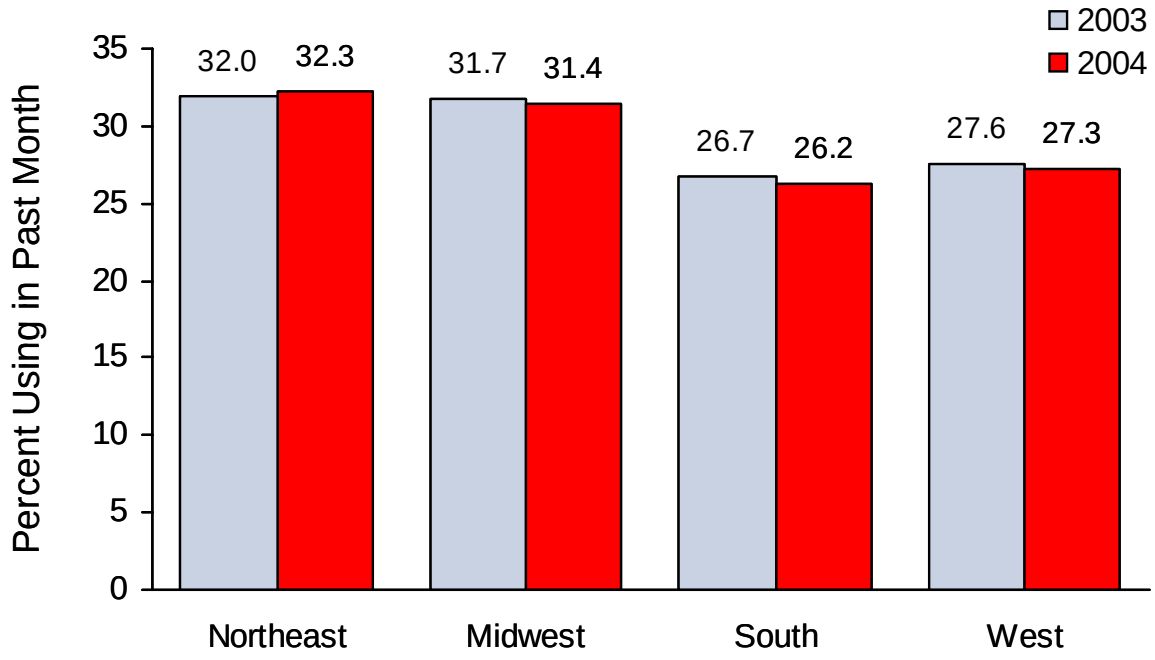
- In 2004, underage current alcohol use rates were higher in small metropolitan areas than in large metropolitan areas. Rates were 31.6 percent in small metropolitan areas, 27.0 percent in large metropolitan areas, and 28.8 percent in nonmetropolitan areas. The rate in nonmetropolitan rural areas was 28.7 percent.

Gender

- In general, males were more likely than females to report past month alcohol use. In 2004, 56.9 percent of males aged 12 or older were current drinkers compared with 44.0 percent of females. However, among youths aged 12 to 17, the rates of past month alcohol use were not significantly different (17.2 percent for males vs. 18.0 percent for females).

- Among young adults aged 18 to 25, an estimated 56.0 percent of females reported current drinking in 2004, unchanged from 2003. However, 64.9 percent of 18- to 25-year-old males reported current alcohol use in 2004, which was 2 percent lower than the 2003 estimate of 66.9 percent, but not significantly lower than the 2002 estimate of 65.2 percent.

Figure 3.2 Past Month Alcohol Use among Persons Aged 12 to 20, by Geographic Region: 2003 and 2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

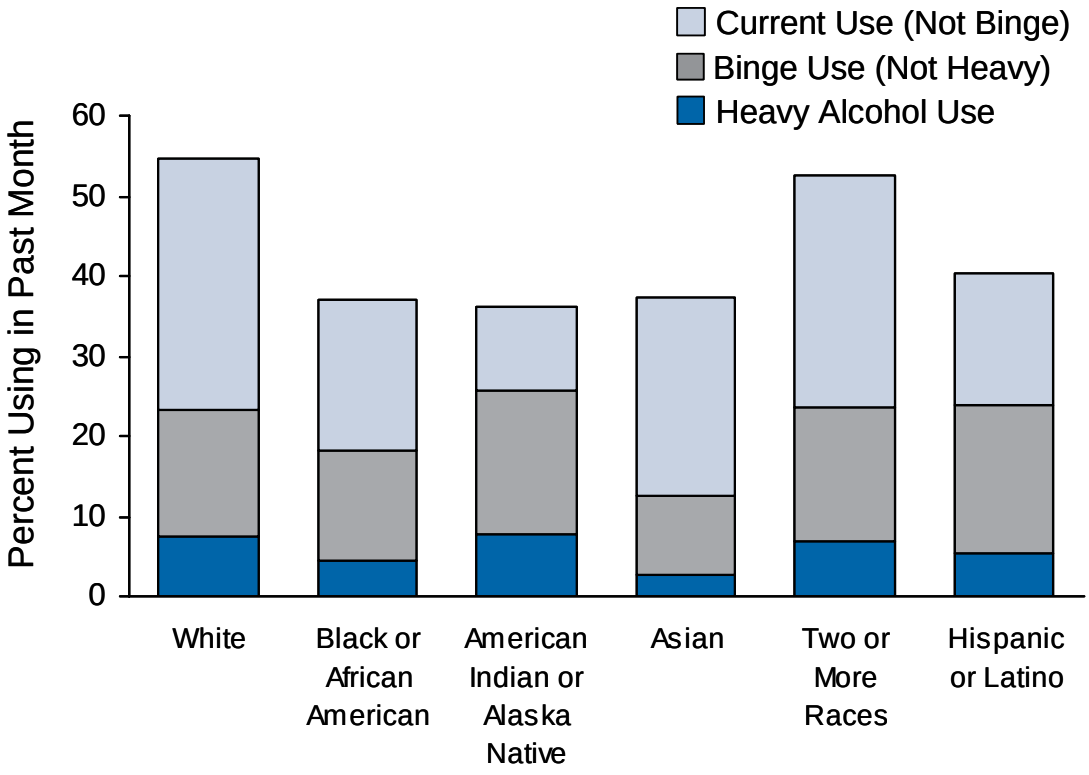
Pregnant Women

- Among pregnant women aged 15 to 44, an estimated 11.2 percent reported past month alcohol use and 4.5 percent reported past month binge drinking. These rates were significantly lower than the rates for nonpregnant women of that age (52.8 and 23.3 percent, respectively). Heavy alcohol use was relatively rare (0.5 percent) among pregnant women. These estimates were based on data averaged over 2003 and 2004.

Race/Ethnicity

- Among persons aged 12 or older, whites and persons reporting two or more races were more likely than other racial/ethnic groups to report current use of alcohol in 2004. An estimated 55.2 percent of whites and 52.4 percent of persons reporting two or more races used alcohol in the past month (Figure 3.3). The rates were 40.2 percent for Hispanics, 37.4 percent for Asians, 37.1 percent for blacks, and 36.2 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: 2004



Note: Due to low precision, estimates for Native Hawaiians or Other Pacific Islanders are not shown.

- The rate of binge alcohol use was lowest among Asians (12.4 percent). Rates for other racial/ethnic groups were 18.3 percent for blacks, 23.8 percent for whites, 24.0 percent for Hispanics, and 25.8 percent for American Indians or Alaska Natives.

- Among youths aged 12 to 17 in 2004, blacks and Asians reported the lowest rate of past month alcohol use. Only 9.4 percent of Asian youths and 9.8 percent of black youths were current drinkers, while rates were at or above 18 percent for whites, American Indians or Alaska Natives, Hispanics, and youths reporting two or more races.

Education

- The rate of past month alcohol use increased with increasing levels of education. Among adults aged 18 or older with less than a high school education, 36.4 percent were current drinkers in 2004, while 67.6 percent of college graduates were current drinkers.

- Rates of heavy drinking increased among college graduates from 2003 to 2004 (6.4 percent in 2004 vs. 5.3 percent in 2003) and decreased among adults with less than a high school education (6.2 percent in 2004 vs. 7.9 percent in 2003). Binge drinking also increased among college graduates, from 20.2 percent in 2003 to 21.9 percent in 2004.

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 enrolled in college) to use alcohol, binge drink, and drink heavily. Past month alcohol use was reported by 62.4 percent of full-time college students compared with 55.7 percent of persons aged 18 to 22 who were not currently enrolled full time. Binge and heavy use rates for college students were 43.4 and 18.6 percent, respectively, compared with 39.4 and 13.5 percent, respectively, for other persons aged 18 to 22.

- There were no significant changes in rates of past month, binge, or heavy alcohol use between 2003 and 2004 among full-time college students aged 18 to 22.

- Among persons aged 18 to 22, full-time college students were more likely to be heavy drinkers than others (18.6 vs. 13.5 percent) (Figure 3.4). However, at later ages (26 or older), those who had graduated from college had rates of heavy drinking similar to those who had not graduated from college (i.e., those who had some college or less) (5.5 vs. 6.3 percent).

Employment

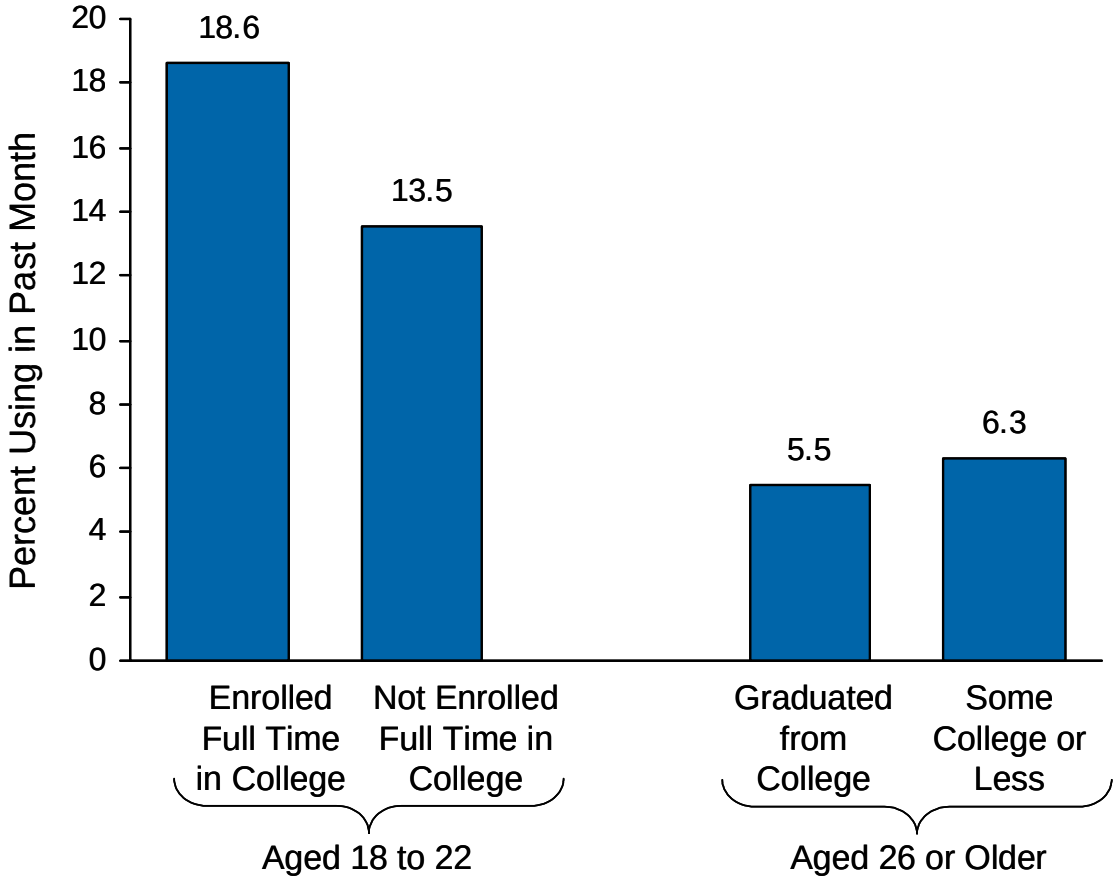
- Rates of current alcohol use were 61.3 percent for full-time employed adults aged 18 or older in 2004 compared with 56.6 percent of their unemployed peers (Figure 3.5). However, the patterns were different for binge and heavy alcohol use; rates were higher for unemployed persons (34.0 and 13.6 percent, respectively, for binge and heavy use) than for full-time employed persons (29.2 and 8.9 percent, respectively).

- Most binge and heavy alcohol users were employed. Among the 51.9 million adult binge drinkers in 2004, 41.2 million (79.3 percent) were employed either full or part time. Similarly, 12.7 million (79.5 percent) of the 16.0 million adult heavy drinkers were employed.

Geographic Area

- The rate of past month alcohol use for people aged 12 or older in 2004 was lower in the South (45.1 percent) than in the Northeast (55.5 percent), Midwest (53.7 percent), or West (50.8 percent). This pattern was similar to that in 2002 and 2003.

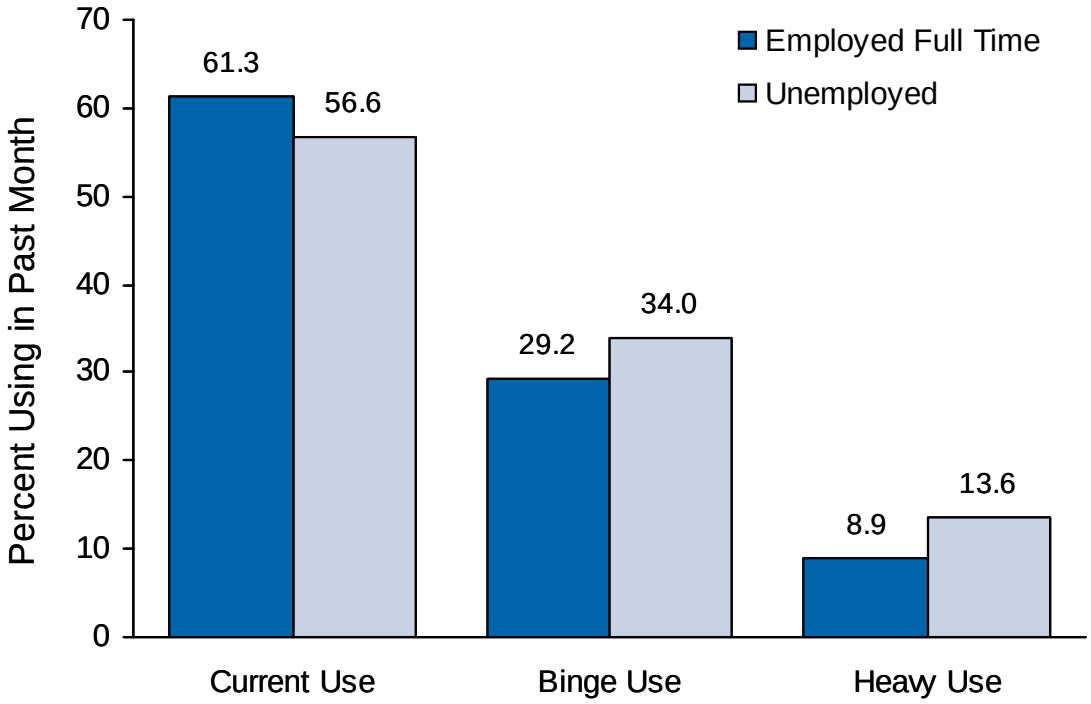
Figure 3.4 Heavy Alcohol Use among Adults Aged 18 or Older, by College Attendance and Age: 2004



- Among people aged 12 or older, the rate of past month alcohol use in large metropolitan areas was 52.7 percent compared with 49.7 percent in small metropolitan areas and 43.7 percent in nonmetropolitan areas. There was less variation across county types in rates of binge and heavy drinking. The rate of heavy alcohol use was 6.4 percent in large metropolitan areas, 7.9 percent in small metropolitan areas, and 7.0 percent in nonmetropolitan areas.

- Among youths aged 12 to 17, the rate of past month binge alcohol use varied by population density. In nonmetropolitan areas, the rate was 13.4 percent compared with 11.7 percent in small metropolitan areas and 10.0 percent in large metropolitan areas. In completely rural counties of nonmetropolitan areas, 16.9 percent of youths reported binge drinking.

Figure 3.5 Current, Binge, and Heavy Alcohol Use among Adults Aged 18 or Older, by Employment Status: 2004



Association with Illicit Drug and Tobacco Use

- The level of alcohol use was strongly associated with illicit drug use in 2004. Among the 16.7 million heavy drinkers aged 12 or older, 32.2 percent were current illicit drug users. Persons who did not use alcohol in the past month were less likely to have used illicit drugs in the past month (3.0 percent) than those who reported current, binge, or heavy use of alcohol in the past month.

- Drinking levels also were associated with tobacco use. Among heavy alcohol users aged 12 or older, 61.2 percent smoked cigarettes in the past month, while only 21.1 percent of non-binge current drinkers and 16.3 percent of persons who did not drink alcohol in the past month were current smokers. Smokeless tobacco and cigar use also were more prevalent among heavy drinkers than among non-binge drinkers and nondrinkers.

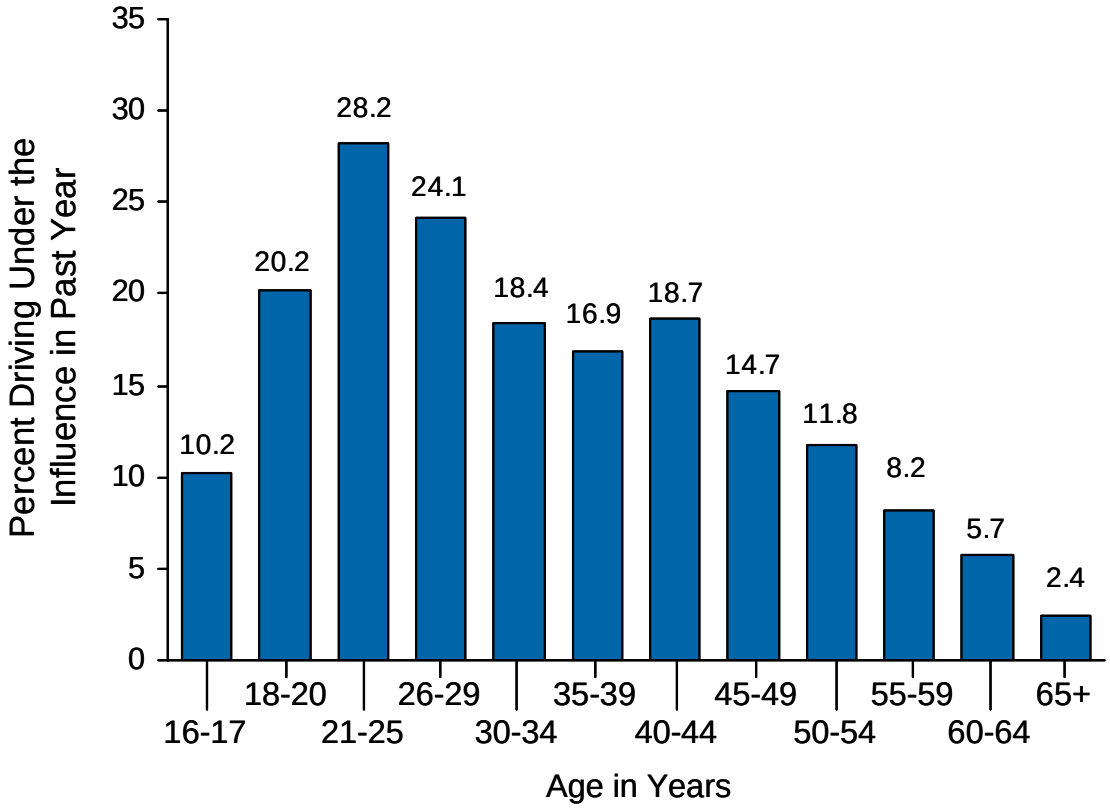
Driving Under the Influence of Alcohol

- In 2004, an estimated 13.5 percent of persons aged 12 or older drove under the influence of alcohol at least once in the past year. This percentage was similar to that reported in 2003. The 2004 estimate corresponds to approximately 32.5 million persons.

- Driving under the influence varied by age group in 2004. An estimated 10.2 percent of 16 or 17 year olds, 20.2 percent of 18 to 20 year olds, and 28.2 percent of 21 to 25 year olds reported driving under the influence of alcohol (Figure 3.6). Beyond age 25, these rates declined with increasing age.

- Males were nearly twice as likely as females (17.9 vs. 9.4 percent, respectively) to drive under the influence of alcohol.

Figure 3.6 Driving Under the Influence of Alcohol in the Past Year among Persons Aged 16 or Older, by Age: 2004



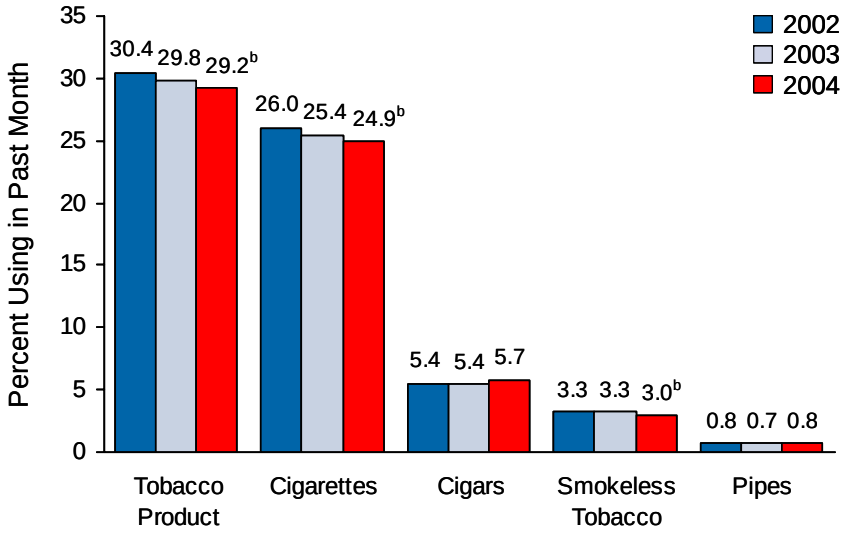
4. Tobacco Use

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." Questions to determine nicotine dependence among current cigarette smokers also are included in NSDUH. Respondents are considered to be dependent on nicotine if they meet the criteria for either the Nicotine Dependence Syndrome Scale or the Fagerstrom Test of Nicotine Dependence (see Appendix B, Section B.4.2, of this report).

- An estimated 70.3 million Americans aged 12 or older reported current (past month) use of a tobacco product in 2004. This represents 29.2 percent of the population in that age range. An estimated 59.9 million persons (24.9 percent of the population) were current cigarette smokers; 13.7 million (5.7 percent) smoked cigars; 7.2 million (3.0 percent) used smokeless tobacco; and 1.8 million (0.8 percent) smoked tobacco in pipes (Figure 4.1).

- These rates of current use were unchanged between 2003 and 2004, but between 2002 and 2004 past month use of a tobacco product declined from 30.4 to 29.2 percent, past month cigarette use decreased from 26.0 to 24.9 percent, and past month smokeless tobacco use decreased from 3.3 to 3.0 percent.

Figure 4.1 Past Month Tobacco Use among Persons Aged 12 or Older: 2002-2004

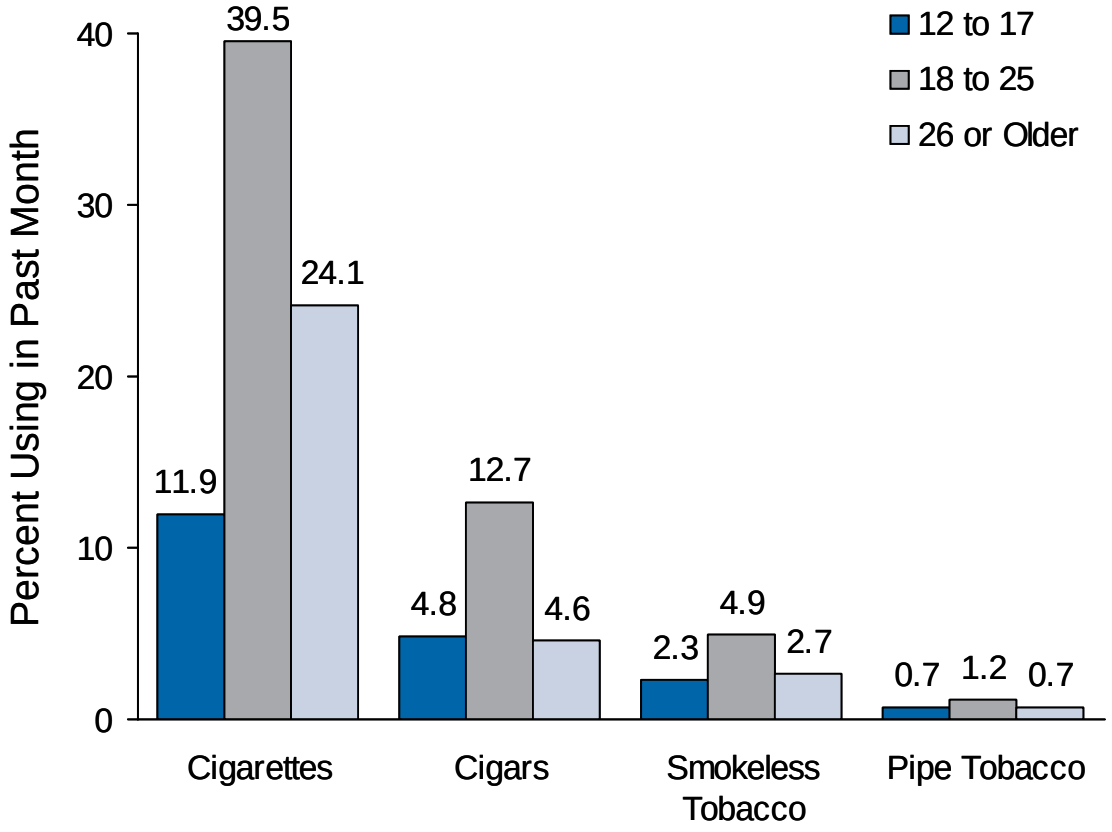


[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Age

- Among age groups, young adults aged 18 to 25 had the highest rate of current use of a tobacco product (44.6 percent) and of each specific product. In 2004, the rates of past month use among young adults were 39.5 percent for cigarettes, 12.7 percent for cigars, 4.9 percent for smokeless tobacco, and 1.2 percent for pipe tobacco (Figure 4.2). Current use of cigarettes and smokeless tobacco by young adults did not change significantly between 2002 and 2004. Use of pipe tobacco by young adults increased from 0.9 percent in 2003 to 1.2 percent in 2004, similar to its rate in 2002 (1.1 percent).

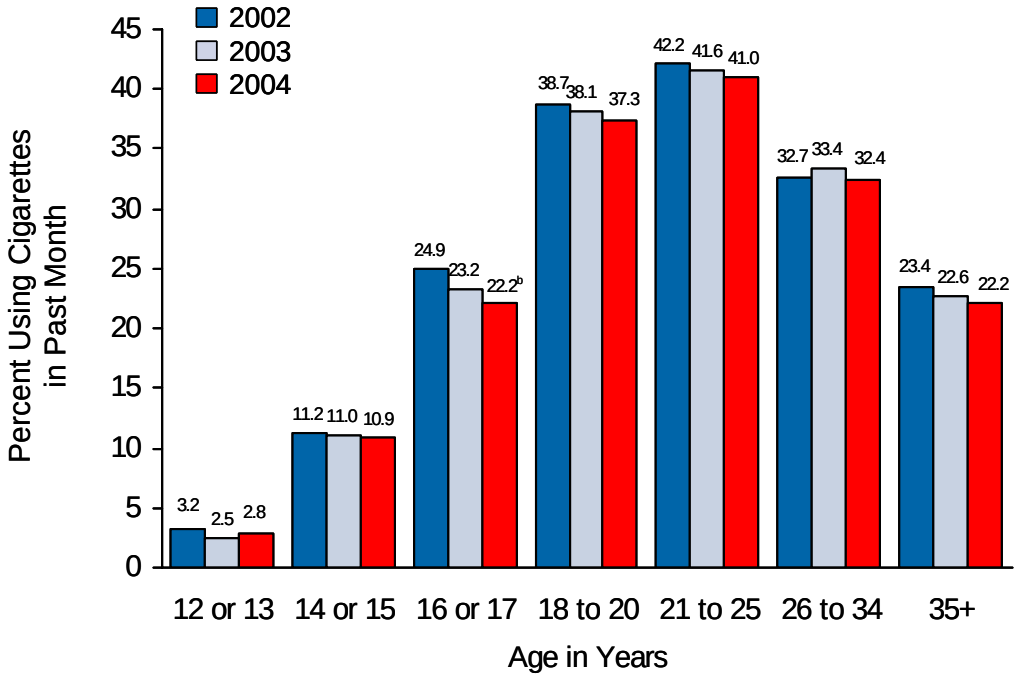
Figure 4.2 Past Month Use of Tobacco Products, by Age: 2004



- Among youths aged 12 to 17 in 2004, an estimated 3.6 million (14.4 percent) used a tobacco product in the past month, and 3.0 million (11.9 percent) used cigarettes. The rate of past month cigarette use among 12 to 17 year olds declined from 13.0 percent in 2002 to 11.9 percent in 2004 (the rate was 12.2 percent in 2003). Cigar use in the past month was reported by 4.8 percent of youths in 2004, and past month smokeless tobacco use was reported by 2.3 percent; these rates were unchanged from 2002 and 2003.

- Current cigarette use increased with age up to the mid-20s then declined. An estimated 2.8 percent of 12 or 13 year olds, 10.9 percent of 14 or 15 year olds, and 22.2 percent of 16 or 17 year olds were current cigarette smokers in 2004 (Figure 4.3). Current cigarette use peaked at 41.0 percent in 2004 among young adults aged 21 to 25. Less than a quarter (22.2 percent) of persons aged 35 or older in 2004 smoked cigarettes in the past month. Rates of cigarette smoking were mostly stable across the 3 survey years within these age groups, with one exception. Among youths aged 16 or 17, the rate of current cigarette smoking declined from 24.9 percent in 2002 to 22.2 percent in 2004.

Figure 4.3 Past Month Cigarette Use, by Age: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Cigar smoking in the past month increased from 11.4 percent in 2003 to 12.7 percent in 2004 among young adults aged 18 to 25. Cigar smoking remained stable for youths aged 12 to 17 and adults aged 26 or older (4.8 and 4.6 percent, respectively).

- Smokeless tobacco use in the past month declined from 3.2 percent in 2003 to 2.7 percent in 2004 among adults aged 26 or older. Smokeless tobacco use remained stable among youths aged 12 to 17 and among young adults aged 18 to 25 (2.3 and 4.9 percent, respectively).

Gender

- In 2004, current use of a tobacco product among persons aged 12 or older was reported by a higher percentage of males (35.7 percent) than females (23.1 percent). Males also had higher rates of past month use of each specific tobacco product compared with females: cigarette smoking (27.7 percent of males vs. 22.3 percent of females); cigar smoking (9.8 percent of males vs. 1.9 percent of females); and use of smokeless tobacco (5.8 percent of males vs. 0.3 percent of females).

- Among youths aged 12 to 17, current cigarette smoking in 2004 was more prevalent among females (12.5 percent) than males (11.3 percent). The rate for females in this age group declined from 13.6 percent in 2002 to 12.5 percent in 2003, then remained unchanged in 2004. Among 12- to 17-year-old males, the rate of current cigarette use was 12.3 percent in 2002, 11.9 percent in 2003, and 11.3 percent in 2004 (no significant change).

- Current cigar smoking among males increased from 9.0 percent in 2003 to 9.8 percent in 2004 among those aged 12 or older and from 17.3 to 19.7 percent among those aged 18 to 25.

Pregnant Women

- Among women aged 15 to 44, combined data for 2003 and 2004 indicated that 18.0 percent of those who were pregnant smoked cigarettes in the past month compared with 30.0 percent of those who were not pregnant. Rates of past month cigarette smoking were lower for pregnant than nonpregnant women among those aged 26 to 44 (11.7 vs. 29.1 percent) and among those aged 18 to 25 (28.0 vs. 36.3 percent) (Figure 4.4). However, among those aged 15 to 17, the rate of cigarette smoking for pregnant women was higher than for nonpregnant women (26.0 vs. 19.6 percent), although the difference was not significant. Similar patterns were observed in the combined data for 2002 and 2003.

Race/Ethnicity

- In 2004, among persons aged 12 or older, 31.4 percent of whites, 27.3 percent of blacks, 33.8 percent of American Indians or Alaska Natives, and 23.3 percent of Hispanics reported that they had used a tobacco product in the past month. Tobacco use was highest for persons who reported two or more races (41.3 percent) and lowest for Asians (11.7 percent). There were no statistically significant changes in past year or past month tobacco use between 2003 and 2004 among any of these groups.

- In 2004, current cigarette smoking among youths aged 12 to 17 and young adults aged 18 to 25 was more prevalent among whites than blacks (14.4 vs. 6.0 percent for 12 to 17 year olds and 45.1 vs. 28.8 percent for 18 to 25 year olds) (Figure 4.5). Among adults aged 26 or older, however, whites and blacks used cigarettes at about the same rate (25.0 and 25.7 percent, respectively). Within each of the three age groups, current cigarette use was less prevalent among Hispanics than among non-Hispanic whites.

Figure 4.4 Current Cigarette Use among Women Aged 15 to 44, by Age and Pregnancy Status, 2003-2004 Combined

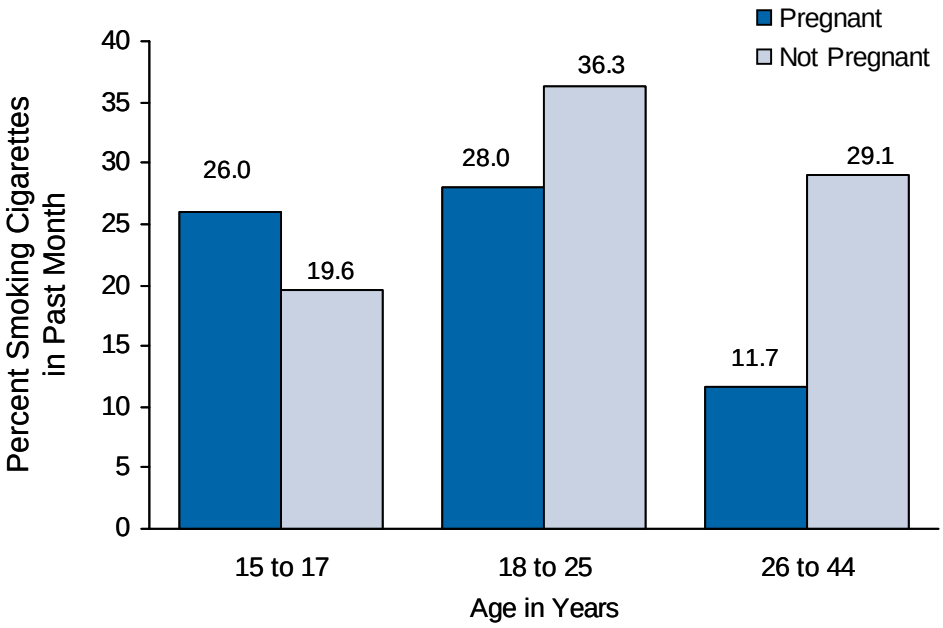
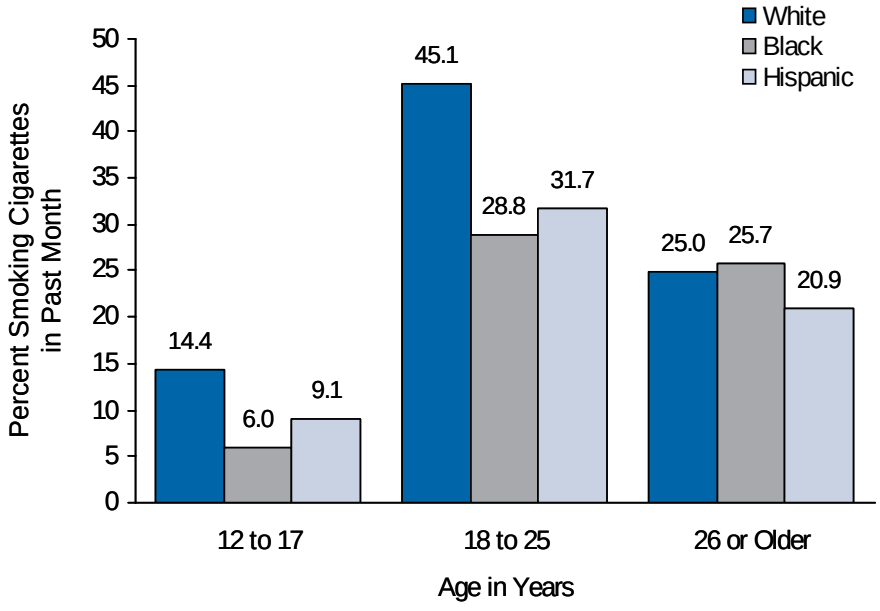


Figure 4.5 Current Cigarette Use, by Race/Ethnicity and Age: 2004



- Current use of smokeless tobacco declined from 8.4 percent in 2003 to 3.6 percent in 2004 among American Indians or Alaska Natives aged 18 or older. In the same age group, past month cigar smoking increased from 5.4 to 6.1 percent among whites, but declined from 7.8 to 6.4 percent among blacks. The rate of current cigar smoking among Hispanics remained stable.

- The 2-year moving average prevalence rates for racial/ethnic subgroups indicate that current cigarette smoking declined from 15.9 percent in the combined years for 2002-2003 to 11.1 percent in 2003-2004 among Filipinos aged 12 or older. Across Asian national groups, cigarette use in 2003-2004 was highest among Koreans (19.9 percent) and lowest among persons who identified themselves as Chinese (7.1 percent). Across Hispanic or Latino subgroups, Central or South Americans had the lowest rate of cigarette smoking (17.6 percent) and Puerto Ricans had the highest rate (27.8 percent).

Education

- Cigarette smoking tended to be less prevalent among persons with more education. Among adults aged 18 or older, current cigarette use in 2004 was reported by 34.8 percent of those who had not completed high school, 30.4 percent of high school graduates who did not attend college, 29.0 percent of persons with some college, and 13.6 percent of college graduates.

- In 2004, the use of smokeless tobacco in the past month was reported by 3.8 percent of persons aged 18 or older who had not completed high school and 3.7 percent of those who completed high school but did not attend college; the prevalence was lower among college graduates (2.2 percent). These rates were not significantly different from those in 2002 and 2003. However, among persons aged 18 or older who had completed some college but did not graduate, there was a significant decrease in the past month use of smokeless tobacco between 2002 (3.3 percent) and 2004 (2.6 percent).

College Students

- Among young adults 18 to 22 years old, full-time college students were less likely to be current cigarette or cigar smokers than their peers who were not enrolled full time in college. Cigarette use in the past month in 2004 was reported by 30.5 percent of full-time college students compared with 44.7 percent of those not enrolled full time.

- In 2004, past month cigar smoking was less common among male full-time college students aged 18 to 22 (19.3 percent) than among their peers not enrolled full time in college (22.3 percent).

- Past month smokeless tobacco use was more common in 2004 among male full-time college students aged 18 to 22 than among their peers not enrolled full time in college (11.1 vs. 8.7 percent).

Employment

- In 2004, current cigarette smoking was more common among unemployed adults aged 18 or older than among adults who were working full time or part time (44.1 vs. 28.7 and 25.2 percent, respectively). Cigar smoking followed a similar pattern, with 11.7 percent of unemployed adults reporting past month use compared with 6.9 percent of full-time workers and 4.9 percent of part-time workers.

- Rates of current cigarette use among adults aged 18 or older decreased among unemployed persons between 2002 and 2003 and between 2002 and 2004; rates were 49.8 percent in 2002, 42.7 percent in 2003, and 44.1 percent in 2004. Among adults who were employed full time, current use of smokeless tobacco decreased from 4.5 percent in 2002 and 2003 to 3.7 percent in 2004.

Geographic Area and County Type

- Current cigarette smoking among persons aged 12 or older was lowest in the West (19.7 percent) and highest in the Midwest (27.8 percent) and the South (26.8 percent). Use of smokeless tobacco was highest in the South (4.1 percent) and lowest in the Northeast (1.5 percent). Cigar smoking, like cigarette use, was highest in the Midwest (6.9 percent) and lowest in the West (4.8 percent).

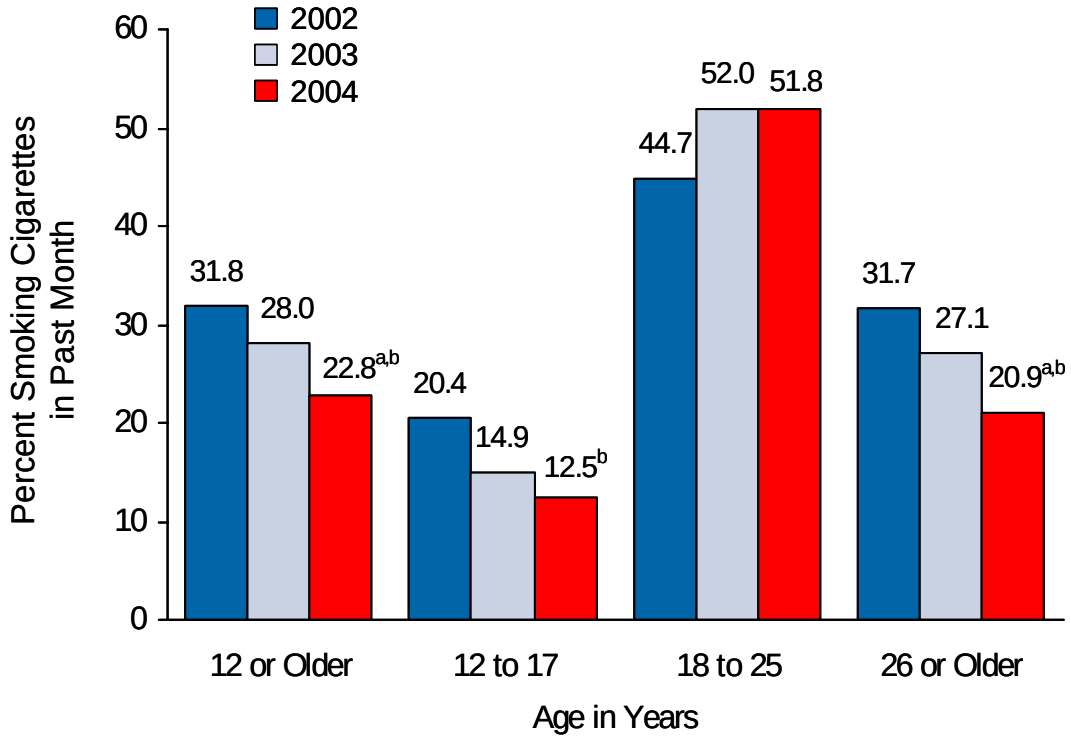
- The rate of current cigarette smoking among persons aged 12 or older declined from 22.6 percent in 2002 and 21.5 percent in 2003 to 19.7 percent in 2004 in the West. In the Midwest, the prevalence of current cigar smoking increased from 5.6 percent in 2002 and 5.8 percent in 2003 to 6.9 percent in 2004.

- Among persons aged 12 or older, the rate of current cigarette use was inversely related to county population density in 2004, as it had been in 2003. In 2004, the rates of cigarette smoking were 28.4 percent in nonmetropolitan areas, 26.0 percent in small metropolitan areas, and 23.2 percent in large metropolitan areas. However, the lowest rate in 2004, 22.8 percent, was found for completely rural counties, and the highest, 29.3 percent, was in the urbanized portions of nonmetropolitan areas.

- Use of smokeless tobacco in the past month among persons aged 12 or older was highest in completely rural counties (8.0 percent) and lowest in large metropolitan areas (1.7 percent).

- In completely rural nonmetropolitan counties, current cigarette use among persons aged 12 or older declined from 31.8 percent in 2002 and 28.0 percent in 2003 to 22.8 percent in 2004 (Figure 4.6). Significant decreases between 2002 and 2004 also were observed for youths aged 12 to 17 and for adults aged 26 or older.

Figure 4.6 Past Month Cigarette Use among Persons in Completely Rural Counties, by Age: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Frequency of Cigarette Use

- An estimated 93.4 million Americans aged 12 or older indicated in 2004 that they had smoked cigarettes daily at some time in their lives. This is 38.8 percent of the population in that age group, a decrease from 39.9 percent in 2003.

- Among the 59.9 million Americans aged 12 or older who smoked cigarettes in the past month, 62.3 percent (37.3 million persons) smoked on all 30 days. In 2004, daily smoking in the past month was reported by an estimated 828,000 youths aged 12 to 17 (27.6 percent of past month cigarette smokers in that age group). Over half (51.6 percent) of past month smokers aged 18 to 25 smoked daily in that period, and 67.8 percent of past month cigarette smokers aged 26 or older were daily smokers.

- In 2004, cigarette smokers averaged around 13 cigarettes per day on the days when they smoked in the past month. The average number of cigarettes per smoking day increased steadily with age from 2 per day among 12 year olds to 6 per day among 17 year olds, 9 per day among 24 year olds, 12 per day among those aged 30 to 34, and 17 per day for 40 to 49 year olds. It peaked at 18 or 19 cigarettes per day on smoking days among persons aged 50 to 64.

Association with Illicit Drug and Alcohol Use

- Use of illicit drugs and alcohol was more common among current cigarette smokers than among nonsmokers in 2004 as in previous years. Among persons aged 12 or older, 20.0 percent of past month cigarette smokers reported current use of an illicit drug compared with 3.9 percent of persons who were not current cigarette smokers. Past month alcohol use was reported by 67.5 percent of current cigarette smokers compared with 44.6 percent of those who did not use cigarettes in the past month. The association also was found with binge drinking (44.2 percent of current cigarette users vs. 15.6 percent of current nonusers) and heavy drinking (17.0 vs. 3.6 percent, respectively).

- Similarly, use of tobacco products other than cigarettes also was higher among current cigarette smokers than among current nonsmokers. Approximately 1 in 20 current cigarette users (4.8 percent) reported using smokeless tobacco in the past month compared with 2.4 percent of nonsmokers. Moreover, 13.0 percent of current cigarette smokers also smoked cigars in the past month compared with 3.3 percent of those who did not smoke cigarettes.

Usual Brand of Cigarettes Smoked

- In 2004, the brands of cigarettes most often smoked during the past month among current cigarette smokers aged 12 or older were Marlboro (43.3 percent), Newport (11.5 percent), and Camel (7.3 percent). These were also the most commonly reported brands in 2002 and 2003.

- The proportion of past month cigarette smokers aged 12 or older using Marlboro increased from 41.3 percent in both 2002 and 2003 to 43.3 percent in 2004. Doral use declined from 4.8 percent of cigarette smokers in 2003 to 3.3 percent in 2004. Winston use, which had been at 3.0 percent in 2002 and 2003, declined to 2.3 percent in 2004.

- Among current cigarette smokers aged 12 to 17, an estimated 49.3 percent smoked Marlboro most often in the past month. Around one quarter (23.9 percent) smoked Newport, and 9.6 percent smoked Camel.

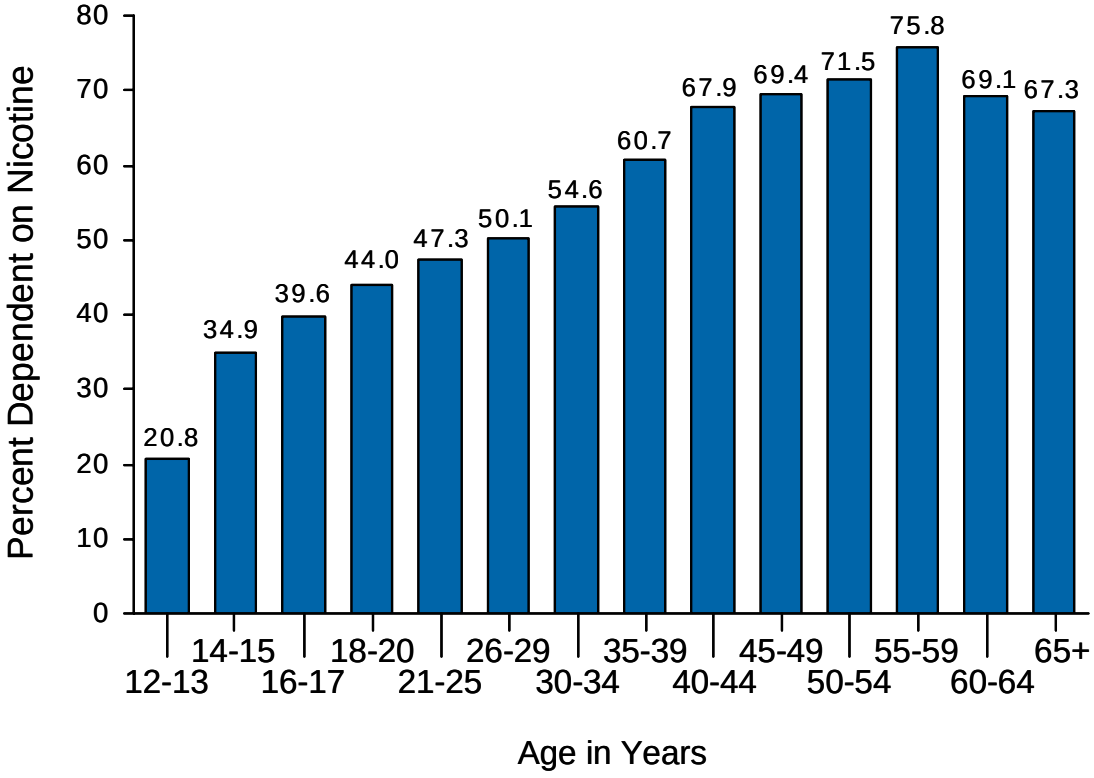
- As in 2002 and 2003, black and white past month cigarette smokers reported using different brands in 2004. Among black smokers, 53.0 percent smoked Newport most often in the past month, followed by Kool (9.8 percent), Marlboro (6.9 percent), and Salem (5.2 percent). Among white cigarette smokers, Marlboro ranked first (45.4 percent), followed by Camel (8.4 percent), Newport (5.2 percent), and Basic (5.1 percent). Among Hispanic past month smokers, Marlboro ranked first with 61.8 percent, Newport second (13.4 percent), and Camel third (5.0 percent).

Nicotine Dependence

- In 2004, an estimated 35.3 million Americans aged 12 or older met the criteria for nicotine dependence in the past month based on their cigarette use. This represents 14.7 percent of the population and 58.9 percent of the estimated 59.9 million past month cigarette users. Among 12 to 17 year olds, 1.1 million (4.4 percent) were nicotine-dependent cigarette smokers. This represents 36.7 percent of the 3.0 million past month cigarette users among youths. The population prevalence of nicotine dependence was 18.2 percent for young adults aged 18 to 25 and 15.5 percent among adults aged 26 or older.

- Among current cigarette smokers, the proportion dependent on nicotine increased with age (Figure 4.7). At age 14 or 15, for example, 34.9 percent of past month cigarette smokers were dependent on nicotine. At age 18 to 20, 44.0 percent were dependent, at age 26 to 29, 50.1 percent were dependent, and among those aged 55 to 59, 75.8 percent were dependent on nicotine. These rates did not change significantly from 2003 to 2004.

Figure 4.7 Nicotine Dependence among Past Month Cigarette Smokers, by Age: 2004



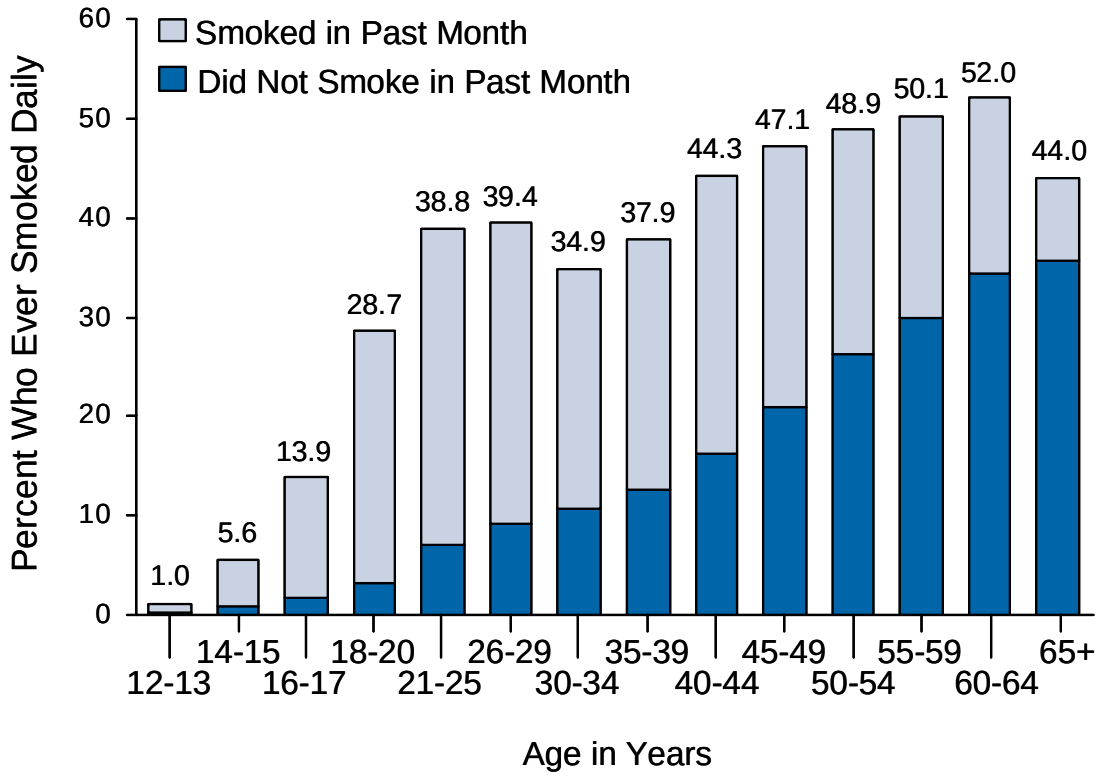
- The rate of dependence was higher for those who started smoking at an earlier age than for those who initiated cigarette use later in life. Among current smokers aged 18 or older, 64.8 percent of those who began smoking cigarettes at age 14 or earlier were dependent in the past month compared with 53.1 percent of those who started smoking cigarettes after age 17.

Discontinuation of Cigarette Use among Lifetime Daily Smokers

- A measure of "quitting" or "discontinuation" of cigarette smoking is the percentage of persons not using cigarettes in the past month among those who have ever smoked cigarettes daily in their lifetime. In 2004, an estimated 46.2 percent of the estimated 93.4 million lifetime daily smokers aged 12 or older had discontinued cigarette use as evidenced by not smoking cigarettes in the past month.

- The proportion of smokers who quit smoking cigarettes generally increased with age (Figure 4.8). In 2004, the proportion of lifetime daily cigarette smokers not smoking in the past month was 23.4 percent for those aged 26 to 29, 36.9 percent for those aged 40 to 44, 66.3 percent for those aged 60 to 64, and 81.0 percent for those aged 65 or older.

Figure 4.8 Lifetime Daily Cigarette Smoking by Current Smoking Status, by Age: 2004



- Although whites were more likely than blacks to have ever been daily cigarette smokers (44.3 vs. 30.2 percent), whites who had been daily cigarette smokers also were more likely than their black counterparts to have quit smoking cigarettes (47.7 vs. 38.9 percent). Asians were the racial/ethnic group most likely to have quit smoking cigarettes (55.5 percent of lifetime daily smokers).

5. Initiation of Substance Use

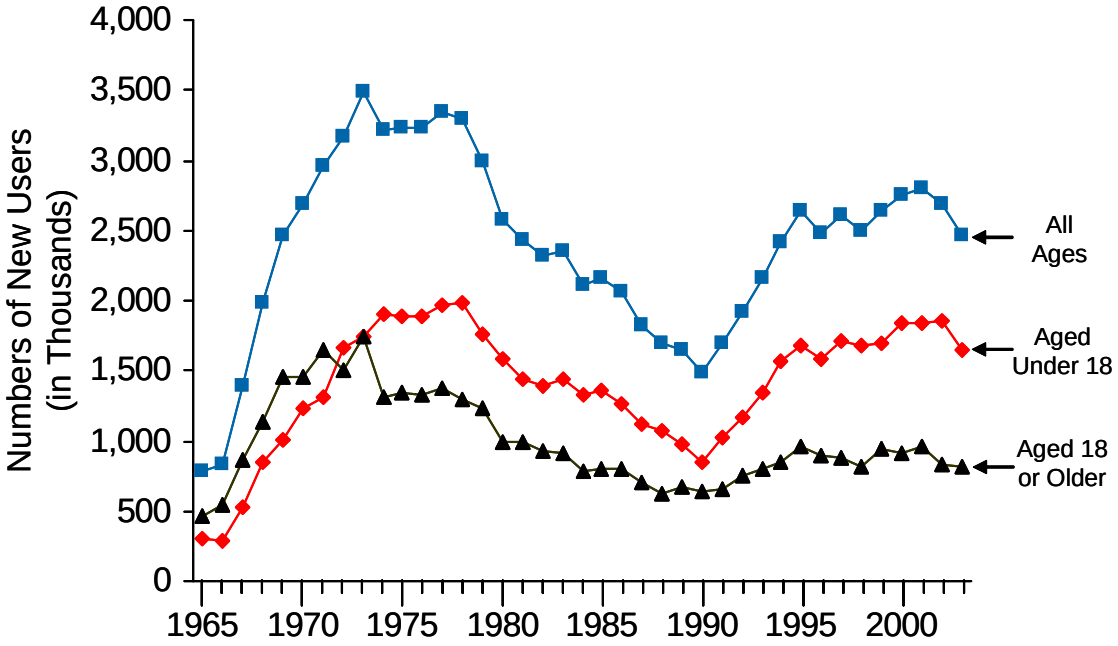
Information on substance use initiation, also known as incidence or first-time use, is important for policymakers and researchers. Measures of initiation are often leading indicators of emerging patterns of substance use. They provide valuable information that can be used in the assessment of the effectiveness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

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 from 1965 to 2003 are tabulated, based on combined 2002-2004 NSDUH data, to show long-term trends in initiation.

Estimates for the annual number of new users of marijuana clearly show the increases in initiation among adults and youths during the late 1960s and early 1970s, declines during the 1980s, and increases among youths during the early 1990s (Figure 5.1). However, recent methodological assessments of these long-term trend estimates based on calendar year of initiation have suggested that they are biased, due to suspected recall errors that seem to increase with the length of recall (Gfroerer et al., 2004). Evidence of 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, in press).

Therefore, this report introduces a new approach for studying substance use initiation based on information on use within the past 12 months from NSDUH. Estimates discussed in this chapter describe initiation of substance use that occurred in the 12 months prior to the interview, and individuals who initiated use within the past 12 months are defined as recent initiates. Estimates for each year are produced independently based on the data from the survey conducted that year. This should improve the comparability of estimates across years, giving a more accurate assessment of recent trends. Although this approach will not eliminate reporting biases, it 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 drugs. See Section B.4.4 in Appendix B for further discussion of methods and bias in initiation estimates.

Figure 5.1 Annual Numbers of New Users of Marijuana: 1965-2003



Illicit Drugs

- In 2004, an estimated 2.8 million persons used an illicit drug for the first time within the past 12 months—approximately 7,000 per day. This was not significantly different from the number in 2002 (2.7 million) or 2003 (2.6 million). Most initiates (58.1 percent) were younger than age 18 when they first used, and the majority of new users (57.9 percent) were female. The average age at initiation was 20.1 years.

- The drug category with the largest number of recent initiates was nonmedical use of pain relievers (2.4 million), followed by marijuana (2.1 million), nonmedical use of tranquilizers (1.2 million), and cocaine (1.0 million) (Figure 5.2). Inhalants had the youngest average age at first use (16.0 years), followed by marijuana (18.0 years) (Figure 5.3).

Figure 5.2 Past Year Initiates for Illicit Drug Categories: 2004

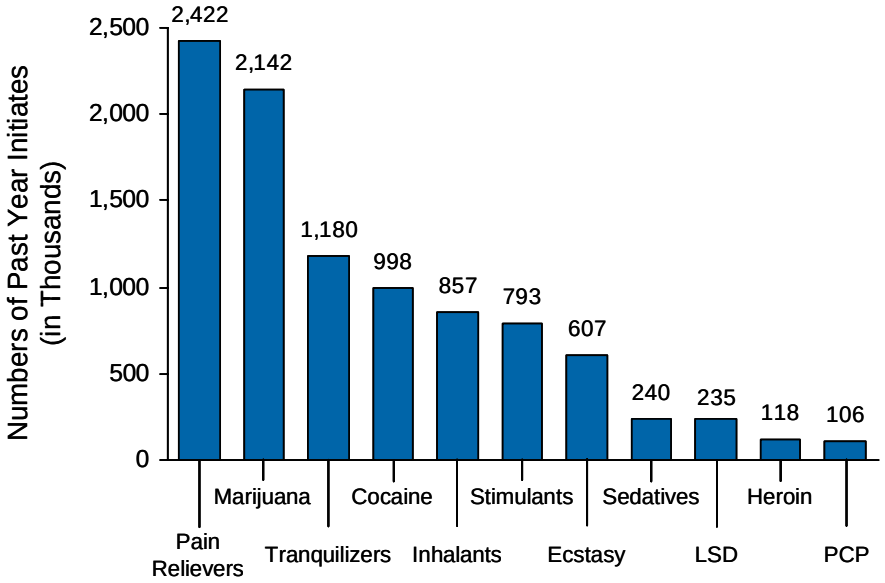
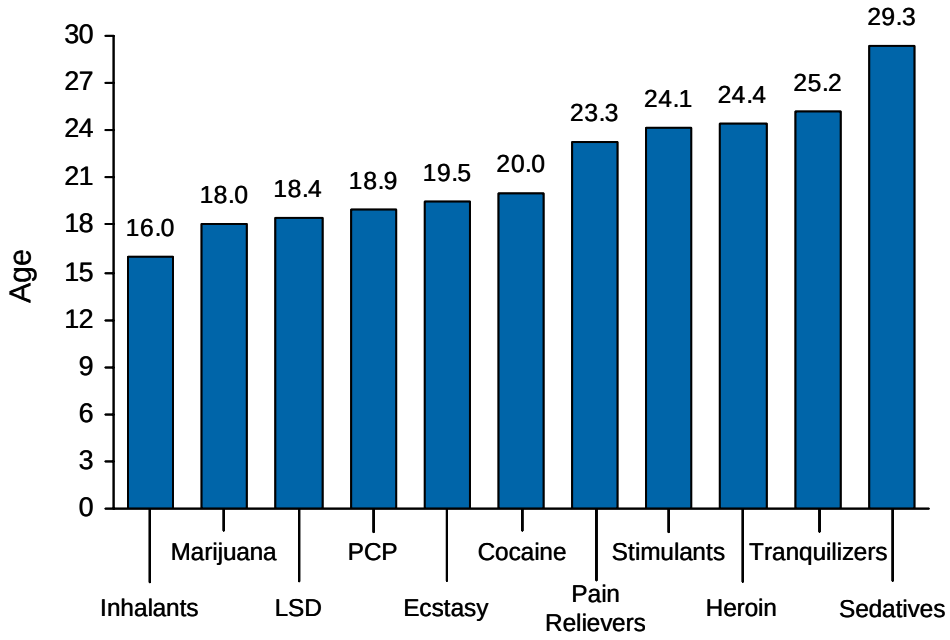


Figure 5.3 Mean Age for Past Year Initiates, by Illicit Drug: 2004



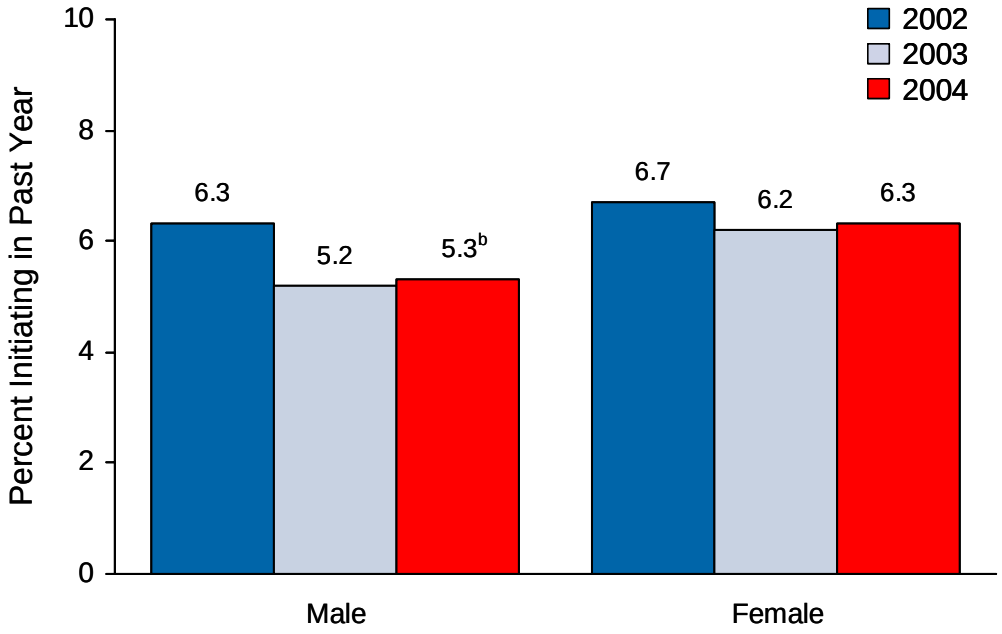
Marijuana

- In 2004, an estimated 2.1 million persons had used marijuana for the first time within the past 12 months—approximately 6,000 per day. This estimate was not significantly different from the number in 2003 (2.0 million). However, there was a significant decline in the number of recent marijuana initiates between 2002 (2.2 million) and 2003 (2.0 million).

- Most (63.8 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 5.0 percent had used marijuana for the first time within the past year, which was similar to the rate in 2003 (4.9 percent).

- Consistent with the decline in current marijuana use among male youths discussed in Chapter 2, the initiation rate (i.e., the percentage who initiated in the past year among those who had never used) for male youths declined from 6.3 percent in 2002 to 5.2 percent in 2003 and remained unchanged in 2004 (5.3 percent) (Figure 5.4). Among female youths, there was no significant change in the incidence over the 3-year period (6.7, 6.2, and 6.3 percent, respectively).

Figure 5.4 Past Year Marijuana Initiation among Youths Aged 12 to 17 Who Had Never Used, by Gender: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- In 2004, the average age of first marijuana use among recent initiates was 18.0 years. This average increased from 17.0 years in 2002 and 17.5 years in 2003. Excluding initiation occurring at age 21 or older, the mean ages of initiation were 15.9 years in 2002, 15.9 years in 2003, and 16.0 years in 2004.

Cocaine

- In 2004, an estimated 1.0 million persons had used cocaine for the first time within the past 12 months—approximately 2,700 per day. This was not significantly different from the number in 2002 (1.0 million) or 2003 (1.0 million).

- Most (65.8 percent) of the 1.0 million recent cocaine initiates were aged 18 or older when they first used. The average age of first use among recent initiates was 20.0 years, which was similar to the average age in both 2002 and 2003 (19.8 years).

Heroin

- In 2004, an estimated 118,000 persons had used heroin for the first time within the past 12 months. The average age of first use among recent initiates was 24.4 years in 2004. There were no significant changes in the number of initiates or in the average age of first use from 2002 to 2004.

Hallucinogens

- In 2004, an estimated 934,000 persons used hallucinogens for the first time within the past 12 months. This was not significantly different from the estimate in 2003 (886,000), but it was lower than the estimate in 2002 (1.2 million).

- Although there was little change between 2003 and 2004 in the number of past year initiates of LSD or Ecstasy, there were declines between 2002 and 2003. The number of past year LSD initiates was 338,000 in 2002, 200,000 in 2003, and 235,000 in 2004. Ecstasy initiation was 1.2 million in 2002, 642,000 in 2003, and 607,000 in 2004. Most (57.7 percent) of the recent Ecstasy initiates in 2004 were aged 18 or older at the time they first used Ecstasy. The average age at initiation of Ecstasy was 19.5 years.

Inhalants

- In 2004, an estimated 857,000 persons had used inhalants for the first time within the past 12 months. The average age of first use among recent initiates was 16.0 years in 2004, and 75.0 percent of recent initiates were under age 18 when they first used. There were no significant changes in the number of inhalant initiates or the average age of first use from 2002 to 2004.

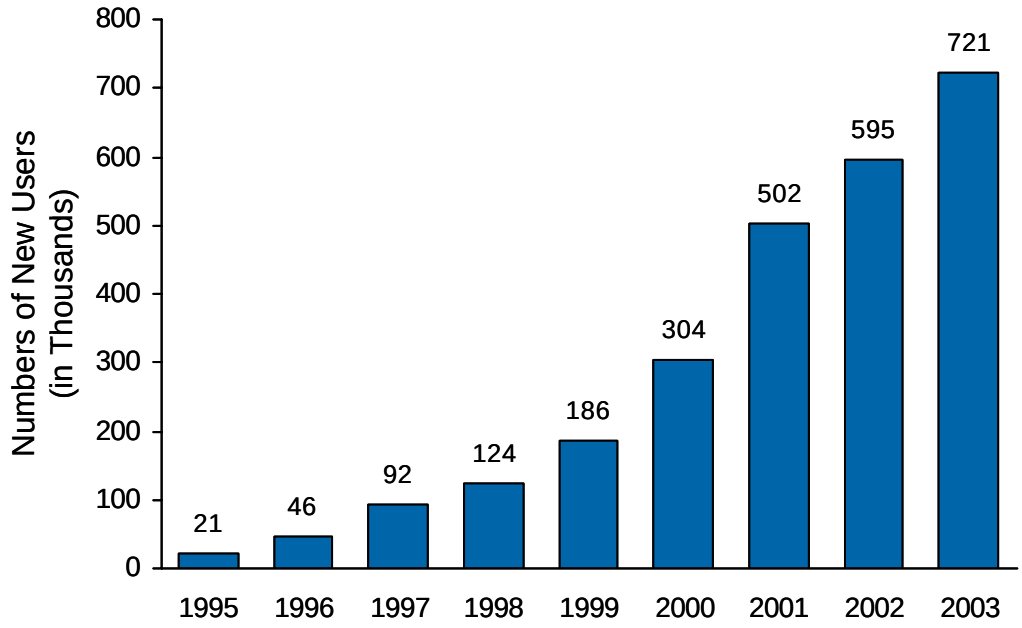
Psychotherapeutics

- This category includes nonmedical use of any prescription-type pain reliever, tranquilizer, stimulant, or sedative. Over-the-counter substances are not included. In 2004, an estimated 2.8 million persons used psychotherapeutics nonmedically for the first time within the past year. The numbers of new users of psychotherapeutics in 2004 were 2.4 million for pain relievers, 1.2 million for tranquilizers, 793,000 for stimulants, and 240,000 for sedatives. These estimates are similar to the corresponding estimates for 2002 and 2003.

- The average age of first nonmedical use of psychotherapeutics among recent initiates was 24.7 years. For specific drug classes, the average ages were 23.3 years for pain relievers, 25.2 years for tranquilizers, 24.1 years for stimulants, and 29.3 years for sedatives.

- In 2004, the number of new nonmedical users of OxyContin® was 615,000, with an average age at first use of 24.5 years. Comparable data on past year OxyContin® initiation are not available for prior years, but calendar year estimates of OxyContin® initiation show a steady increase in the number of initiates from 1995, the year this drug was first available, through 2003 (Figure 5.5).

Figure 5.5 Annual Numbers of New Nonmedical Users of OxyContin®: 1995-2003



- The number of recent new users of methamphetamine nonmedically was 318,000 in 2004. Between 2002 and 2004, the number of methamphetamine initiates remained level at around 300,000 per year. The average age of new users was 18.9 years in 2002, 20.4 years in 2003, and 22.1 years in 2004.

Alcohol

- In 2004, an estimated 4.4 million persons had used alcohol for the first time within the past 12 months—approximately 12,000 per day. This was significantly greater than in 2002 (3.9 million) and 2003 (4.1 million).

- Most (86.9 percent) of the 4.4 million recent alcohol initiates were younger than 21 at the time of initiation.

- In 2004, the average age of first alcohol use among recent initiates was 17.5 years. This average age was 16.7 years in 2002 and 16.5 years in 2003, but these are not statistically different from the average age of first use in 2004. Excluding initiation occurring at age 21 or older, the mean ages were 15.5 years in 2002, 15.6 years in 2003, and 15.6 years in 2004.

Tobacco

- The number of persons who smoked cigarettes for the first time within the past 12 months was 2.1 million in 2004, which was not significantly different from the estimates for 2002 (1.9 million) and 2003 (2.0 million). Most new smokers were under age 18 when they first smoked cigarettes (67.8 percent).

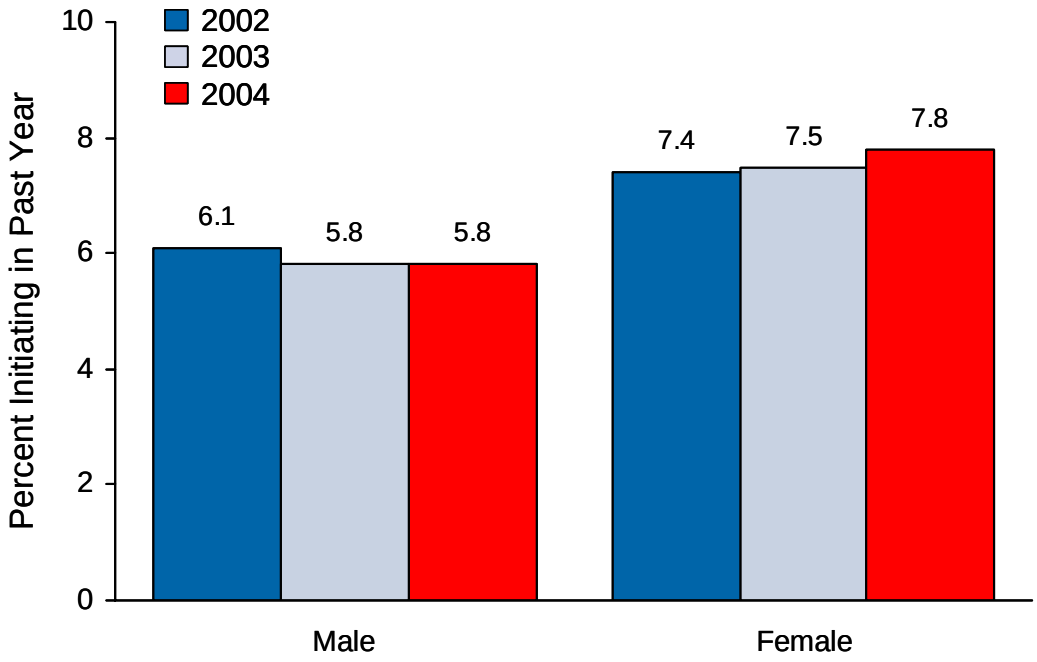
- In 2004, the average age of first cigarette use among recent initiates was 16.7 years. This average was similar to the averages in 2002 (16.9 years) and 2003 (16.9 years). The average age in 2004 was similar for males (16.6 years) and females (16.8 years).

- The initiation rate (i.e., the percentage of nonsmokers who initiated cigarette use within the past 12 months) was 2.6 percent in 2002, 2003, and 2004. Among youths aged 12 to 17 years, the incidence showed no significant changes during this period in that it was 6.7 percent in 2002, 6.6 percent in 2003, and 6.8 percent in 2004. This pattern was observed for both male and female youths (Figure 5.6).

- In 2004, the number of persons who had started smoking cigarettes daily within the past 12 months was 1.1 million, or about 3,000 per day. This estimate is similar to the estimates for 2002 (1.0 million) and 2003 (1.1 million). An estimated 49.5 percent, or 0.5 million (about 1,500 per day), of these new daily smokers were younger than age 18 when they started smoking daily.

- The average age of first daily smoking among recent new daily smokers in 2004 was 18.8 years. This was not significantly different from the average in 2002 (19.9 years) or 2003 (19.8 years), and the average age did not differ between males (19.0 years) and females (18.6 years) in 2004.

Figure 5.6 Past Year Cigarette Initiation among Youths Aged 12 to 17 Who Had Never Smoked, by Gender: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- In 2004, an estimated 3.1 million persons aged 12 or older used cigars for the first time in the past 12 months, a significant increase in the number of initiates from 2003 (2.7 million) but unchanged from 2002 (2.9 million). Although in 2004 there were approximately the same number of past year initiates of cigar use among males and females (1.6 million and 1.5 million, respectively), females initiated at an older age (22.7 years) than males (20.1 years). The overall average age at first cigar use was 21.3 years.

- The number of persons aged 12 or older initiating use of smokeless tobacco in the past year was similar in 2002 (951,000), 2003 (928,000), and 2004 (999,000). In 2004, the number of males who were first-time users of smokeless tobacco in the past 12 months was between 2 and 3 times higher than the number of females (727,000 vs. 272,000). A similar pattern was seen in both 2002 and 2003.

- The average age of first smokeless tobacco use among recent initiates in 2004 was 19.7 years. Averages were 19.1 years for males and 21.3 years for females.

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.

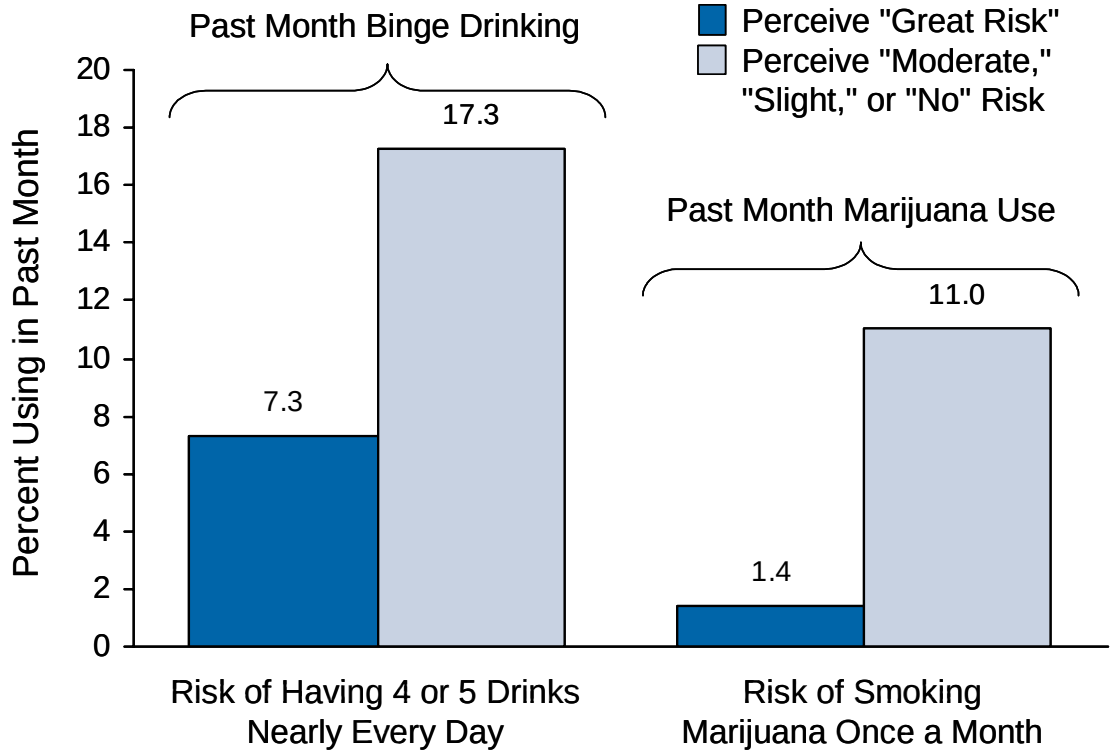
This chapter presents findings for youth prevention-related measures collected in the 2004 NSDUH. Included are measures of perceived risk from substance use (cigarettes, alcohol, and illicit drugs), perceived availability of substances, perceived parental disapproval of substance use, feelings about peer substance use, attitudes about school, involvement in delinquent behavior, participation in religious and other activities, exposure to substance abuse 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. However, the associations discussed in this chapter should not be inferred to reflect causal connections. NSDUH data for an individual are collected at only one point in time, making it impossible to determine, for example, whether a lowering of perceived risk preceded the substance use or vice versa. It is also not possible to determine whether observed associations could be explained better by other factors not considered in the analysis or not measured in the survey.

Perceptions of Risk

- One factor thought to 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." Substance use was generally higher among persons who reported lower levels of perceived risk than among those who saw greater risk. For example, 7.3 percent of youths aged 12 to 17 in 2004 who perceived great risk from "having 4 or 5 drinks of an alcoholic beverage nearly every day" reported binge drinking (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, binge drinking was reported by 17.3 percent of youths who saw moderate, slight, or no risk from having four or five drinks of an alcoholic beverage nearly every day (Figure 6.1). Past month marijuana use was reported by 1.4 percent of youths who saw great risk in smoking marijuana once a month compared with 11.0 percent of youths who saw moderate, slight, or no risk.

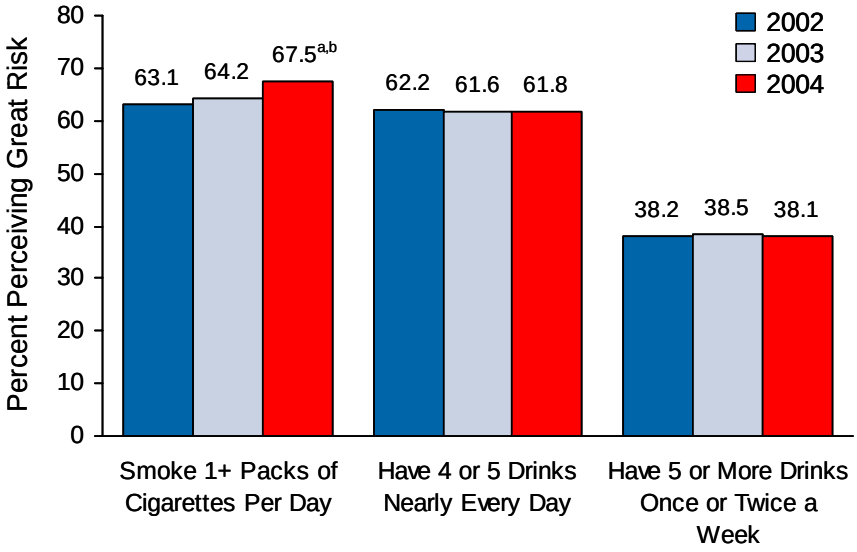
Figure 6.1 Past Month Binge Drinking and Marijuana Use among Youths Aged 12 to 17, by Perceptions of Risk: 2004



- Increases over time in the perceived risk of using a substance frequently are associated with concurrent or subsequent decreases in the rate of use of the substance and vice versa. Looking over 3 years, for example, the proportion of youths who reported perceiving great risk from smoking one or more packs of cigarettes per day increased from 63.1 percent in 2002 to 67.5 percent in 2004 (Figure 6.2). Over the same period, the rate of past month cigarette smoking among youths decreased from 13.0 to 11.9 percent, and the rate of lifetime cigarette smoking declined from 33.3 to 29.2 percent (Figure 6.3).

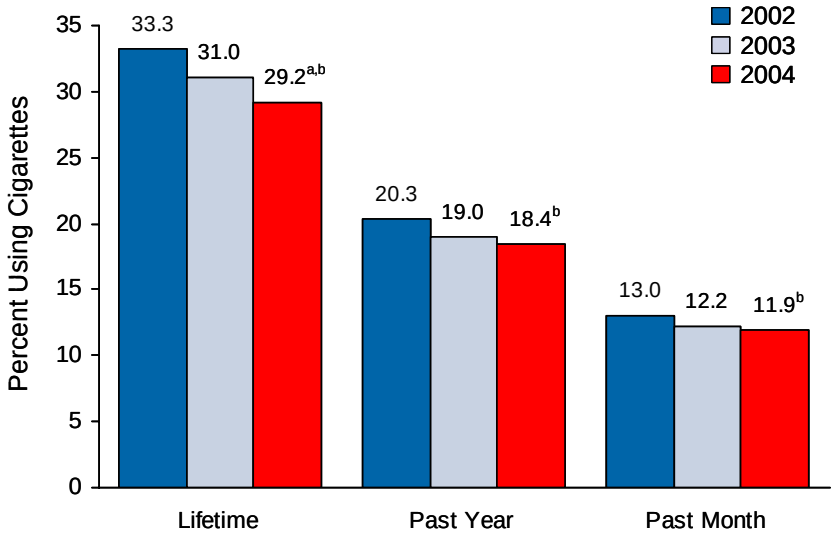
- The perceived risk of heavy alcohol use remained stable from 2002 to 2004 based on two measures (Figure 6.2). The percentages of youths aged 12 to 17 who reported that they perceived great risk in having five or more drinks of an alcoholic beverage once or twice a week were 38.2 percent in 2002, 38.5 percent in 2003, and 38.1 percent in 2004.

Figure 6.2 Perceived Great Risk of Cigarette and Alcohol Use among Youths Aged 12 to 17: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Figure 6.3 Lifetime, Past Year, and Past Month Cigarette Use among Youths Aged 12 to 17: 2002-2004

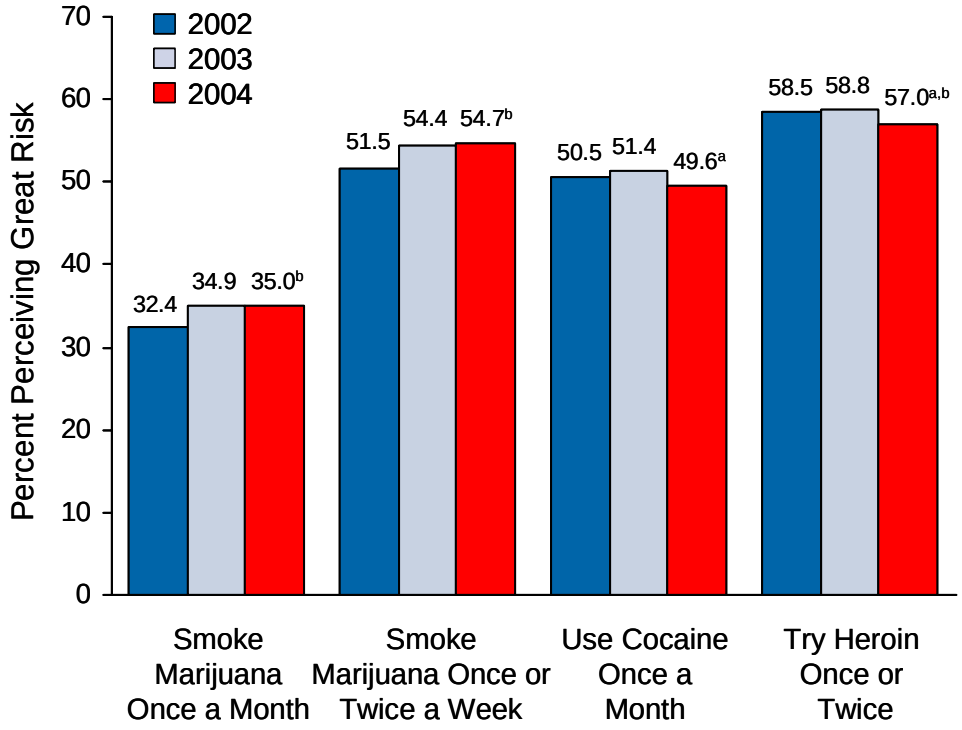


[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Declines were seen from 2003 to 2004 in the perceived risk of cocaine and heroin use (Figure 6.4). The perception of great risk in using cocaine once a month decreased from 51.4 percent in 2003 to 49.6 percent in 2004, and the perception of great risk from trying heroin once or twice a week declined from 58.8 to 57.0 percent. The prevalence of heroin and cocaine use remained stable from 2003 to 2004 among youths aged 12 to 17. In both 2003 and 2004, an estimated 0.1 percent of youths reported using heroin in the past month, while past month cocaine use was reported by 0.6 percent in 2003 and 0.5 percent in 2004.

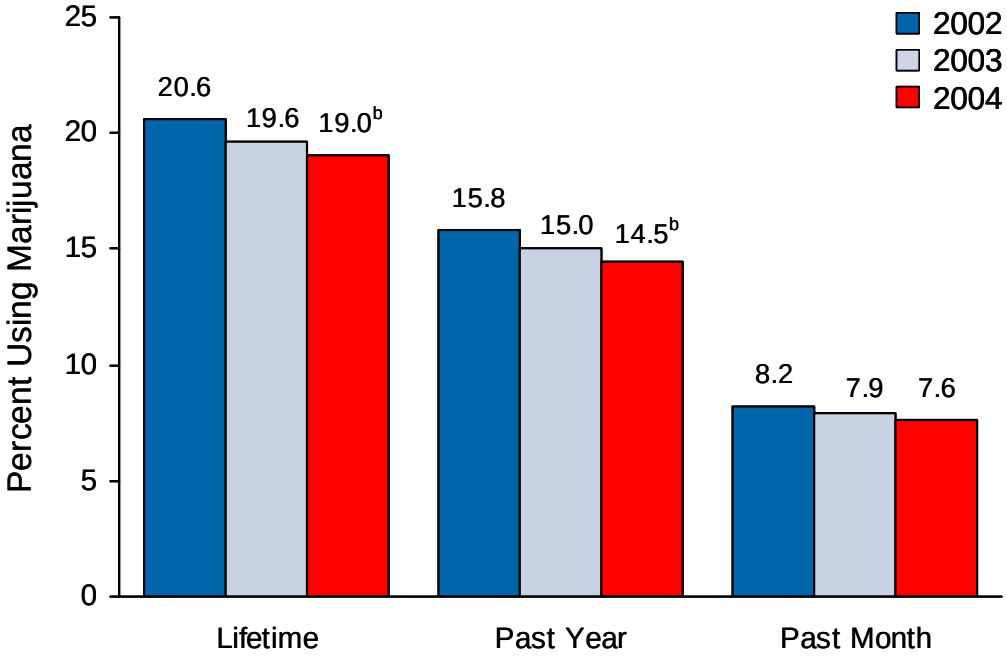
- Looking over a 3-year period, the perceived risk from smoking marijuana once a month increased from 32.4 percent in 2002 to 34.9 percent in 2003, then remained stable at 35.0 percent in 2004. The perception of great risk in smoking marijuana once or twice a week increased from 51.5 percent in 2002 to 54.4 percent in 2003, then remained stable at 54.7 percent in 2004 (Figure 6.4). From 2002 to 2004, there were declines in marijuana use in the lifetime (from 20.6 to 19.0 percent) and in the past year (from 15.8 to 14.5 percent) (Figure 6.5).

Figure 6.4 Perceived Great Risk of Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Figure 6.5 Lifetime, Past Year, and Past Month Marijuana Use among Youths Aged 12 to 17: 2002-2004

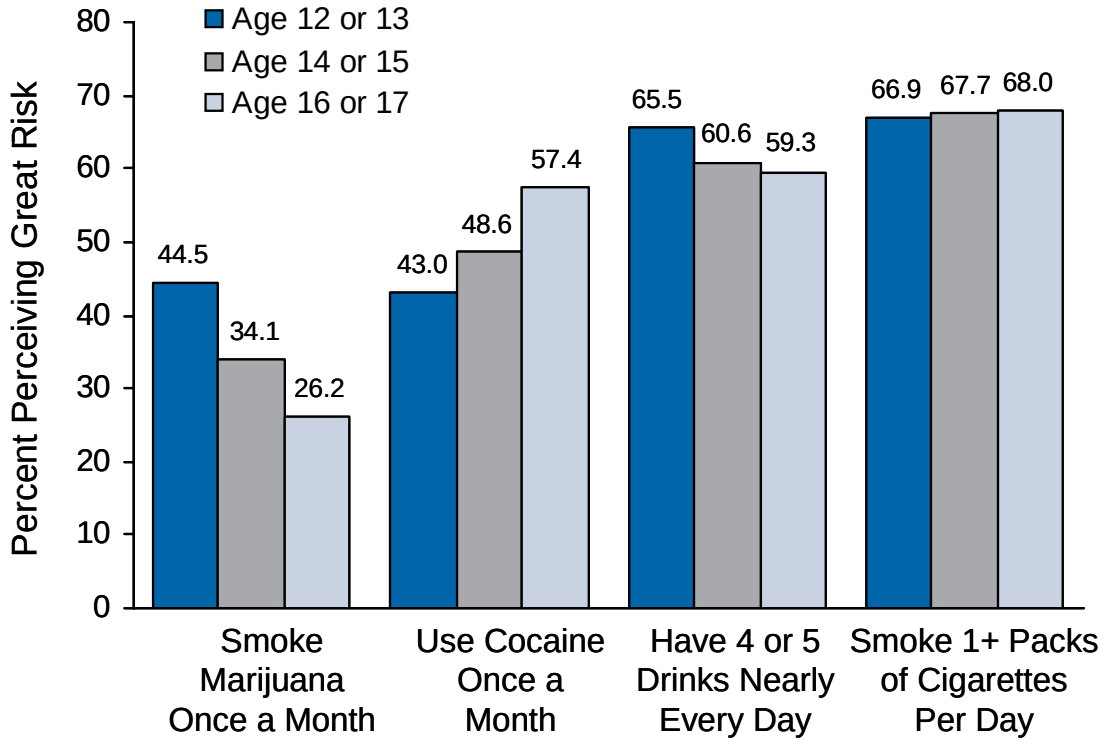


[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- For some drugs, the perceived risk of use decreased as youths got older, but for other drugs it increased. In 2004, the perception of great risk from smoking marijuana once a month decreased with age; it was reported by 44.5 percent of youths aged 12 or 13, 34.1 percent of those aged 14 or 15, and 26.2 percent of those aged 16 or 17 (Figure 6.6). For cocaine, on the other hand, perceived risk increased with age. In 2004, 43.0 percent of youths aged 12 or 13, 48.6 percent of those aged 14 or 15, and 57.4 percent of those aged 16 or 17 reported that they perceived great risk in using cocaine once a month.

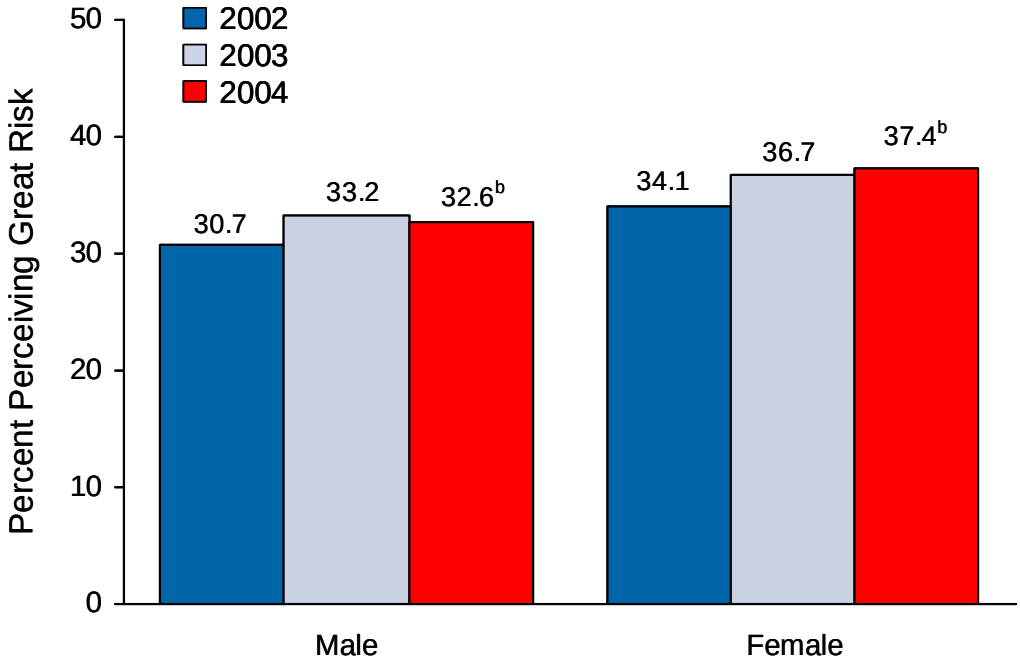
- For many substances, female youths were more likely to report perceptions of great risk than male youths. This is true, for instance, for smoking one or more packs of cigarettes per day (72.3 percent for females vs. 62.9 percent for males), smoking marijuana once or twice a week (58.4 vs. 51.1 percent), and having four or five drinks of alcohol nearly every day (67.4 vs. 56.4 percent).

Figure 6.6 Perceived Great Risk of Marijuana, Cocaine, Alcohol, and Cigarette Use among Youths Aged 12 to 17, by Age: 2004



- As noted in Chapter 2, past month use of marijuana declined from 2002 to 2004 for males aged 12 to 17 (from 9.1 to 8.1 percent), but remained stable for females in that age group (7.2 percent in 2002 and 7.1 percent in 2004). Over that period, the percentage of youths who perceived great risk from smoking marijuana once a month increased for both male and female youths. As shown in Figure 6.7, the rates of perceiving great risk among female youths were 34.1 percent in 2002, 36.7 percent in 2003, and 37.4 percent in 2004. Among male youths, the rates were 30.7 percent in 2002, 33.2 percent in 2003, and 32.6 percent in 2004. For both groups, the increases were significant between 2002 and 2003 and between 2002 and 2004, but not between 2003 and 2004. Still, perceived risk was higher for females than males, while the rate of past month use was higher for males than females.

Figure 6.7 Perceived Great Risk of Smoking Marijuana Once a Month among Youths Aged 12 to 17, by Gender: 2002-2004



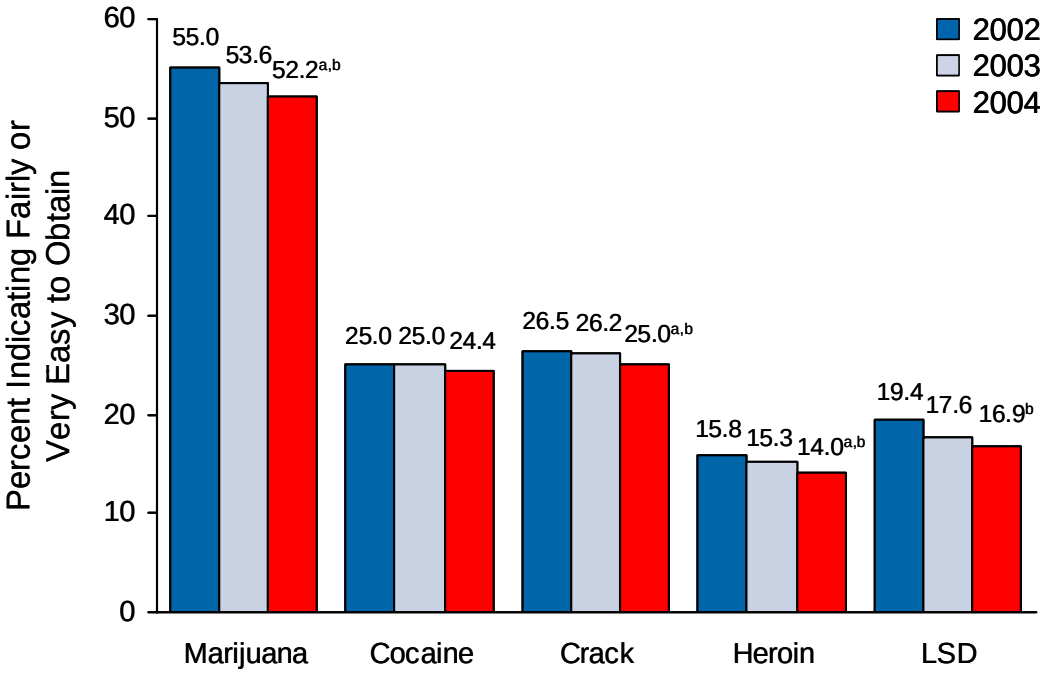
[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Perceived Availability

- Over half (52.2 percent) of youths aged 12 to 17 reported in 2004 that it would be "fairly easy" or "very easy" for them to obtain marijuana if they wanted some (Figure 6.8). Around one quarter reported it would be easy to get cocaine (24.4 percent) or crack (25.0 percent). One in seven (14.0 percent) indicated that heroin would be "fairly" or "very" easily available, and one in six (16.9 percent) said it would be easy for them to get LSD if they wanted some.

- The perceived availability of marijuana declined each year from 2002 to 2004 among youths aged 12 to 17, while the perceived availability of crack and heroin only declined from 2003 to 2004. The perceived availability of marijuana decreased from 55.0 percent in 2002 to 53.6 percent in 2003 and to 52.2 percent in 2004. The perceived availability of crack declined from 26.2 percent in 2003 to 25.0 percent in 2004, and the proportion who reported that heroin would be easily available decreased from 15.3 to 14.0 percent. Perceived LSD availability declined from 19.4 percent in 2002 to 17.6 percent in 2003, then remained relatively stable between 2003 and 2004 (16.9 percent in 2004).

Figure 6.8 Perceived Availability of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- The decline in the perceived availability of marijuana among youths aged 12 to 17 was paralleled by a decline in lifetime and past year marijuana use among youths. As discussed earlier in the chapter, lifetime marijuana use for youths decreased from 20.6 percent in 2002 to 19.0 percent in 2004, and past year use decreased from 15.8 to 14.5 percent over that period (Figure 6.5). During this time period, the perceived availability of marijuana decreased from 55.0 to 52.2 percent (Figure 6.8). Similarly, lifetime and past year use of LSD declined from 2002 to 2004 in parallel to the decrease in perceived availability of LSD. Lifetime use of LSD by youths aged 12 to 17 decreased from 2.7 percent in 2002 to 1.2 percent in 2004; past year use of this hallucinogen decreased from 1.3 to 0.6 percent over that 3-year period. The perceived ease of availability of LSD decreased from 19.4 percent in 2002 to 16.9 percent in 2004.

- The percentage of youths who reported that drugs would be easy to obtain if they wanted some increased with age. In 2004, 22.4 percent of those aged 12 or 13 said it would be fairly or very easy to obtain marijuana compared with 57.2 percent of those aged 14 or 15 and 76.8 percent of those aged 16 or 17.

- In 2004, 16.3 percent of youths indicated that they had been approached by someone selling drugs in the past month, similar to the 16.1 percent reported in 2003 and the 16.7 percent in 2002. Youths who reported being approached by someone selling drugs, compared with those who reported no such approaches, were much more likely to have used an illicit drug in their lifetime (64.1 vs. 23.4 percent), in the past year (52.7 vs. 14.9 percent), and in the past month (32.6 vs. 6.3 percent).

Perceived Parental Disapproval of Substance Use

- Most youths believed their parents would "strongly disapprove" of their using substances. In 2004, 90.6 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, while the remaining 9.4 percent believed their parents would "somewhat disapprove" or "neither approve nor disapprove." A majority of youths (89.8 percent) reported that their parents would strongly disapprove of their trying marijuana or hashish once or twice, and 89.0 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 2004 were similar to those seen in 2002 and 2003.

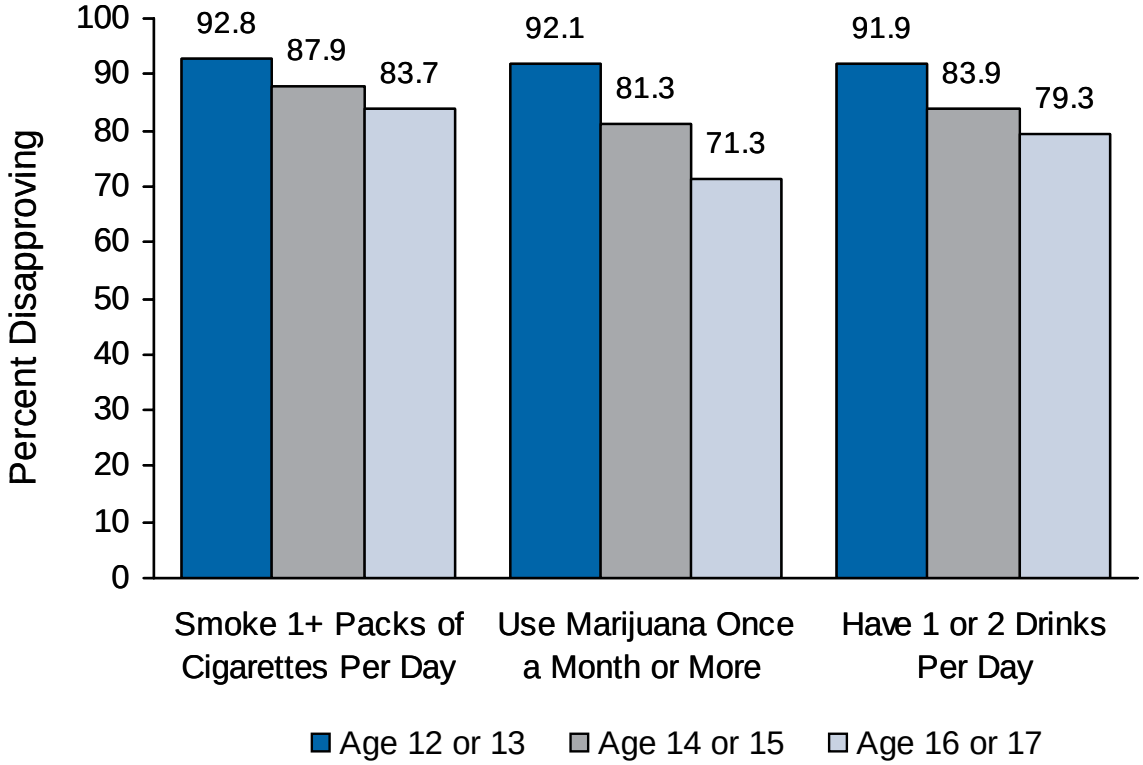
- Youths who believed their parents would strongly disapprove of their using a particular substance were less likely to engage in use of that substance than were youths who believed their parents would somewhat disapprove or neither approve nor disapprove. For example, past month cigarette use was reported by 8.8 percent of youths who perceived strong parental disapproval of their smoking one or more packs of cigarettes per day compared with 42.2 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 for those who did not (5.1 vs. 30.0 percent).

Feelings about Peer Substance Use

- A large majority of youths reported that they disapprove of their peers using substances. In 2004, 88.1 percent of youths aged 12 to 17 "strongly" or "somewhat" disapproved of their peers smoking one or more packs of cigarettes per day; 80.6 percent reported similar feelings about their peers trying marijuana or hashish once or twice; and 85.0 percent strongly or somewhat disapproved of peers having one or two drinks of an alcoholic beverage nearly every day. These rates are similar to those observed in 2003.

- The percentage disapproving of peers' substance use generally decreased with age. In 2004, disapproval of peers using marijuana once a month or more, for example, was reported by 92.1 percent of youths aged 12 or 13, 81.3 percent of those aged 14 or 15, and 71.3 percent of those aged 16 or 17 (Figure 6.9).

Figure 6.9 Disapproval of Peer Substance Use among Youths Aged 12 to 17, by Age: 2004



- Past month marijuana use was reported by 2.7 percent of youths who disapproved of their peers using marijuana once a month or more compared with 29.2 percent of youths who reported that they neither approve nor disapprove of such behavior from their peers.

Attitudes about School

- Most youths aged 12 to 17 who reported being currently enrolled in school had positive perceptions about school. In 2004, 78.6 percent indicated that they "liked going to school a lot" or "kind of liked going to school"; 77.7 percent believed the assigned homework was meaningful and important; 88.4 percent believed the things they learned at school would be "very important" or "somewhat important" later in life; and 75.3 percent found the courses "very" or "somewhat" interesting. These rates were similar to those observed in 2002 and 2003. An estimated 77.5 percent of youths in 2004 indicated that their teachers "always" or "sometimes" let them know they were doing a good job with schoolwork; this was unchanged from 2003 but was higher than the 75.7 percent observed in 2002.

- In general, youths who reported positive attitudes about school were less likely than other youths to have used substances. Past month marijuana use in 2004, for example, was reported by 6.0 percent of youths who reported they "liked a lot" or "kind of liked" going to school compared with 14.6 percent of those who reported they "didn't like very much" or "hated" it. Moreover, past month marijuana use was reported by 5.8 percent of youths who found assigned schoolwork meaningful and important as compared with 14.8 percent of those who did not. It also was reported by 6.7 percent of those who believed the things they learned in school would be important later in life as compared with 16.3 percent of those who did not.

Fighting and Delinquent Behavior

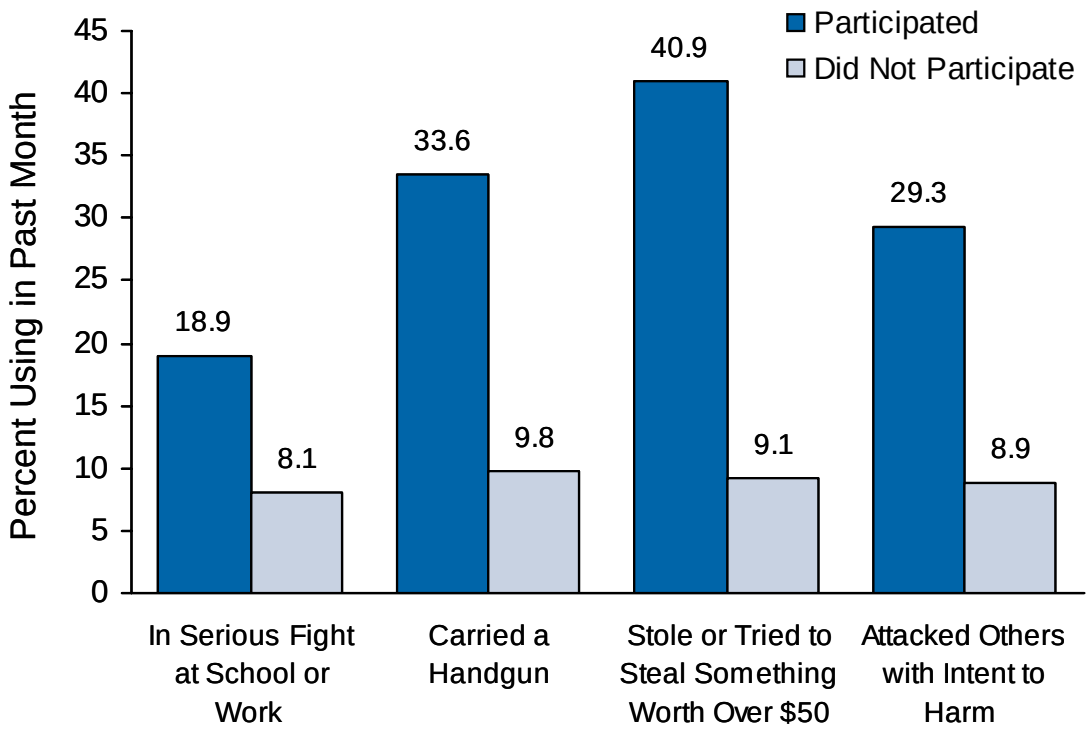
- In 2004, 23.1 percent of youths aged 12 to 17 reported that, in the past year, they had gotten into a serious fight at school or at work; 17.0 percent had taken part in a group-against-group fight; 3.3 percent had carried a handgun at least once; 3.8 percent had sold illegal drugs; 4.5 percent had, at least once, stolen or tried to steal something worth more than $50; and 8.2 percent had, in at least one instance, attacked others with intent to seriously hurt them. For all but one of these measures, the rate in 2004 was similar to that observed in 2003. The exception was the percentage of youths who had taken part in group-against-group fights, which increased from 15.9 percent in 2002 to 18.1 percent in 2003 then decreased to 17.0 percent in 2004.

- Youths who had engaged in fighting or other delinquent behaviors were more likely than other youths to have used illicit drugs. For example, past month illicit drug use was reported by 18.9 percent of youths who had gotten into serious fights at school or work compared with 8.1 percent of those who had not and by 40.9 percent of those who had stolen or tried to steal something worth over $50 compared with 9.1 percent of those who had not (Figure 6.10).

Religious Beliefs and Participation in Activities

- In 2004, 32.0 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; 68.0 percent agreed with the statement that religious beliefs influence how they make decisions in life; and 34.1 percent agreed with the statement that it is important for their friends to share their religious beliefs. Findings for these measures remained stable from 2003 to 2004. Drug, alcohol, and cigarette use were lower among youths who agreed with these statements than among those who disagreed. For example, past month illicit drug use was reported by 8.1 percent of those who agreed that religious beliefs are a very important part of life compared with 18.5 percent of those who disagreed with that statement.

Figure 6.10 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Participation in Criminal Acts or Fighting in Past Year: 2004



Exposure to Substance Use Prevention Messages and Programs

- One in eight youths (12.2 percent) reported in 2004 that they had participated in drug, tobacco, or alcohol prevention programs outside of school in the past year. Participation in such programs increased from 12.7 percent of youths in 2002 to 13.9 percent in 2003, but then declined to 12.2 percent in 2004. The prevalence of alcohol use was generally lower among youths who reported participating in these programs than among youths who did not; for example, past month binge drinking was reported by 9.5 percent of youths who had participated in such programs compared with 11.3 percent of those who had not. However, rates of illicit drug use did not differ significantly between the two groups (e.g., past month marijuana use was reported by 7.9 percent of those who had participated in prevention programs outside of school and by 7.5 percent of those who had not participated in these types of programs).

- In 2004, 60.3 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; this rate represents an increase from the 2003 rate of 58.9 percent and the 2002 rate of 58.1 percent. Among youths who reported having had such conversations with their parents, rates of current alcohol and cigarette use and past year and lifetime use of alcohol, cigarettes, and illicit drugs were lower than among youths who did not report such conversations. For example, past month binge drinking was reported by 10.5 percent of youths who had talked with their parents about drug, tobacco, or alcohol use compared with 12.0 percent of those who had not. Past month use of illicit drugs other than marijuana was reported by 4.6 percent of youths who had such conversations with their parents compared with 6.3 percent of those who had not.

- Almost four fifths (78.2 percent) of youths enrolled in school reported in 2004 they had seen or heard drug or alcohol prevention messages at school in the past year, a percentage similar to that observed in 2002 and 2003. Indicators of alcohol, cigarette, and illicit drug use were uniformly lower for youths exposed to such messages in school than for youths not reporting such exposure. Past month use of marijuana, for example, was reported by 7.1 percent of youths exposed to these messages at school compared with 10.6 percent of youths reporting no such exposure.

- Out-of-school exposure to drug or alcohol prevention messages in the past year was reported by 83.0 percent of youths aged 12 to 17 in 2004, a percentage similar to that in 2002 and 2003. Most indicators of current alcohol and drug use were similar for youths exposed to such out-of-school messages and those reporting no such exposure. However, past month use of illicit drugs was lower among those who were exposed than among those not exposed (10.3 vs. 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 they perceived their parents exercised over them in the year prior to the survey. In 2004, 79.6 percent of youths reported that their parents "always" or "sometimes" checked on whether they had completed their homework, an increase from 78.1 percent in 2003. Among youths, 80.8 percent indicated that their parents always or sometimes provided help with their homework in 2004, similar to the 80.9 percent in 2003. Also, 69.6 percent reported that their parents always or sometimes limited the amount of time they spent out with friends on school nights, similar to the 70.6 percent in 2003. Most (87.2 percent in 2004) said their parents made them do chores around the house, similar to the 87.4 percent in 2003. In 2004, an estimated 38.1 percent reported that their parents limited the amount of time they watched television, similar to the 37.4 percent in 2003. Most (85.8 percent in 2004) said their parents always or sometimes let them know they had done a good job, which was unchanged from 2003.

- In 2004, drug, alcohol, and cigarette use was uniformly lower among youths who reported that their parents always or sometimes engaged in these monitoring behaviors than among youths whose parents "seldom" or "never" engaged in such behaviors. For instance, for parental assistance with homework, rates of past month marijuana use were 6.2 percent for youths whose parents always or sometimes helped compared with 14.7 percent among youths indicating their parents seldom or never helped. Rates for current cigarette smoking were 10.1 and 21.3 percent for the two groups of youths, respectively, and rates of binge drinking were 9.5 versus 19.3 percent.

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 nonmedical use of prescription-type drugs. These questions are used to classify persons as dependent 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 on 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. Although individuals may meet the criteria specified for both dependence and abuse, persons are classified with abuse of a particular substance only if they are not classified as dependent on that substance.

This chapter provides estimates of the prevalence and patterns of substance use disorders in the Nation from the 2004 NSDUH and compares these estimates against the results from the 2002 and 2003 NSDUHs. It also provides estimates of the prevalence and patterns of the receipt of treatment for problems related to substance use and discusses the need for and receipt of treatment at specialty facilities for problems associated with substance use.

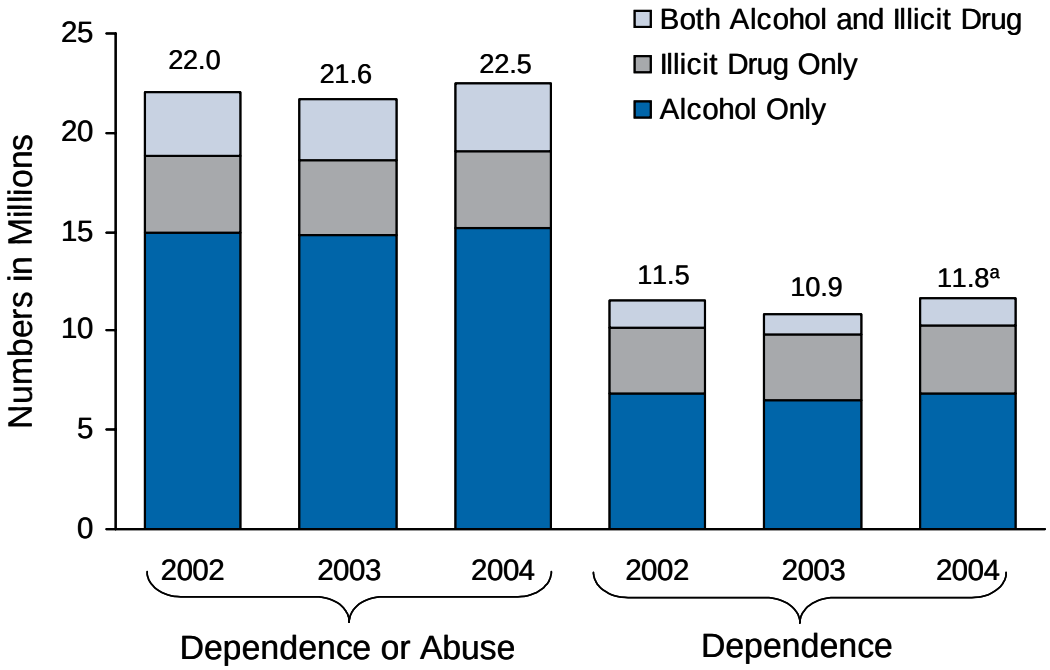
7.1 Substance Dependence and Abuse

- An estimated 22.5 million persons aged 12 or older in 2004 were classified with substance dependence or abuse in the past year (9.4 percent of the total population) (Figure 7.1). Of these, 3.4 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.9 million were dependent on or abused illicit drugs but not alcohol, and 15.2 million were dependent on or abused alcohol but not illicit drugs.

- Between 2002 and 2004, there was no change in the number of persons with substance dependence or abuse (22.0 million in 2002, 21.6 million in 2003, and 22.5 million in 2004).

- Of the 7.3 million persons classified with dependence on or abuse of illicit drugs (regardless of dependence on or abuse of alcohol), 4.5 million were dependent on or abused marijuana in 2004. This represents 1.9 percent of the total population aged 12 or older and 61.2 percent of all those classified with illicit drug dependence or abuse.

Figure 7.1 Substance Dependence or Abuse among Persons Aged 12 or Older: 2002-2004



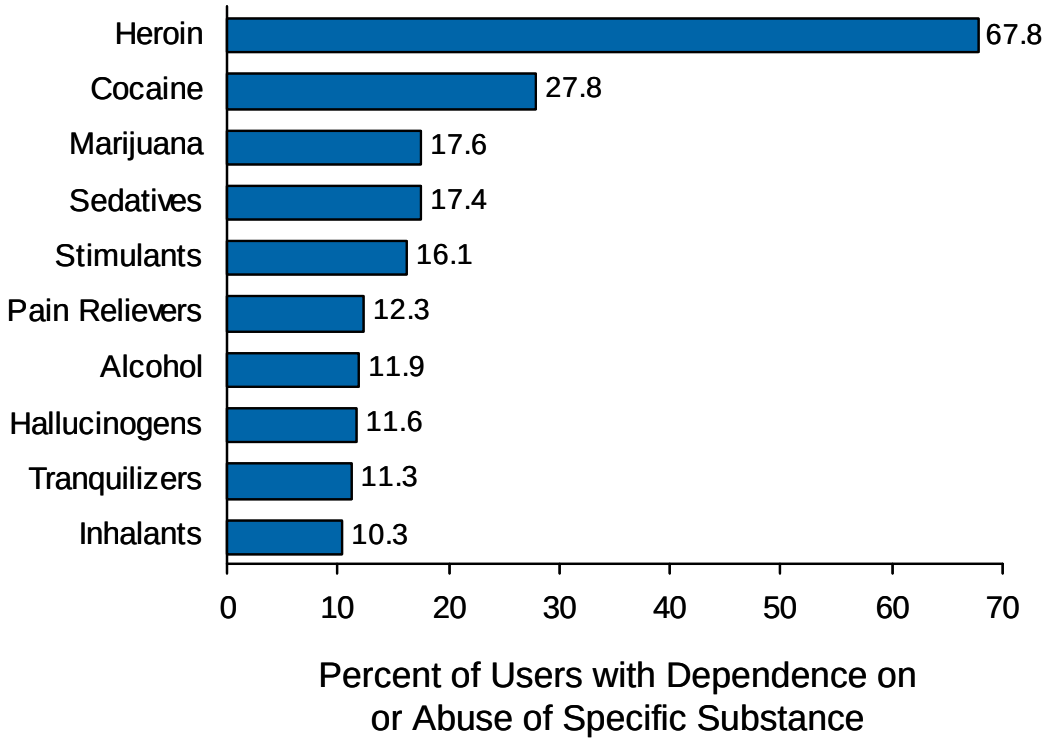
[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- In 2004, 67.8 percent (0.3 million) of past year heroin users were classified with dependence on or abuse of heroin (Figure 7.2). Among past year users of cocaine, 27.8 percent (1.6 million) were classified with dependence on or abuse of cocaine. Among past year users of marijuana, 17.6 percent (4.5 million) were classified with dependence on or abuse of marijuana, while 12.3 percent (1.4 million) of past year users of pain relievers were classified with dependence on or abuse of pain relievers.

- There were 18.7 million persons aged 12 or older classified with dependence on or abuse of alcohol in 2004 (7.8 percent). Among past year users of alcohol, 11.9 percent were classified with alcohol dependence or abuse.

- There were no changes between 2002 and 2004 in the estimated percentages of the population with dependence on or abuse of illicit drugs (3.0 percent in 2002, 2.9 percent in 2003, and 3.0 percent in 2004) and dependence on or abuse of alcohol (7.7 percent in 2002, 7.5 percent in 2003, and 7.8 percent in 2004). However, there was a decrease in the rate of dependence on or abuse of hallucinogens from 2002 to 2003 (0.2 to 0.1 percent) and an increase from 2003 to 2004 (0.1 to 0.2 percent).

Figure 7.2 Dependence on or Abuse of Specific Substances among Past Year Users of Substances: 2004



Age at First Use

- In 2004, adults who had first used substances at a younger age were more likely to be classified with dependence or abuse than adults who initiated use at a later age. For example, among adults aged 18 or older who first tried marijuana at age 14 or younger, 13.4 percent were classified with illicit drug dependence or abuse compared with only 2.7 percent of adults who had first used marijuana at age 18 or older. This pattern of higher rates of dependence or abuse among persons initiating their use of marijuana at younger ages was observed among all demographic subgroups analyzed.

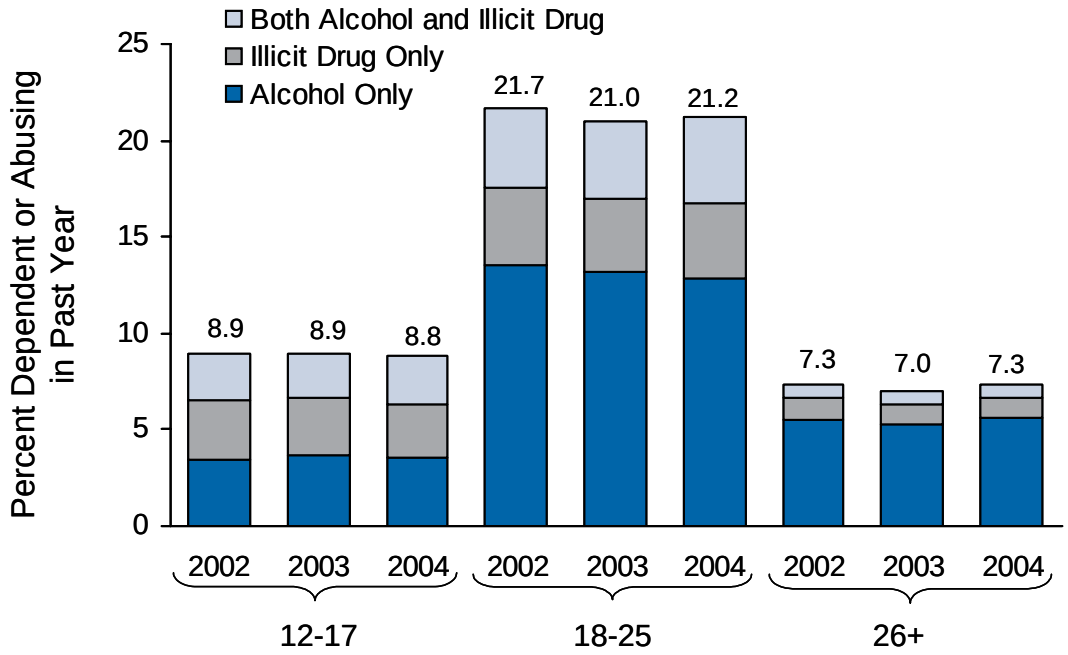
- Among adults, a similar pattern was observed between age at first use of alcohol and dependence on or abuse of alcohol. Among adults aged 18 or older who first tried alcohol at age 14 or younger, 17.9 percent were classified with alcohol dependence or abuse compared with only 4.1 percent of adults who had first used alcohol at age 18 or older. Adults aged 21 or older who had first used alcohol before reaching 21 also 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. 2.7 percent).

Age

- Rates of substance dependence or abuse in 2004 showed substantial variation by age. The rate for dependence or abuse was 1.3 percent at age 12, and rates generally increased until the highest rate (25.4 percent) at age 21. After age 21, there was a general decline with age. A similar pattern by age was observed in 2002 and 2003.

- In 2004, the rate of substance dependence or abuse was 8.8 percent for youths aged 12 to 17, 21.2 percent for persons aged 18 to 25, and 7.3 percent for persons aged 26 or older (Figure 7.3). Among persons with substance dependence or abuse, 60.5 percent of youths aged 12 to 17, 39.2 percent of young adults aged 18 to 25, and 24.3 percent of adults aged 26 or older were dependent on or abused illicit drugs.

Figure 7.3 Illicit Drug or Alcohol Dependence or Abuse, by Age Group and Substance: 2002-2004

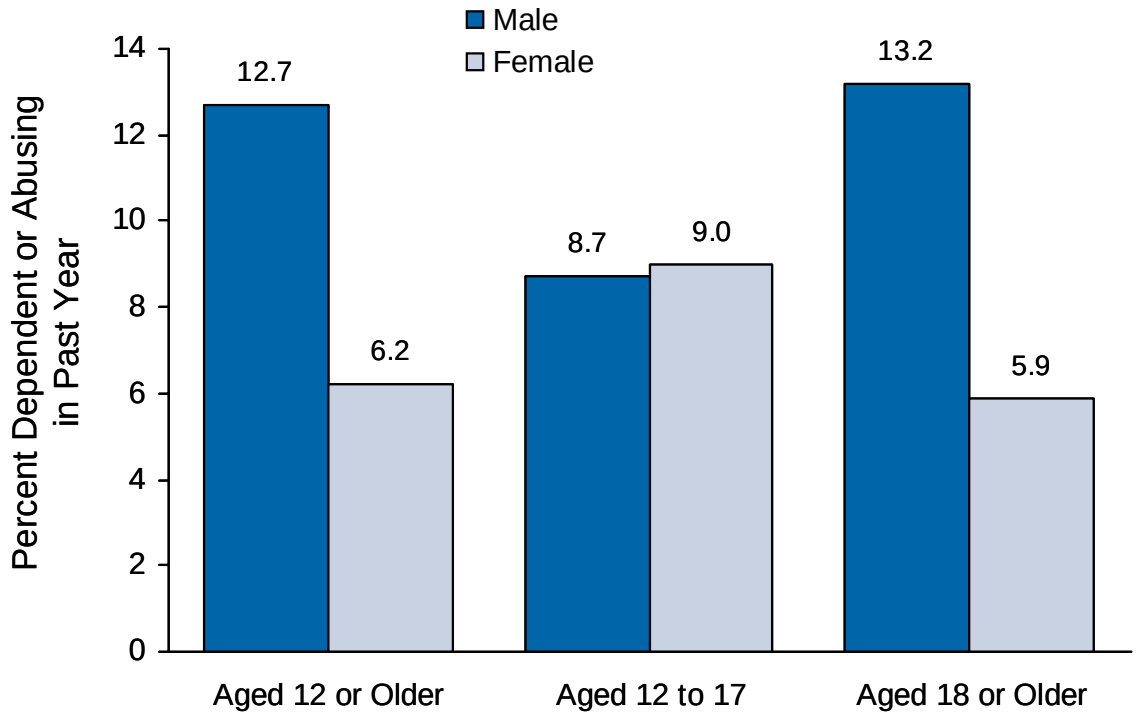


[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

Gender

- Similar to previous years, in 2004, males aged 12 or older were twice as likely to be classified with substance dependence or abuse as females (12.7 vs. 6.2 percent) (Figure 7.4). Among youths aged 12 to 17, however, the rate of substance dependence or abuse among males (8.7 percent) was similar to the rate among females (9.0 percent).

Figure 7.4 Illicit Drug or Alcohol Dependence or Abuse, by Age and Gender: 2004



Race/Ethnicity

- Among persons aged 12 or older in 2004, the rate of substance dependence or abuse was highest among American Indians or Alaska Natives (20.2 percent). The next highest rates were among persons reporting two or more races (12.2 percent). Asians had the lowest rate of dependence or abuse (4.7 percent). The rates among Hispanics (9.8 percent) and whites (9.6 percent) were higher than the rate among blacks (8.3 percent).

- Between 2003 and 2004, there were no statistically significant changes in the rates of substance dependence or abuse for any racial/ethnic group.

Education/Employment

- Rates of substance dependence or abuse varied with level of education. Among adults aged 18 or older in 2004, those who graduated from high school but did not attend any college and those who graduated from college had the lowest rates of dependence or abuse (9.1 and 8.2 percent respectively), while those who were not high school graduates and those with some college had higher rates (10.3 and 10.5 percent, respectively).

- Rates of substance dependence or abuse varied with current employment status. In 2004, an estimated 19.9 percent of unemployed adults aged 18 or older were classified with dependence or abuse, while 10.5 percent of full-time employed adults and 11.9 percent of part-time employed adults were classified as such.

- Most adults with substance dependence or abuse in 2004 were employed either full or part time. Of the 20.3 million adults classified with dependence or abuse, 15.7 million (77.6 percent) were employed.

Criminal Justice Populations

- In 2004, adults aged 18 or older who were on parole or a supervised release from jail during the past year were more likely to be classified with dependence on or abuse of a substance (40.8 percent) than those who were not on parole or supervised release during the past year (9.2 percent).

- In 2004, probation status also was associated with substance dependence or abuse. The rate of substance dependence or abuse was 38.5 percent among adults who were on probation during the past year, while the rate was only 8.8 percent among adults who were not on probation during the past year.

Geographic Area

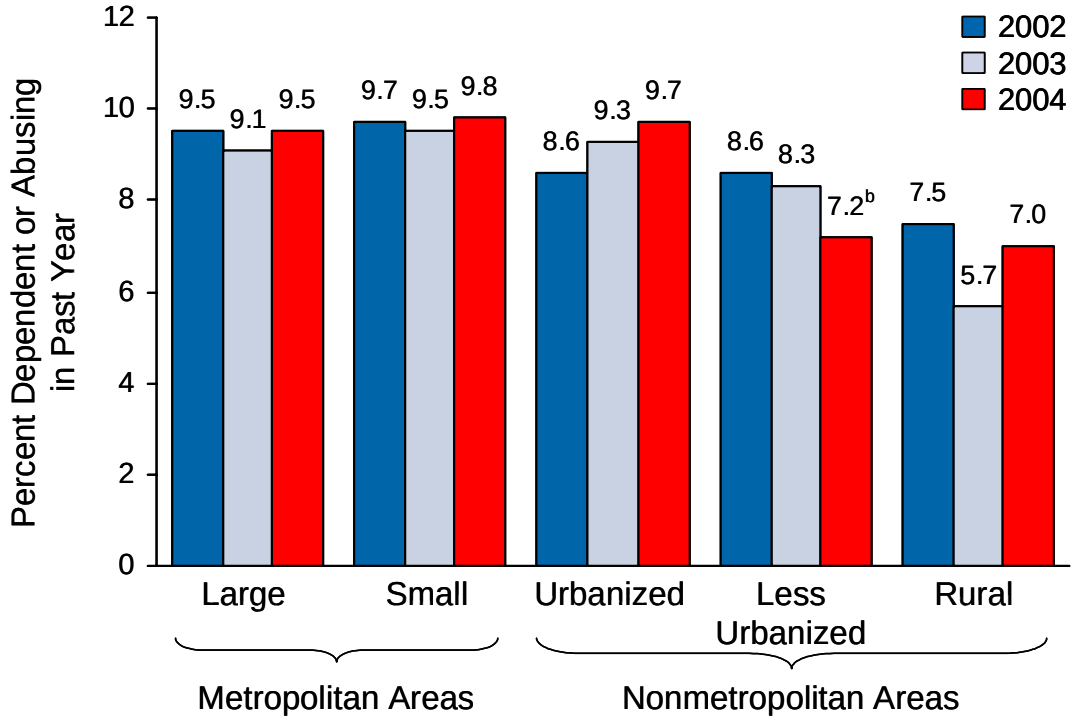
- Rates of substance dependence or abuse for persons aged 12 or older varied by region. Rates were higher in the Midwest (10.2 percent) and West (10.1 percent) and lower in the Northeast (8.9 percent) and South (8.5 percent).

- In 2004, among persons aged 12 or older, the rate for substance dependence or abuse was 9.5 percent in large metropolitan counties, 9.8 percent in small metropolitan counties, and 8.2 percent in nonmetropolitan counties (Figure 7.5). The rate was lowest (7.0 percent) in completely rural 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. 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.

Figure 7.5 Illicit Drug or Alcohol Dependence or Abuse among Persons Aged 12 or Older, by County Type: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- An estimated 3.8 million people 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 in 2004. Of these, 1.5 million received treatment for the use of both alcohol and illicit drugs, 0.7 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.)

- Between 2003 and 2004, there was no statistically significant change in the number or percentage of the population receiving substance use treatment within the past year (3.3 million, 1.4 percent in 2003; 3.8 million, 1.6 percent in 2004). The number receiving treatment for illicit drug use was significantly higher in 2004 (2.2 million) than in 2003 (1.8 million), but it was not significantly different than in 2002 (2.0 million).

Age, Gender, and Race/Ethnicity

- Among persons aged 12 or older in 2004, males were more than twice as likely as females to receive treatment for an alcohol or an illicit drug use problem in the past year (2.3 vs. 0.9 percent, respectively). Males and females had similar rates of treatment among youths aged 12 to 17 (1.8 vs. 1.4 percent).

- Among persons aged 12 or older in 2004, the rates of alcohol or illicit drug use treatment in the past year were highest among American Indians or Alaska Natives (4.6 percent) and persons reporting two or more races (3.2 percent). The next highest rate was among blacks (2.6 percent). The rates among whites and Hispanics were similar (1.4 and 1.6 percent, respectively). The lowest rate was among Asians (1.0 percent).

- The rate of past year treatment for illicit drug use was significantly higher in 2004 (0.8 percent) than in 2003 (0.6 percent) among persons aged 26 or older, but it was similar to the rate in 2002 (0.7 percent).

Geographic Area

- The rate of past year treatment for illicit drug or alcohol use did not vary greatly by region. The rate was essentially the same in the West and South (1.6 percent) and was 1.7 percent in the Midwest and 1.5 percent in the Northeast.

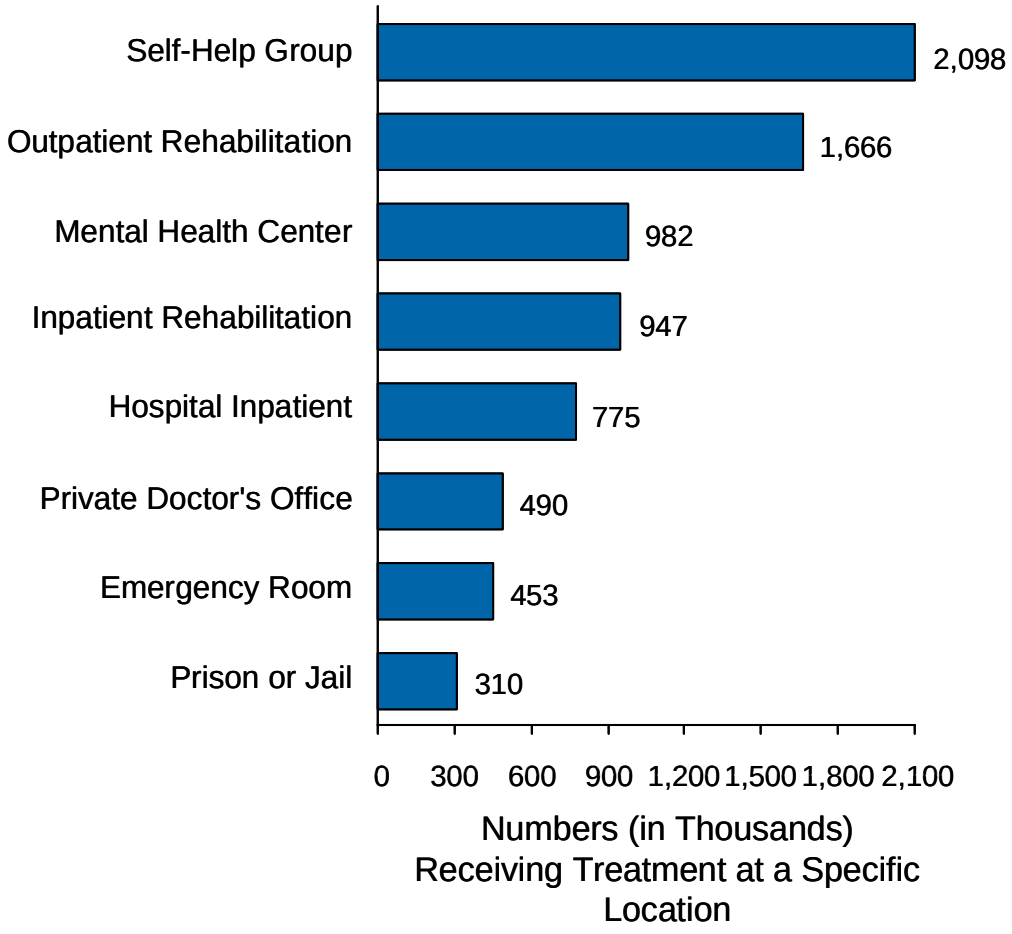
- In 2004, among persons aged 12 or older, the rate of treatment for illicit drug or alcohol use was 1.6 percent in both large and small metropolitan counties and 1.5 percent in nonmetropolitan counties.

Location of Treatment and Substance Treated

- In 2004, among the 3.8 million persons aged 12 or older who received treatment for alcohol or illicit drug use in the past year, more than half (2.1 million) received treatment at a self-help group (Figure 7.6). There were 1.7 million persons who received treatment at a rehabilitation facility as an outpatient, 982,000 at a mental health center as an outpatient, 947,000 at a rehabilitation facility as an inpatient, 775,000 at a hospital as an inpatient, 490,000 at a private doctor's office, 453,000 at an emergency room, and 310,000 at a prison or jail. (Note that persons could report receiving treatment at more than one location.)

- The numbers of persons receiving treatment at specific locations in 2004 were generally higher than the numbers receiving treatment at the corresponding specific locations in 2003. However, these increases were only statistically significant for outpatient rehabilitation (1.2 million in 2003 vs. 1.7 million in 2004) and emergency rooms (251,000 vs. 453,000). With the exception of inpatient rehabilitation (1.1 million in 2002 vs. 947,000 in 2004), all of the estimates for 2004 were similar to the corresponding numbers receiving treatment in 2002. The similarities between the 2002 and 2004 estimates may be attributed to significant decreases observed for several locations between 2002 and 2003, which offset the increases between 2003 and 2004 discussed above.

Figure 7.6 Locations Where Past Year Substance Use Treatment Was Received among Persons Aged 12 or Older: 2004



- More than half (2.4 million) of the 3.8 million persons who received treatment for a substance use problem in the past year received treatment for alcohol use during their most recent treatment. An estimated 1.0 million persons received treatment for marijuana use during their most recent treatment. Estimates for other drugs were 884,000 persons for cocaine, 424,000 for pain relievers, and 283,000 for heroin. (Note that respondents could indicate that they received treatment for more than one substance during their most recent treatment.)

- The estimated number of persons receiving treatment for cocaine use during their most recent treatment was higher in 2004 (884,000) than in 2003 (557,000), but it was similar to the estimate in 2002 (796,000).

7.3 Needing and Receiving Specialty Treatment

This section discusses the need for and receipt of treatment for a substance use problem at a "specialty" treatment facility. It includes estimates of the number of persons needing and receiving treatment, as well as those needing but not receiving treatment. These estimates are specified separately for alcohol, illicit drugs, and illicit drugs or alcohol. Specialty treatment is defined as treatment received at hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), or mental health centers. It excludes treatment at an emergency room, private doctor's office, self-help groups, 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 diagnostic criteria for dependence on or abuse of alcohol or illicit drugs in the past 12 months or received specialty treatment for alcohol or illicit drug use in the past 12 months.

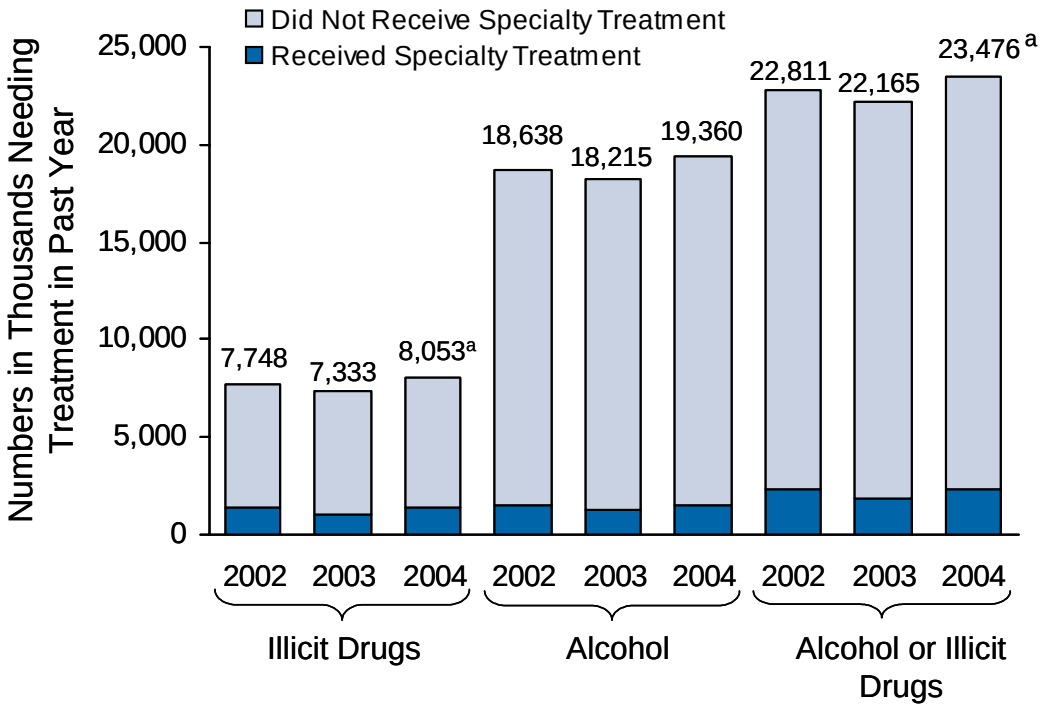
An individual needing treatment for an illicit drug use problem is defined as receiving treatment for his or her drug use problem only if he or she reported receiving specialty treatment for drug use in the past year. Thus, an individual who needed treatment for illicit drug use but only received specialty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

- In 2004, the estimated number of persons aged 12 or older needing treatment for an alcohol or illicit drug use problem was 23.48 million (9.8 percent of the total population) (Figure 7.7). An estimated 2.33 million of these people (1.0 percent of the total population and 9.9 percent of the people who needed treatment) received treatment at a specialty facility. Thus, there were 21.15 million persons (8.8 percent of the total population) who needed treatment but did not receive treatment at a specialty substance abuse facility in 2004.

- The estimated number of persons needing but not receiving treatment for a substance use problem was slightly higher in 2004 (21.1 million) than in 2003 (20.3 million), but this difference was not statistically significant. The estimate of the number receiving specialty treatment in 2004 (2.3 million) was significantly higher than the estimate in 2003 (1.9 million), but it was essentially the same as the estimate in 2002 (2.3 million). The overall number needing treatment was higher in 2004 (23.5 million) than in 2003 (22.2 million).

- Of the 2.3 million people aged 12 or older who received specialty substance use treatment, 718,000 persons received treatment for both alcohol and illicit drug use, 817,000 persons received treatment for alcohol use only, and 709,000 persons received treatment for illicit drugs use only. (Note that estimates by substance do not add to the total number of persons receiving specialty substance use treatment because the total includes persons who reported receiving specialty treatment but did not report for which substance the treatment was received.)

Figure 7.7 Need for and Receipt of Specialty Treatment in the Past Year for Illicit Drug or Alcohol Use among Persons Aged 12 or Older: 2002-2004



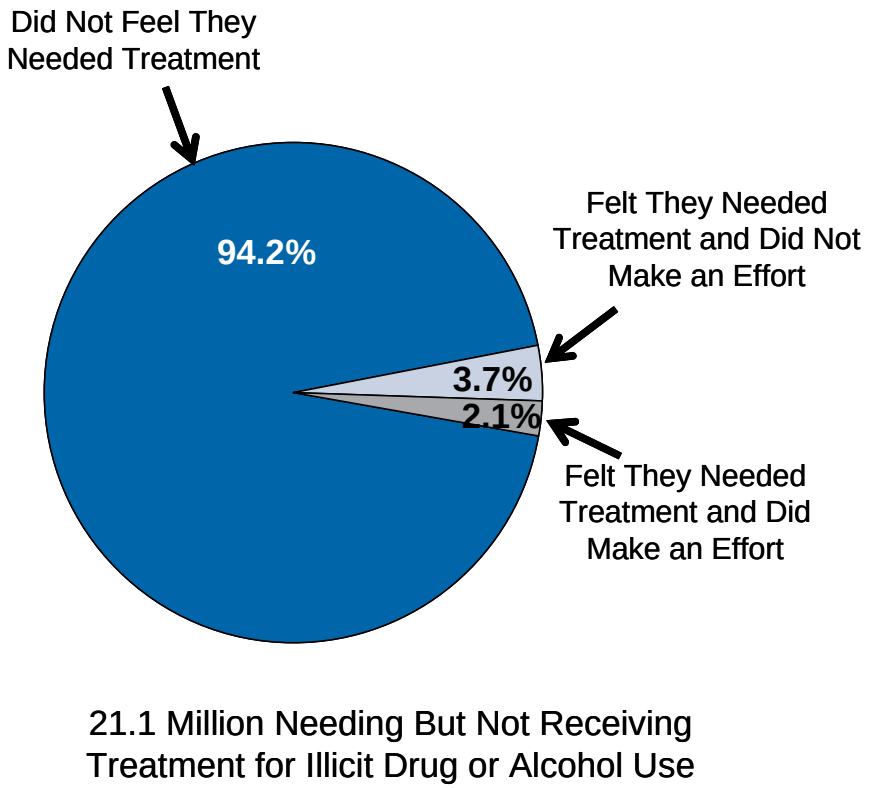
[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Among persons who received specialty substance use treatment in the past year, an estimated 43.1 percent reported using their "own savings or earnings" as a source of payment for their most recent specialty treatment. An estimated 38.0 percent reported using private health insurance, 29.0 percent reported Medicaid, and 22.8 percent reported Medicare as a source of payment. An estimated 22.4 percent reported using public assistance other than Medicaid, and 21.2 percent reported relying on family members. (Note that persons could report more than one source of payment.)

- In 2004, more than half of the 2.3 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, an estimated 416,000 received treatment at an emergency room, 303,000 received treatment at a doctor's office, and 240,000 received treatment at a prison or jail.

- Of the 21.1 million people who needed but did not receive treatment in 2004, an estimated 1.2 million (5.8 percent) reported that they felt they needed treatment for their alcohol or drug use problem (Figure 7.8). Of the 1.2 million persons who felt they needed treatment, 441,000 (35.8 percent) reported that they made an effort but were unable to get treatment, and 792,000 (64.2 percent) reported making no effort to get treatment.

Figure 7.8 Past Year Perceived Need and Effort Made to Receive Specialty Treatment among Persons Aged 12 or Older Needing But Not Receiving Treatment for Illicit Drug or Alcohol Use: 2004



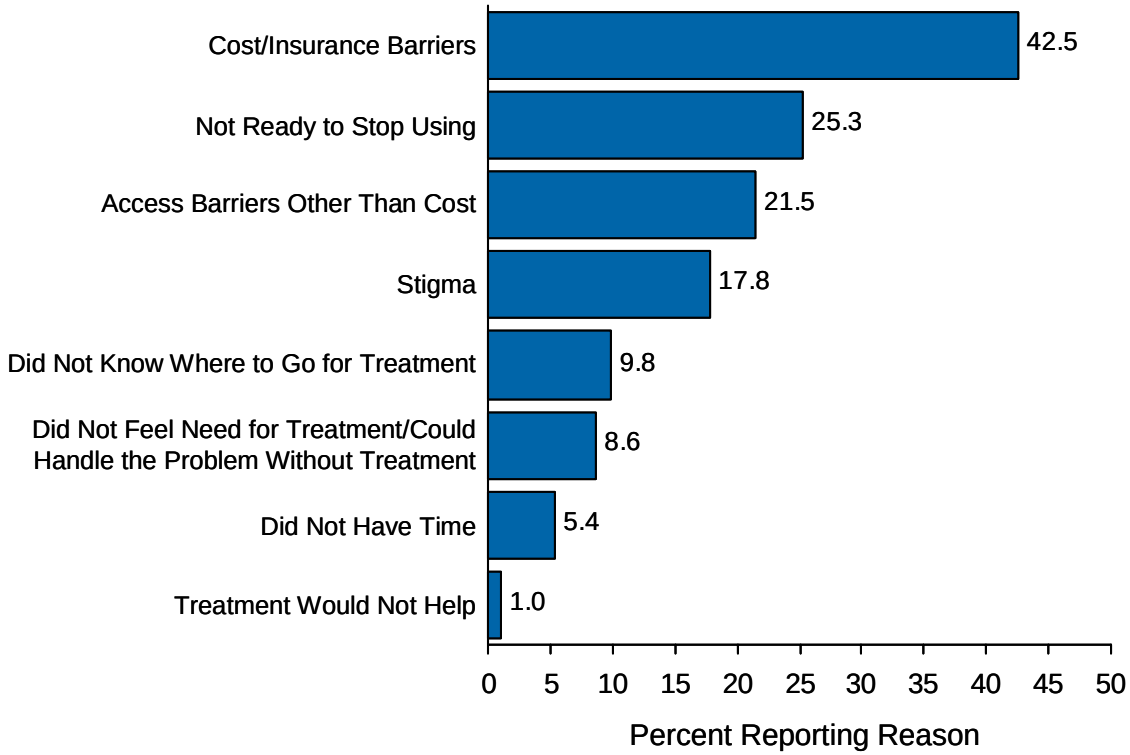
- The number of people who felt they needed treatment and made an effort to get it among those who needed but did not receive treatment was higher in 2004 (441,000) than in 2003 (273,000), but it was similar to the number in 2002 (446,000).

- Similar to 2002 and 2003, in 2004 there were 2.3 million youths aged 12 to 17 (9.1 percent of this population) who needed treatment for an alcohol or illicit drug use problem. Of this group, only 185,000 youths received treatment at a specialty facility (8.1 percent of youths who needed treatment), leaving an estimated 2.1 million youths who needed treatment for a substance use problem but did not receive it at a specialty facility.

- Based on 2003-2004 combined data, the most often reported reasons for not receiving illicit drug or alcohol use treatment among persons who needed but did not receive treatment and felt they needed treatment were not ready to stop using (40.0 percent), cost or insurance barriers (34.5 percent), stigma (21.6 percent), and did not feel the need for treatment (at the time) or could handle the problem without treatment (13.9 percent).

- Based on 2003-2004 combined data, among persons who needed but did not receive illicit drug or alcohol use treatment, felt they needed treatment, and made an effort to receive treatment, the most often reported reasons for not receiving treatment were cost or insurance barriers (42.5 percent), not ready to stop using (25.3 percent), other access barriers (21.5 percent), and stigma (17.8 percent) (Figure 7.9).

Figure 7.9 Reasons for Not Receiving 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: 2003-2004 Combined



- Persons who made no effort to receive treatment were more likely to report that they were not ready to stop using (46.8 percent) as a reason for not receiving treatment than persons who made an effort to receive treatment (25.3 percent) (2003-2004 combined data). Among those who made no effort to receive treatment, 23.3 percent reported stigma and 30.8 percent reported cost and insurance barriers as reason for not receiving treatment.

Illicit Drug Use Treatment and Treatment Need

- In 2004, the estimated number of persons aged 12 or older needing treatment for an illicit drug use problem was 8.1 million (3.3 percent of the total population). An estimated 1.4 million of these people (0.6 percent of the total population and 17.7 percent of the people who needed treatment) received treatment at a specialty facility for an illicit drug problem. Thus, there were 6.6 million persons (2.8 percent of the total population) who needed treatment but did not receive treatment at a specialty facility for an illicit drug problem in 2004.

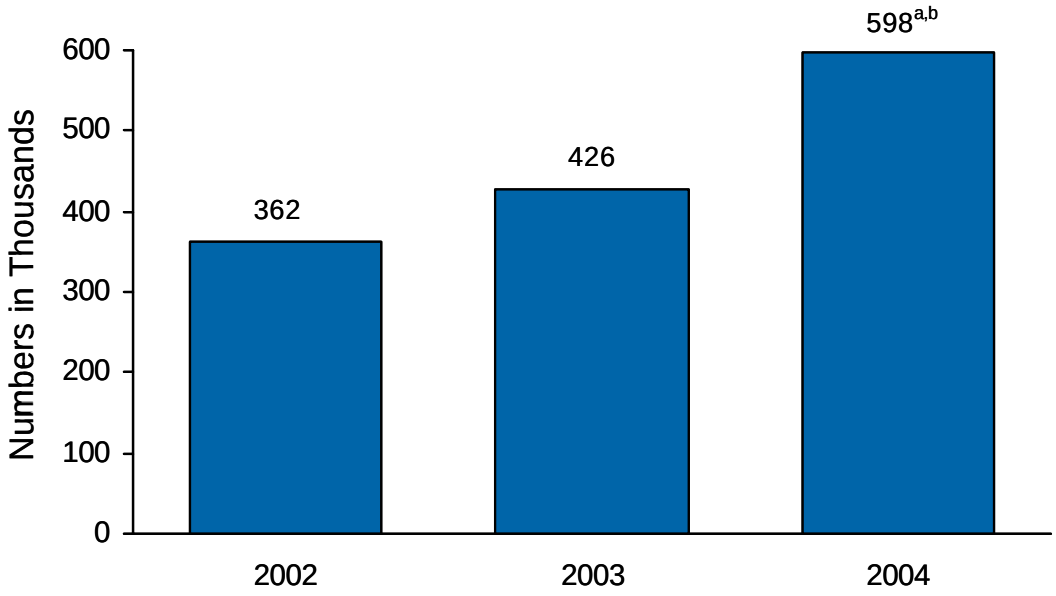
- The estimated number of persons needing but not receiving specialty treatment for an illicit drug use problem in 2004 (6.6 million) was slightly higher than the estimate for 2003 (6.2 million), but this difference was not statistically significant. However, there were significant increases in the number of persons needing treatment and in the number of persons receiving specialty treatment for an illicit drug use problem. Between 2003 and 2004, the number of persons needing treatment increased from 7.3 million to 8.1 million, and the number receiving specialty treatment increased from 1.1 million to 1.4 million. The number needing treatment in 2002 was 7.7 million, not significantly different from the estimates in 2003 or 2004. Between 2002 and 2003, there was a decrease in the number of persons receiving specialty treatment for an illicit drug use problem (1.4 million in 2002 to 1.1 million in 2003). The changes in the number of persons receiving specialty treatment for an illicit drug use problem between 2002 and 2003, and between 2003 and 2004, were driven by changes among persons aged 26 or older (983,000 in 2002, 649,000 in 2003, and 941,000 in 2004).

- Between 2003 and 2004, the number of persons receiving treatment for a cocaine use problem during their most recent treatment at a specialty facility increased from 276,000 in 2003 to 466,000 in 2004. This was a change from the decline between 2002 and 2003 in the number of persons receiving treatment for a cocaine use problem during their most recent treatment at a specialty facility (471,000 in 2002; 276,000 in 2003).

- Of the 6.6 million people who needed but did not receive specialty treatment for illicit drug use in 2004, an estimated 598,000 (9.0 percent) reported that they felt they needed treatment for their illicit drug use problem. Of the 598,000 persons who felt they needed treatment, 194,000 (32.4 percent) reported that they made an effort but were unable to get treatment, and 404,000 (67.6 percent) reported making no effort to get treatment.

- Among persons needing but not receiving treatment for an illicit drug use problem, the estimated number who felt they needed treatment was higher in 2004 (598,000) than in 2003 (426,000). In 2002, the number of persons who felt they needed illicit drug use treatment among those needing but not receiving treatment was 362,000 (Figure 7.10).

Figure 7.10 Number of Persons Aged 12 or Older Who Felt the Need for but Did Not Receive Specialty Treatment for Illicit Drug Use in the Past Year among Those with Illicit Drug Dependence or Abuse: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Among youths aged 12 to 17, an estimated 1.4 million (5.5 percent) needed treatment for an illicit drug use problem in 2004. Of this group, only 134,000 received treatment at a specialty facility (9.6 percent of youths aged 12 to 17 who needed treatment), leaving an estimated 1.3 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 2003-2004 combined data), the most often reported reasons for not receiving treatment were cost or insurance barriers (38.8 percent), not ready to stop using (36.4 percent), stigma (21.0 percent), other access barriers such as no transportation/ inconvenient (16.0 percent), and did not feel the need for treatment (at the time) or could handle the problem without treatment (15.1 percent).

Alcohol Use Treatment and Treatment Need

- In 2004, the estimated number of persons aged 12 or older needing treatment for an alcohol use problem was 19.4 million (8.0 percent of the total population). Of these, 1.5 million (0.6 percent of the total population and 7.9 percent of the people who needed treatment for an alcohol use problem) received alcohol use treatment at a specialty facility. Thus, there were 17.8 million people who needed treatment but did not receive treatment at a specialty facility for an alcohol use problem.

- Between 2003 and 2004, there were no statistically significant changes in the estimated number of persons needing or receiving treatment for an alcohol use problem.

- Among the 17.8 million people who needed but did not receive treatment for an alcohol use problem in 2004, an estimated 724,000 (4.1 percent) felt they needed treatment for their alcohol use problem. Of the 724,000 persons, 283,000 (39.1 percent) made an effort but were unable to get treatment, and 442,000 (61.0 percent) did not make an effort to get treatment.

- In 2004, there were 1.6 million youths (6.2 percent) aged 12 to 17 who needed treatment for an alcohol use problem. Of this group, only 126,000 received treatment at a specialty facility (8.0 percent of youths aged 12 to 17 who needed treatment), leaving an estimated 1.4 million youths who needed but did not receive treatment.

8. Prevalence and Treatment of Mental Health Problems

This chapter presents information on several aspects of mental health in the United States, including the prevalence and treatment of serious psychological distress (SPD) and major depressive episodes (MDE) and the association of these problems with substance use.

Past year SPD is an overall indicator of nonspecific psychological distress that is constructed from the K6 scale administered to adults aged 18 or older in the National Survey on Drug Use and Health (NSDUH). The K6 scale consists of six questions that gather information on how frequently a respondent experienced symptoms of psychological distress during the 1 month in the past year when he or she was at his or her worst emotionally. Responses to these six questions are combined to produce a score ranging from 0 to 24, where a score of 13 or greater is considered SPD. This cutoff is based on research suggesting that scores above this threshold provide an indicator of serious mental illness. Although previous reports from the Substance Abuse and Mental Health Services Administration (SAMHSA) have referred to this measure as "serious mental illness (SMI)" and research has shown that the measure is highly correlated with measures of SMI, SAMHSA has determined that it is appropriate to report these estimates (for 2002, 2003, and 2004) as the prevalence of SPD, not SMI. See Section B.4.4 in Appendix B for further discussion.

The 2004 sampling methodology employed a split-sample design in which approximately half of the adult respondents (sample A) were administered the K6 questions embedded in the full serious mental illness module, as it was administered in prior years of the survey. The other half of the adult respondents (sample B) were administered only the K6 questions without other mental health symptom questions in the module. To increase comparability across several years of data, estimates for SPD in this report are based only on respondents in sample A (i.e., those who were administered the K6 scale within the full module).

Adults in sample B also received a new module of questions to measure lifetime and past year prevalence of MDE, the severity of MDE as measured by role impairment, and treatment received specifically for depression. A similar set of questions on MDE also was administered to the full sample of youths aged 12 to 17.

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 significant overlap between those meeting the criteria of SPD and MDE, there are important distinctions between the two. Meeting the criteria for SPD indicates that the respondent exhibited a high level of distress due to any type of mental problem, which may include general symptoms related to phobia, anxiety, or depression. However, meeting the

criteria for MDE indicates that the respondent had the specific physical and emotional symptom profile indicative of major depression.

The 2004 NSDUH (adults in sample B and all youths) also collected data regarding role impairment based on the Sheehan Disability Scale (SDS). Role impairment is a measure of the impact of depression on a person's life. Among youths aged 12 to 17, information on impairment is captured in four domains: chores at home, school or work, close relationships with family, and social life. For adults aged 18 or older, the role domains are home management responsibilities, work responsibilities, close relationships, and social life. The questions used to measure MDE and role impairment and the scoring strategy for these responses are included in Section B.4.5 of Appendix B.

This chapter presents data on the receipt of treatment for any mental health problems among adults and adolescents. This may be different from the treatment received specifically for MDE (discussed in Section 8.2), 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 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 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 covered 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 2004 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 sample frame of the survey includes only the U.S. civilian, noninstitutionalized population, persons who were residing in long-term psychiatric or other institutions at the time of interview were excluded from the NSDUH sample.

8.1 Serious Psychological Distress

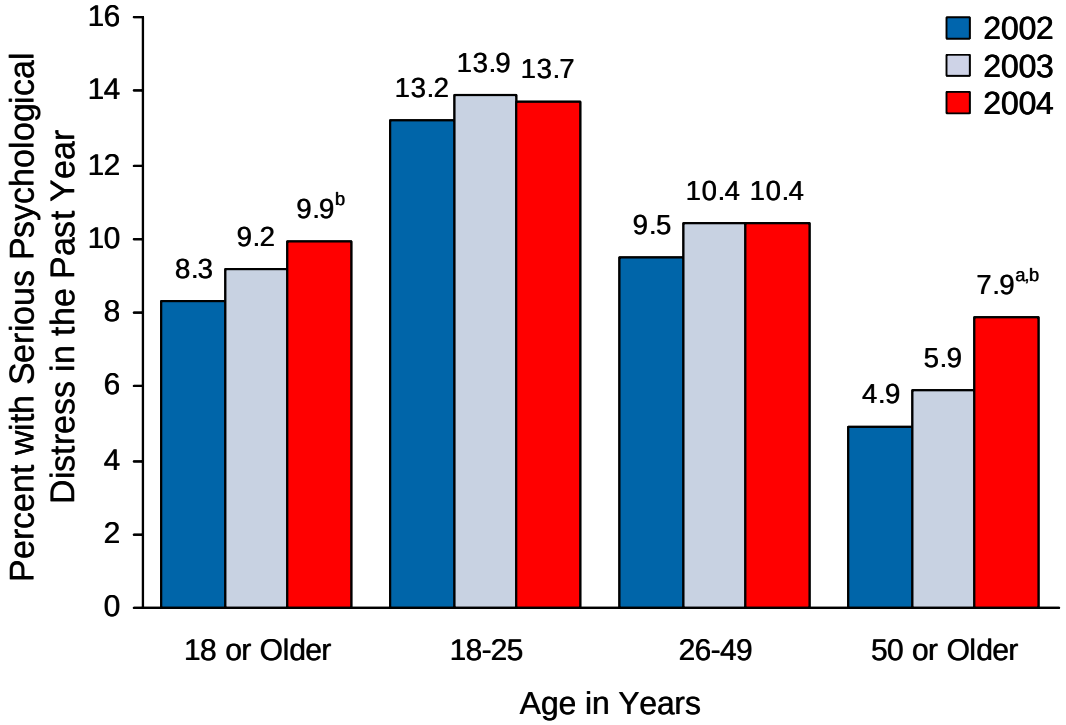
Prevalence of Serious Psychological Distress

- In 2004, there were an estimated 21.4 million adults aged 18 or older with SPD. This represents 9.9 percent of all adults, similar to the rate of 9.2 percent in 2003 but higher than the rate of 8.3 percent in 2002 (Figure 8.1).

- Rates of SPD in 2004 were highest for adults aged 18 to 25 (13.7 percent) and lowest for those aged 50 or older (7.9 percent).

- The prevalence of SPD among women (12.0 percent) was higher than that among men (7.7 percent).

Figure 8.1 Rates of Serious Psychological Distress in the Past Year among Adults Aged 18 or Older, by Age: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.

[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- Rates of SPD ranged from 10.8 percent among Hispanics and 10.3 percent among whites to only 6.7 percent among Asians. Rates were 8.7 percent for persons reporting two or more races and 8.1 percent for blacks.

- Rates of SPD in 2004 were 9.6 percent in the South, 9.7 percent in the Northeast, 10.1 percent in the Midwest, and 10.5 percent in the West.

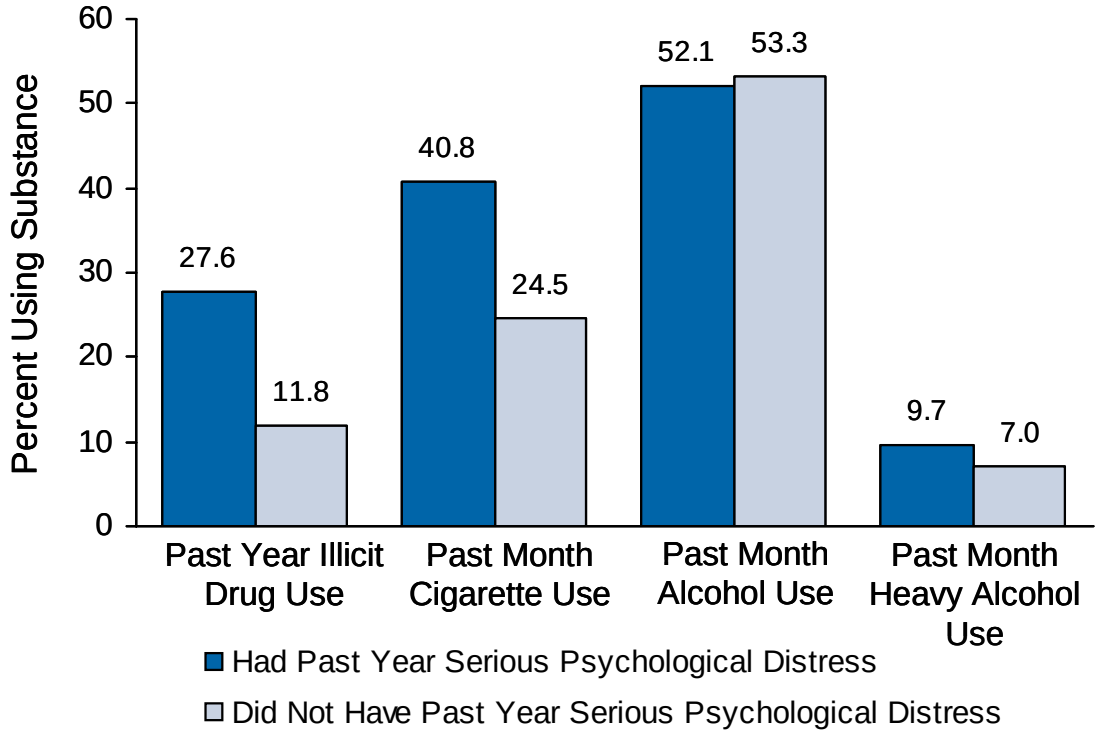
- Rates of SPD among adults in 2004 were higher in small metropolitan areas (12.0 percent) than in large metropolitan areas (8.9 percent). The rate in nonmetropolitan areas was 9.7 percent.

Serious Psychological Distress and Substance Use and Dependence or Abuse

- In 2004, adults who used illicit drugs in the past year were more than twice as likely to have SPD as adults who did not use an illicit drug (20.6 vs. 8.3 percent). This pattern has remained stable since 2002 and was observed within most demographic subgroups.

- Among adults with SPD, 27.6 percent used an illicit drug in the past year compared with 11.8 percent among those without SPD. Similarly, the rate of past month cigarette use was 40.8 percent among adults with SPD, and 24.5 percent among adults without SPD (Figure 8.2).

Figure 8.2 Substance Use among Adults Aged 18 or Older, by Serious Psychological Distress in the Past Year: 2004



- SPD was not strongly linked with past year or current alcohol use, but there was an association between SPD and binge and heavy alcohol use. The rate of current alcohol use in 2004 among adults with SPD was similar to the rate among those without SPD (52.1 vs. 53.3 percent). However, the rate of heavy alcohol use in the past month among adults with SPD was higher (9.7 percent) than among adults without SPD (7.0 percent).

- SPD was highly correlated with substance dependence or abuse. Among adults with SPD in 2004, 21.3 percent (4.6 million) were dependent on or abused illicit drugs or alcohol. The rate among adults without SPD was 7.9 percent.

Treatment and Unmet Need for Treatment among Adults with Serious Psychological Distress

- Among the 21.4 million adults with SPD in 2004, 10.3 million (48.1 percent) received treatment for a mental health problem in the past year. This is similar to the estimates in 2002 (47.9 percent) and 2003 (47.2 percent).

- In 2004, rates of mental health treatment among adults with SPD varied by age. The rate was 38.2 percent for adults aged 18 to 25, 50.6 percent among those aged 26 to 49, and 50.9 percent for adults aged 50 or older.

- Among the 21.4 million adults with SPD, 826,000 (3.9 percent) received inpatient treatment, 6.5 million (30.2 percent) received outpatient treatment, and 9.2 million (43.1 percent) received prescription medication.

- Among adults with SPD who received treatment for mental health problems in the past year, 48.7 percent reported that treatment helped them "a great deal" or "a lot" in managing daily activities.

- Among adults with SPD in the past year who did not receive treatment and reported an unmet need for treatment, cost or insurance issues were the most frequently reported reason for not obtaining treatment (57.6 percent). Other reasons for not receiving treatment identified by these respondents included not feeling a need for treatment at the time or believing that the problem could be handled without treatment (32.1 percent), stigma associated with treatment (28.6 percent), not knowing where to go for services (25.9 percent), and not having time (12.9 percent).

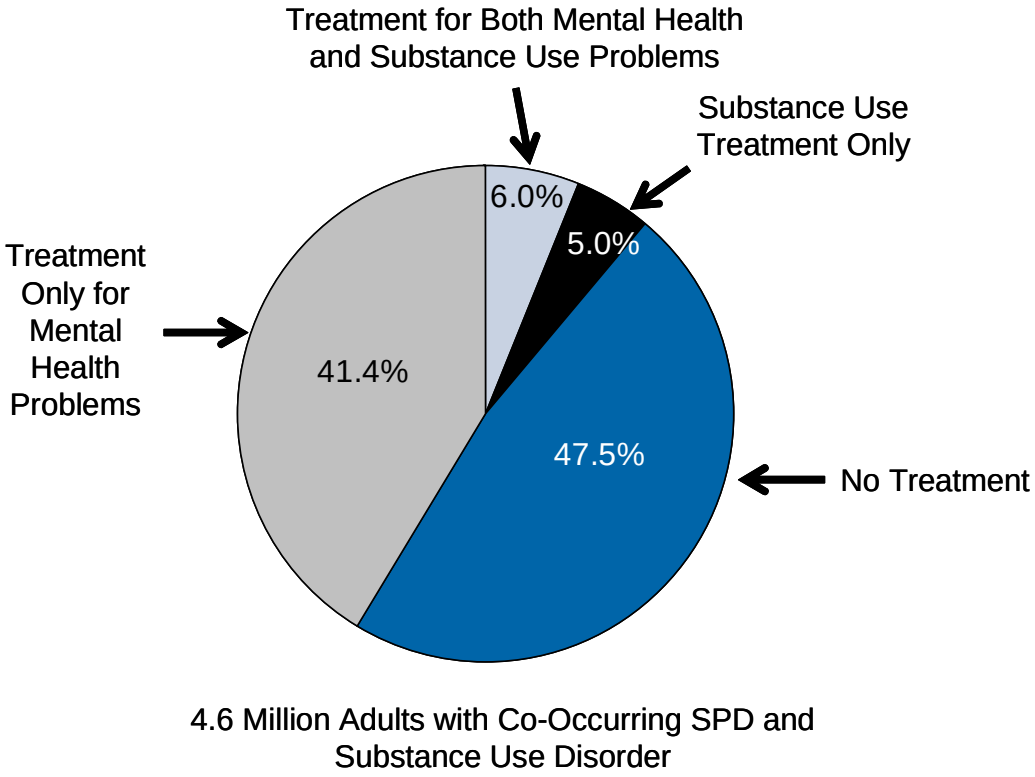
- In 2004, about half of all adults with SPD who received outpatient treatment for a mental health problem in the past year reported receiving outpatient treatment or counseling in the office of a private therapist, psychologist, psychiatrist, social worker, or counselor not part of a clinic (49.5 percent). An estimated 26.3 percent received care in an outpatient mental health clinic, and 28.2 percent received it in a private physician's office.

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

- Among the 4.6 million adults with SPD and a substance use disorder in 2004, 47.5 percent (about 2.2 million) received treatment for mental health problems, and 11.0 percent (503,000 adults) received specialty substance use treatment (Figure 8.3).

- In 2004, about half (47.5 percent) of adults with both SPD and a substance use disorder received no treatment for either problem. Only 6.0 percent (274,000 adults) received both treatment for mental health problems and specialty substance use treatment. Another 41.4 percent received only treatment for mental health problems, and 5.0 percent received only specialty substance use treatment.

Figure 8.3 Past Year Treatment among Adults Aged 18 or Older with Both Serious Psychological Distress and a Substance Use Disorder: 2004



Note: Due to rounding, these percentages do not add to 100 percent.

8.2 Major Depressive Episodes

Prevalence of Major Depressive Episodes

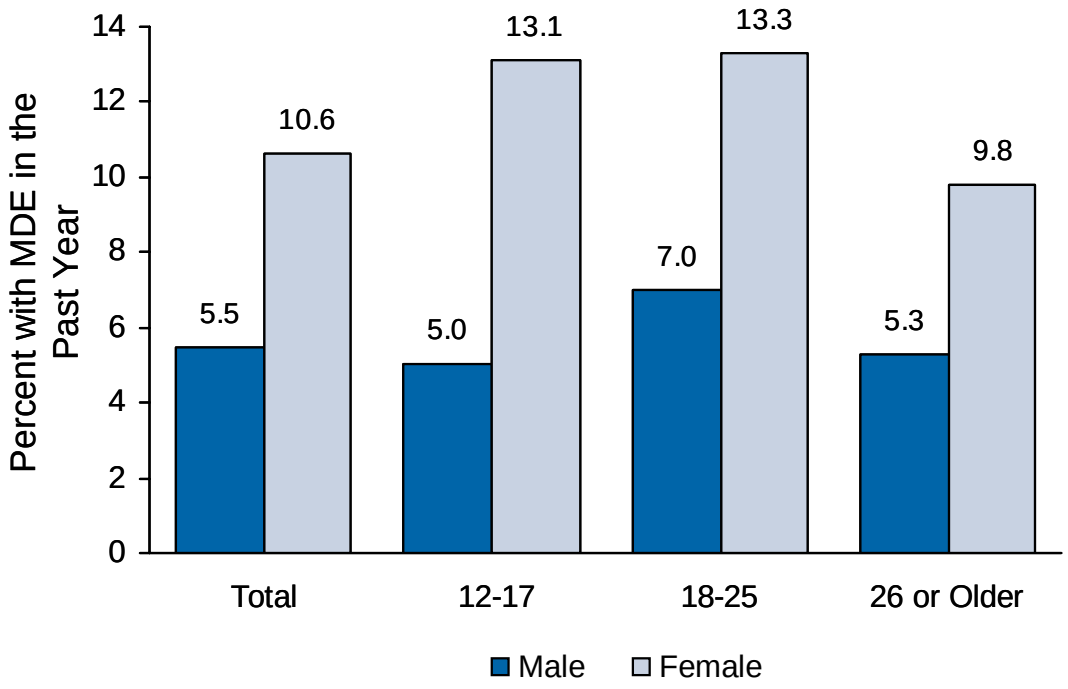
- In 2004, an estimated 35.1 million persons (14.7 percent of the population) aged 12 or older had at least one MDE in their lifetime, and 19.3 million persons (8.1 percent of the population) had at least one MDE in the past year. In 2004, an estimated 2.2 million youths aged 12 to 17 and 17.1 million adults aged 18 or older had at least one MDE during the past year.

- The lifetime prevalence of MDE was 14.0 percent among persons aged 12 to 17, 16.6 percent among persons aged 18 to 25, and 14.5 percent among persons aged 26 or older.

- The past year prevalence of MDE was highest for adults aged 18 to 25 (10.1 percent) and lowest for those aged 26 or older (7.6 percent). The rate among youths aged 12 to 17 was 9.0 percent.

- The past year prevalence of MDE was higher among females than among males (10.6 vs. 5.5 percent) (Figure 8.4). Rates of lifetime and past year MDE were higher for females than males in all age groups.

Figure 8.4 Major Depressive Episodes in the Past Year among Persons Aged 12 or Older, by Age and Gender: 2004



- Among racial/ethnic groups, the past year prevalence of MDE was highest among persons reporting two or more races (16.6 percent). Rates of MDE were below 10 percent among whites (8.5 percent), American Indians or Alaska Natives (8.0 percent), blacks (7.2 percent), Hispanics (6.8 percent), and Asians (5.4 percent).

- Among adults aged 18 or older, past year prevalence of MDE was higher among unemployed persons (11.3 percent) than among persons employed full time (7.6 percent) and persons not in the labor force (8.0 percent). The rate was 8.8 percent among part-time employees.

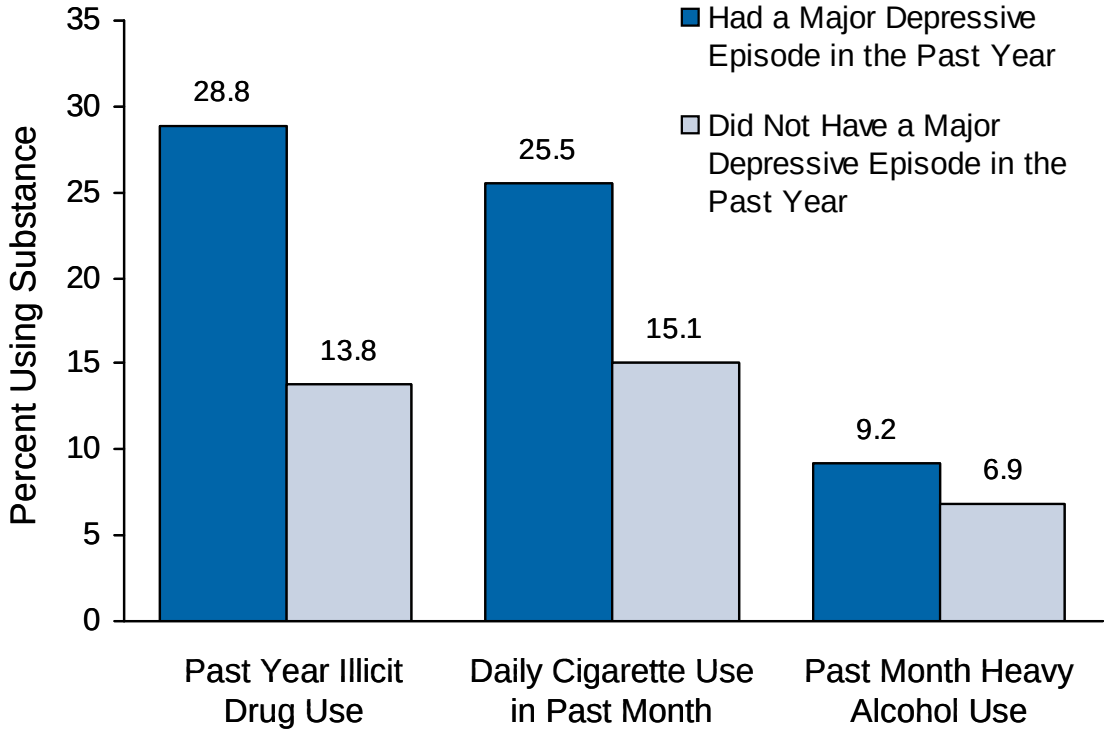
- Among persons aged 12 or older, perceived health was highly correlated with past year MDE. The rate of MDE was highest among persons with fair or poor health (13.6 percent) and lowest among those with excellent health (5.1 percent). The rate was 7.6 percent among those with very good health and 9.3 percent among those with good health.

Major Depressive Episodes and Substance Use

- In 2004, persons with MDE in the past year were more likely than those without MDE to have used an illicit drug in the past year. Among persons with an MDE, 28.8 percent used an illicit drug in the past year, while among those without an MDE only 13.8 percent used an illicit drug (Figure 8.5). A similar pattern was observed for specific types of past year illicit drug use, such as marijuana, cocaine, heroin, hallucinogens, inhalants, and the nonmedical use of psychotherapeutics.

- Past month heavy alcohol use, defined as drinking five or more drinks on 5 or more days in the past 30 days, also was associated with an MDE in the past year. Among persons with an MDE, 9.2 percent were heavy alcohol users compared with 6.9 percent of persons without an MDE. Similarly, among persons with an MDE, the rate of daily cigarette use was 25.5 percent, while the rate was 15.1 percent among persons without an MDE.

Figure 8.5 Substance Use among Persons Aged 12 or Older, by Major Depressive Episode in the Past Year: 2004



Co-Occurrence of a Major Depressive Episode with Substance Dependence or Abuse

- Having MDE in the past year also was associated with substance dependence or abuse. Among persons aged 12 or older with MDE in 2004, 22.0 percent were dependent on or abused alcohol or illicit drugs, while among persons without MDE 8.6 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 (9.6 vs. 2.7 percent) and alcohol (16.8 vs. 7.1 percent).

- Among persons with substance dependence or abuse, 18.5 percent had at least one MDE in the past year compared with 7.0 percent among those who did not have substance dependence or abuse.

Treatment for Major Depressive Episodes

- Among persons aged 12 or older who had MDE in the past year, 62.3 percent received treatment (i.e., saw or talked to a medical doctor or other professional or used prescription medication) for depression within the same time period.

- Rates of treatment among persons with MDE in the past year varied by age. The rate was highest among adults 26 or older (69.5 percent). The rate was 46.3 percent for adults 18 to 25 years of age and 40.3 percent for adolescents 12 to 17 years of age.

- In 2004, females who had MDE in the past year were more likely than males to receive treatment in the past year (66.6 vs. 53.4 percent) (Figure 8.6).

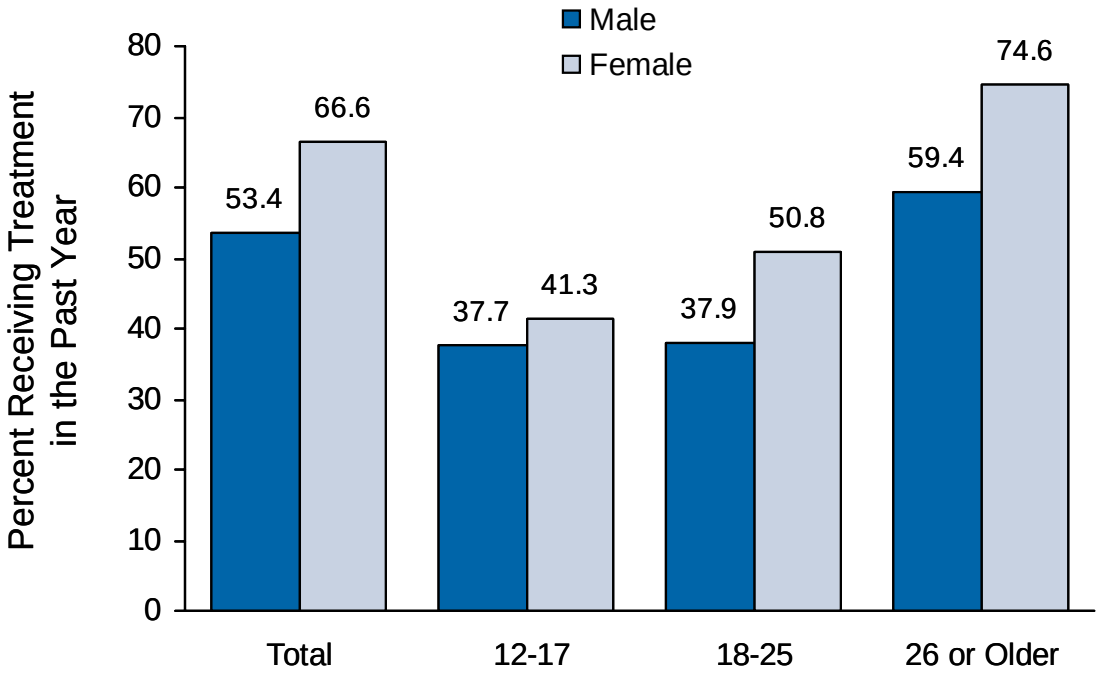
- Only 28.9 percent of black youths with MDE in the past year received treatment for depression during the past year, compared with 44.9 percent of white youths and 36.8 percent of Hispanic youths with MDE.

- Persons with MDE in the past year whose self-perceived health status was fair or poor were more likely to receive treatment for their depression (74.1 percent) than those whose self-perceived health status was good (64.7 percent), very good (55.0 percent) or excellent (57.8 percent).

- Among adults 18 or older with MDE in the past year, less than half of those with no insurance (41.1 percent) received treatment for depression in the past year compared with 70.3 percent of adults with private insurance, 74.3 percent of adults with Medicaid or CHIP, and 82.6 percent of adults with other health insurance, including Medicare, CHAMPUS, TRICARE, CHAMPVA, VA, and other sources of health care or insurance.

- Among persons aged 12 or older with MDE in the past year, 17.2 percent saw or talked to a medical doctor or other professional but did not use prescription medication, 3.4 percent used prescription medication but did not see a medical doctor or other professional, and 41.7 percent saw or talked to a health professional and used prescription medication within the past 12 months.

Figure 8.6 Past Year Treatment for Depression among Persons Aged 12 or Older with a Major Depressive Episode in the Past Year, by Age and Gender: 2004



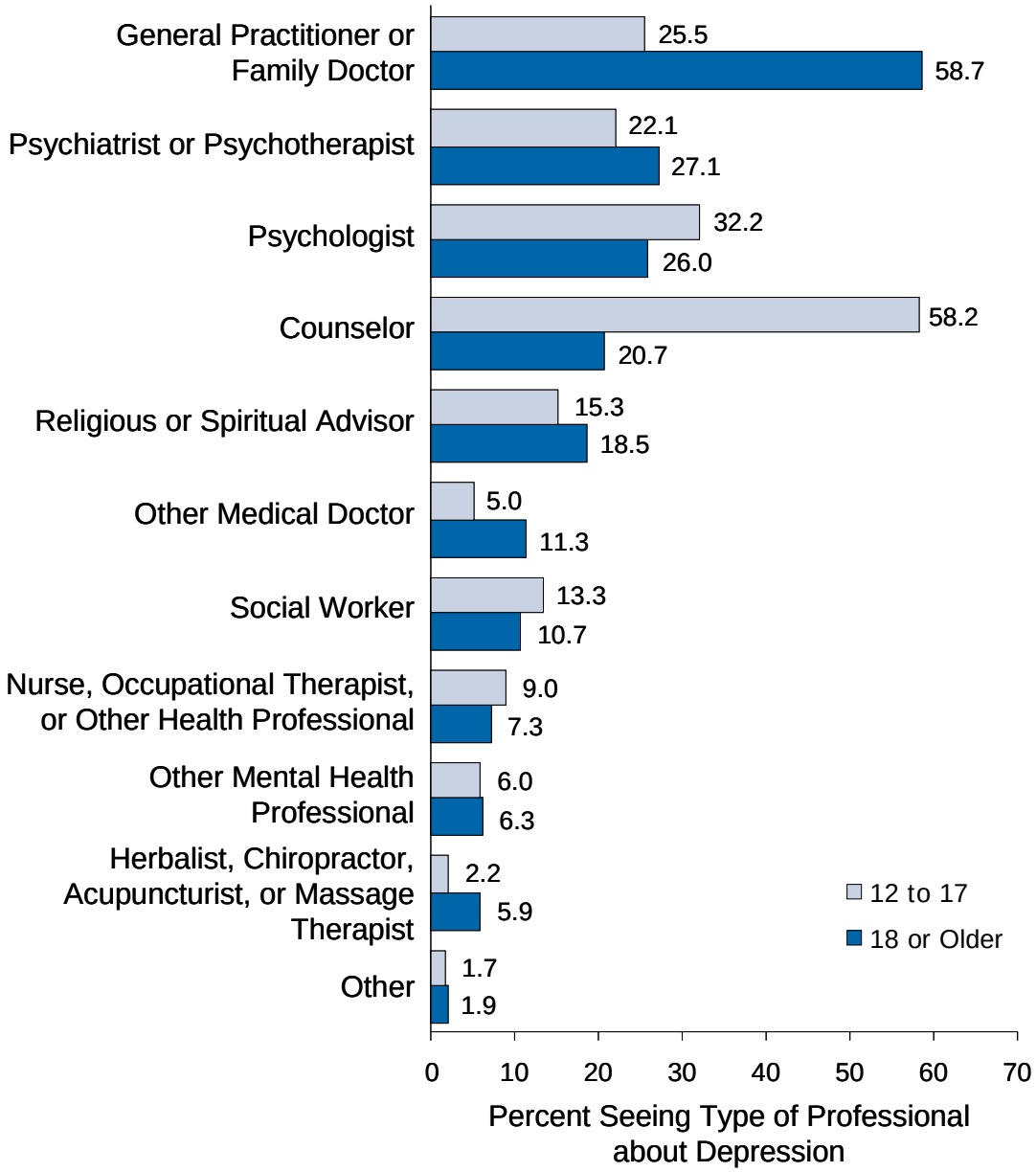
- There were differences by age group in the type of professional seen among persons with MDE in the past year who saw or talked to a professional in the past year about depression. Adults aged 18 years or older were more likely than youths aged 12 to 17 to see a family doctor (58.7 vs. 25.5 percent) or other medical doctors (11.3 vs. 5.0 percent) about depression in the past year. In contrast, youths were more likely than adults to see psychologists (32.2 vs. 26.0 percent) or counselors (58.2 vs. 20.7 percent) (Figure 8.7).

- Among adults with an MDE in the past year, about one in five uninsured adults reported both seeing or talking to a health care professional and using a prescription medication in the past year (19.5 percent), while 50.0 percent with private insurance, 58.6 percent with Medicaid/CHIP, and 63.3 percent with other insurance reported both seeing or talking with a health care professional and using a prescription medication for the treatment of MDE in the past year.

Perceived Help from Treatment for Major Depressive Episodes

- An estimated 42.4 percent of persons with MDE in the past year who saw or talked to a health care professional in the past year for depression reported this treatment as helping "a lot" or "extremely," and 29.2 percent described this care as helping "not at all" or "a little."

Figure 8.7 Type of Professional Seen among Persons Aged 12 or Older with Major Depressive Episodes in the Past Year Who Saw or Talked to a Medical Doctor or Other Professional in the Past Year about Depression, by Age Group: 2004



- Among persons aged 12 or older with MDE in the past year, 55.0 percent of those who received prescription medication for depression in the past year reported that the medication has helped "a lot" or "extremely," while only 42.4 percent of those who saw or talked to a medical doctor or other professional reported that this treatment helped "a lot" or "extremely."

- An estimated 39.9 percent of youths aged 12 to 17 with MDE in the past year who saw or talked to a medical doctor or other professional for depression reported that this treatment helped "not at all" or "a little."

- Among persons with MDE in the past year who received prescription medication for depression in the past year, 32.9 percent of youths aged 12 to 17 reported that the prescription medication helped "not at all" or "a little," while 16.7 percent of adults aged 18 or older reported that the prescription medication helped "not at all" or "a little."

Role Impairment Resulting from Major Depressive Episode

- An estimated 1.5 million youths aged 12 to 17 years old with MDE in the past year experienced severe to very severe impairment in at least one of four role domains due to depression. This represents 69.2 percent of youths with MDE and 6.1 percent of all youths. On average, youths with very severe impairment due to depression were unable to carry out normal activities 55.7 days during the past year.

- An estimated 11.2 million adults with MDE in the past year experienced severe or very severe impairment in at least one of the four role domains due to depression (66.3 percent of adults with MDE, 5.2 percent of all adults). On average, adults who reported very severe impairment in at least one of the domains were unable to carry out normal activities on 120.3 days out of the year.

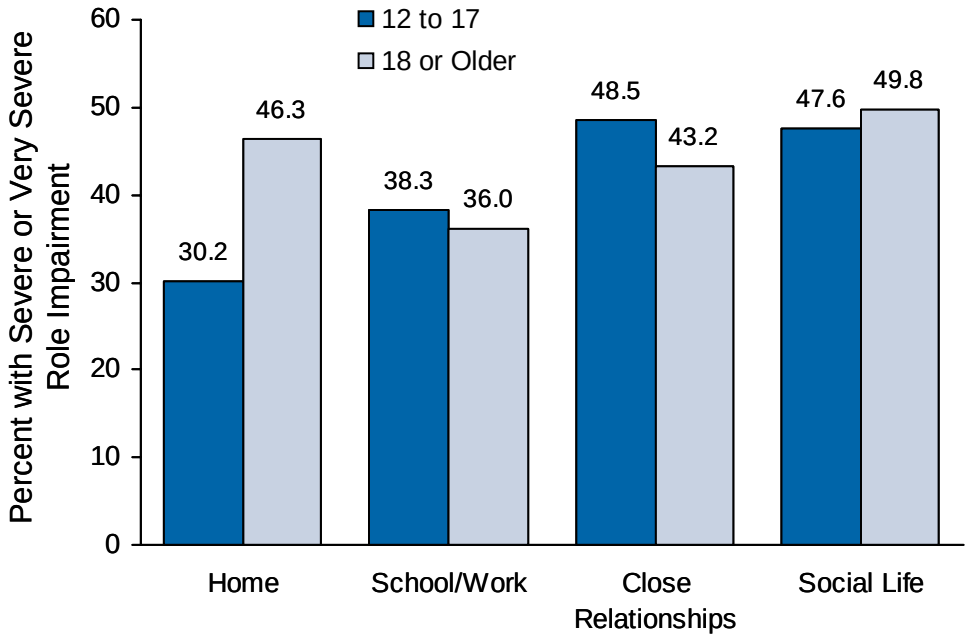
- An estimated 5.5 million adults with MDE in the past year reported severe or very severe impairment in their ability to carry out work activities in the past year as the result of their depression.

- Among adults aged 18 years or older with MDE in the past year, 46.3 percent described severe or very severe impairment in their ability to fulfill normal responsibilities with home management, while 43.2 percent reported severe to very severe impairment in forming and maintaining close relationships with others due to depression (Figure 8.8).

8.3 Treatment and Unmet Treatment Need among All Adults

- In 2004, an estimated 27.5 million adults received treatment for mental health problems during the past 12 months. This represents 12.8 percent of the population 18 years or older and is similar to the rate in 2002 and 2003.

Figure 8.8 Percentage with Severe or Very Severe Role Impairment as Measured by the Sheehan Disability Scale (SDS) among Persons Aged 12 or Older with a Major Depressive Episode in the Past Year: 2004



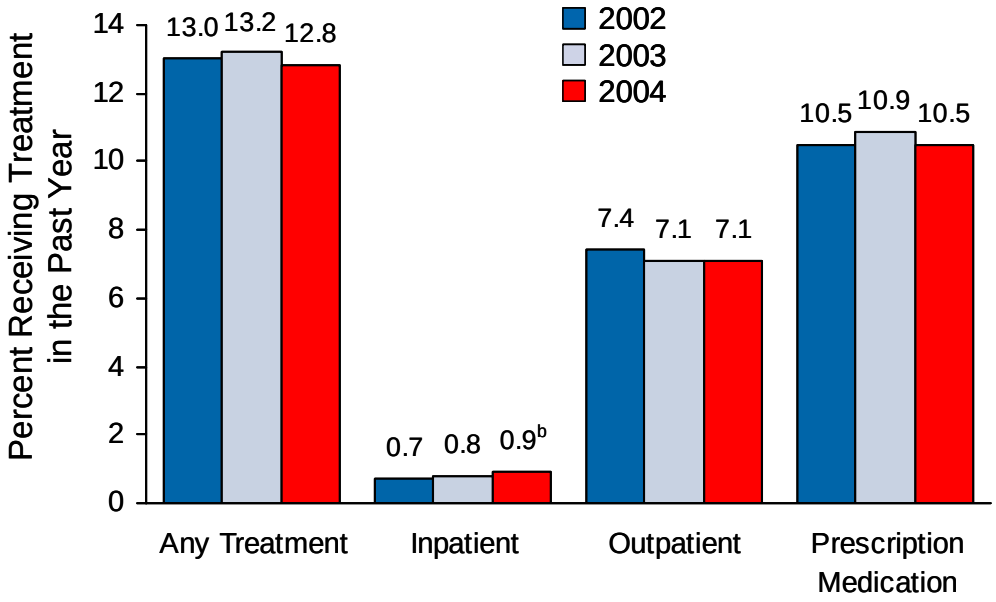
- The treatment type most often reported by the adult population in 2004 was prescription medication (10.5 percent), followed by outpatient treatment (7.1 percent). About 1.9 million adults (0.9 percent) received inpatient care for mental health problems during the past year. These patterns of utilization were not significantly different from those seen in 2002 and 2003, although the rate of inpatient treatment was higher in 2004 than in 2002 (0.7 percent) (Figure 8.9).

- Rates of treatment for mental health problems varied by age, ranging from 10.8 percent for adults aged 18 to 25 to 14.4 percent for adults aged 26 to 49. The rate was 11.7 percent among adults aged 50 or older.

- In 2004, men were less likely than women to receive outpatient treatment (5.0 vs. 9.0 percent) and prescription medication (6.9 vs. 13.9 percent) for mental health problems. There was no gender difference in the rates of inpatient treatment.

- Among racial/ethnic groups, the rates of treatment for adults in 2004 were 15.8 percent for persons reporting two or more races, 14.9 percent for non-Hispanic whites, 12.6 percent for American Indians or Alaska Natives, 8.5 percent for blacks, 7.4 percent for Hispanics, and 4.7 percent for Asians.

Figure 8.9 Past Year Treatment for Mental Health Problems among Adults Aged 18 or Older, by Type of Treatment: 2002-2004



[a] Difference between the 2003 estimate and the 2004 estimate is statistically significant at the .05 level.
[b] Difference between the 2002 estimate and the 2004 estimate is statistically significant at the .05 level.

- In 2004, the overall rate of treatment for mental health problems was lowest for adults with less than a high school education and for high school graduates with no college (11.3 and 11.5 percent, respectively). Similar to 2003, adults without a high school diploma were more likely than adults with some college or college graduates to have received inpatient mental health treatment (1.8 percent vs. 0.7 and 0.2 percent, respectively). Adults with some college (12.5 percent) and college graduates (10.6 percent) were more likely to receive prescription medication for mental health problems compared with adults with less than a high school education (8.9 percent).

- In 2004, adults with an annual family income of less than $20,000 were more likely to receive treatment or counseling for mental health problems (15.6 percent) than were those with incomes of $20,000 to $49,999 (11.6 percent), those with incomes of $50,000 to $74,999 (12.9 percent), and adults with incomes of $75,000 or more (12.2 percent).

- The rate of illicit drug use in the past year was higher among adults who received treatment or counseling for their mental health problems in the past year than among those who did not receive treatment (21.5 vs. 12.5 percent). The rate of past year alcohol use also was higher among adults who received treatment for a mental health problem than among those who did not receive treatment (71.5 vs. 68.5 percent). However, there were no significant differences in the rate of past month binge alcohol use or past month heavy alcohol use between those receiving and those not receiving treatment (23.9 vs. 24.2 percent and 7.5 vs. 7.4 percent, respectively).

- Adults who received treatment or counseling in the past year for their mental health problems were more than twice as likely to be dependent on or abuse illicit drugs as adults who did not receive any treatment (6.3 vs. 2.2 percent). They also were more likely to be dependent on or abuse alcohol (13.2 vs. 7.2 percent).

- Similar to 2002 and 2003, more than half of adults who received treatment or counseling for mental health problems in 2004 (54.7 percent) reported that the treatment improved their ability to manage daily activities "a great deal or a lot."

- In 2004, 10.9 million adults (5.1 percent) reported an unmet need for treatment or counseling for mental health problems in the past year. This includes 5.6 million adults who did not receive treatment. Among adults who did receive treatment or counseling for a mental health problem in the past year, 19.1 percent reported an unmet need. This may reflect a delay in treatment or receipt of insufficient treatment.

- Among the 5.6 million adults who reported an unmet need and did not receive treatment in the past year, several barriers to treatment were reported. These included cost or insurance issues (47.2 percent), not feeling a need for treatment at the time or believing that the problem could be handled without treatment (37.6 percent), stigma associated with treatment (25.8 percent), and not knowing where to go for services (19.9 percent) (Figure 8.10).

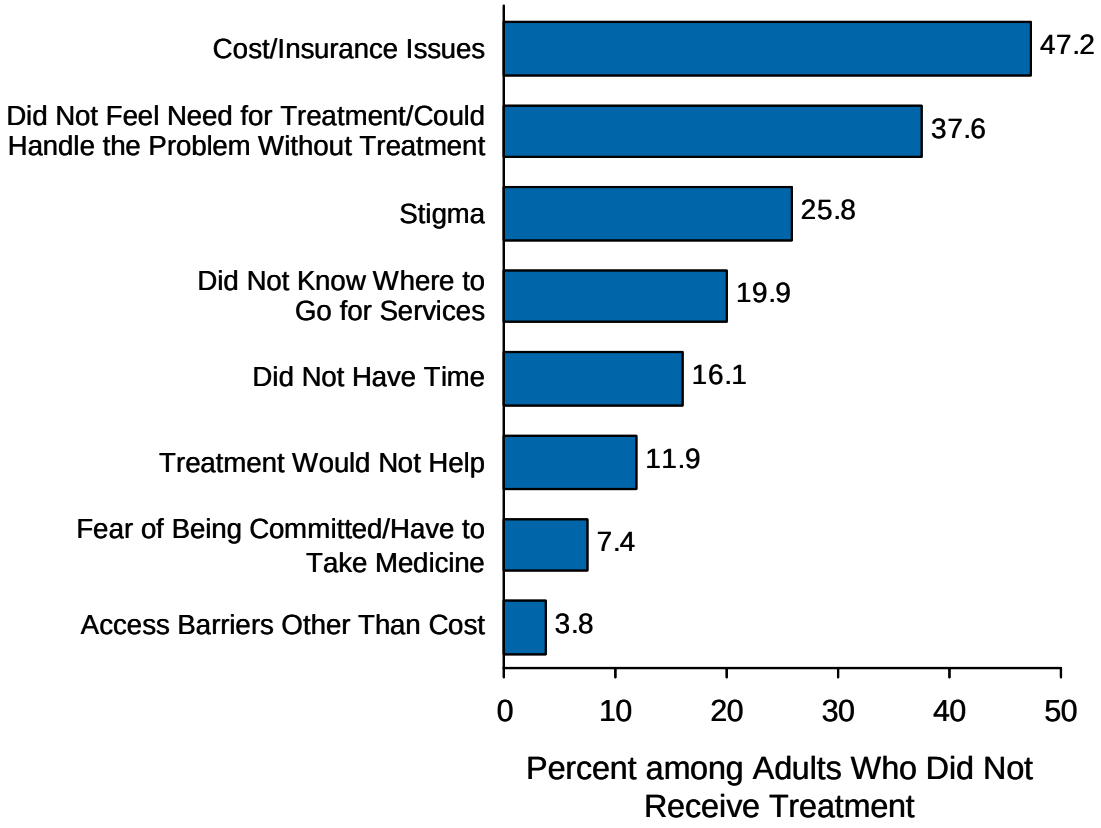
8.4 Treatment for Mental Health Problems among Youths

- In 2004, 5.7 million youths aged 12 to 17 (22.5 percent) received treatment or counseling for emotional or behavior problems in the year prior to the interview. This is higher than the estimates for 2002 (19.3 percent) and 2003 (20.6 percent).

- The rate of treatment for mental health problems among youths aged 12 to 17 who used illicit drugs in the past year (33.6 percent) was higher than the rate among youths who did not use illicit drugs (19.6 percent).

- The rate of illicit drug use in the past year was higher among youths who received mental health treatment or counseling in the past year than among those who did not (31.4 vs. 18.0 percent). This pattern also was observed for marijuana, cocaine, hallucinogens, inhalants, and the nonmedical use of psychotherapeutics.

Figure 8.10 Reasons for Not Receiving Treatment in the Past Year among Adults Aged 18 or Older with an Unmet Need for Treatment Who Did Not Receive Treatment: 2004



- Youths 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 (40.8 vs. 31.9 percent). Youths receiving mental health treatment or counseling in the past year were more likely to have smoked cigarettes in the past year (27.6 vs. 15.7 percent).

- Youths who received mental health treatment or counseling in the past year were twice as likely to be dependent on or to have abused illicit drugs or alcohol in the past year than those who did not receive treatment or counseling (14.9 vs. 7.1 percent).

9. Discussion of Trends in Substance Use Prevalence

This report presents findings from the 2004 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, 2003, and 2004 estimates are not comparable with estimates from 2001 and earlier surveys. The primary focus of the report is on comparisons across subgroups of the U.S. population in 2004 and changes between 2003 and 2004, as well as between 2002 and 2004, in the substance use and mental health measures addressed by the survey. Some of the key findings for 2004 are presented in the Highlights section of this report. This chapter provides an additional discussion of the findings concerning a topic of great interest—trends in substance use among youths and young adults.

The 2002-2004 NSDUHs show that among youths aged 12 to 17, the use of alcohol, inhalants, cocaine, and pain relievers used nonmedically did not change significantly, while cigarette use declined. Youth marijuana use also declined, but slowly, and primarily among males, and not in the West region. However, data on marijuana incidence suggest that the recent declining trend in marijuana prevalence may not continue in 2005. The percentage of youths who used marijuana for the first time within the past 12 months was 4.9 percent in 2003 and 5.0 percent in 2004. Among young adults aged 18 to 25, trends were similar to the trends for youths, except that there was no decline in cigarette use in this age group. The past month cigarette smoking rate among young adults remained at about 40 percent in 2004.

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 E, along with descriptions of methods and results from other substance use and mental health data sources.

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 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 earlier participated in the study as 12th graders (2004 data from the adult survey are not available at this time) (Johnston, O'Malley, Bachman, & Schulenberg, 2005). Historically, NSDUH rates of substance use among youths have been lower than those of MTF, but the two sources have usually shown similar trends.

Recent Trends in Substance Use

A comparison of NSDUH and MTF estimates for 2002, 2003, and 2004 is shown in Tables 9.1 and 9.2 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 NSDUH youth estimates, while MTF follow-up data on persons aged 19 to 24 provide the closest match on age to NSDUH young adult estimates. The NSDUH results are very consistent with MTF trends. Both surveys show decreases among youths and young adults for some measures of use of illicit drugs, alcohol, and cigarettes between 2002 and 2004, although not all decreases are statistically significant. The gender difference in the youth marijuana use trend described in Chapter 2 of this report also is evident in MTF data. The rate of past year marijuana use among male 8th and 10th graders dropped from 24.7 percent in 2002 to 20.7 percent in 2004, while among females in these grades the rate was 20.4 percent in 2002 and 18.5 percent in 2004 (Johnston, O'Malley, Bachman, & Schulenberg, in press a).

Long-Term Trends in the Use of Marijuana, Cocaine, and Nonmedical Psychotherapeutics

In this section, trends in the use of two illicit drugs of concern, marijuana and cocaine, are described along with trends in the nonmedical use of prescription-type psychotherepeutics. Methodology changes throughout NSDUH's history make it difficult to assess long-term trends. However, it is instructive to compare NSDUH estimates from 1971 to 2004 by "piecing together" the data from time periods for which data are comparable. Specifically, valid trend comparisons can be made for 1971-1998, 1999-2001, and 2002-2004. With this approach, comparisons between 1998 and 1999, and between 2001 and 2002, are made with caution because they are potentially biased due to methods changes. Nevertheless, when these data are combined in a single presentation, it often becomes clear that the effects of the methods changes are small compared with the major shifts in substance use prevalence that have occurred over the past three decades. For example, NSDUH data show an increase in youth and young adult marijuana use in the 1970s, followed by a decrease in the 1980s and another less pronounced increase among youths in the early 1990s (Figures 9.1 and 9.2). These trends also are evident in MTF data, as well as in NSDUH retrospectively reported incidence data presented in Figure 5.1 in Chapter 5 of this report.

The trend in cocaine use during the 1970s and 1980s shows a similar pattern to that of marijuana, although cocaine use lagged by several years and occurred among an older group of users (Figure 9.3). These results are consistent with MTF data (not shown). Marijuana use increased in the early 1970s, until it peaked in 1979, while cocaine use did not dramatically increase until the late 1970s, peaking in 1982 among youths, in 1979 among young adults aged 18 to 25, and in 1985 among persons aged 26 to 34. Marijuana use peaked in 1979 for all three of these age groups (data for those aged 26 to 34 are not shown; see Table 7.128B in the 2004 Detailed Tables). These trends for marijuana and cocaine are consistent with prior studies that have shown that more than 90 percent of cocaine users during the early 1980s had used marijuana prior to initiating cocaine use (Adams, Rouse, & Gfroerer, 1990); the same appears to be true for cocaine users in 2004.

Trend data for nonmedical use of prescription-type psychotherapeutics among persons aged 12 or older showed a decrease from 1985 to 1990, followed by a gradual decline; the rate

was lower in 1998 than in 1991. Methodological changes limit inferences about trends between 1998 and 1999 and from 2001 to 2002. A significant 1-year increase occurred from 2000 to 2001, but from 2002 to 2004 the rate remained stable (Figure 9.4).

Table 9.1 Comparison of NSDUH and MTF Prevalence Rates among Youths: 2002-2004

	NSDUH Age 12-17			MTF 8th and 10th Grades		
	2002	2003	2004	2002	2003	2004
Marijuana						
Lifetime	20.6[a,b]	19.6	19.0	29.0[a,b]	27.0	25.7
Past Year	15.8[b]	15.0	14.5	22.5[a,b]	20.5	19.7
Past Month	8.2	7.9	7.6	13.1[b]	12.3[b]	11.2
Cocaine						
Lifetime	2.7	2.6	2.4	4.9	4.4	4.4
Past Year	2.1[b]	1.8	1.6	3.2	2.8	2.9
Past Month	0.6	0.6	0.5	1.4	1.1	1.3
Ecstasy						
Lifetime	3.3[a,b]	2.4	2.1	5.5[a,b]	4.3[b]	3.6
Past Year	2.2[a,b]	1.3	1.2	3.9[a,b]	2.6[b]	2.1
Past Month	0.5[b]	0.4	0.3	1.6[a,b]	0.9	0.8
LSD						
Lifetime	2.7[a,b]	1.6[b]	1.2	3.8[a,b]	2.8	2.3
Past Year	1.3[a,b]	0.6	0.6	2.1[a,b]	1.5	1.4
Past Month	0.2	0.2	0.2	0.7	0.6	0.6
Inhalants						
Lifetime	10.5	10.7	11.0	14.4	14.3	14.9
Past Year	4.4	4.5	4.6	6.8[b]	7.1[b]	7.8
Past Month	1.2	1.3	1.2	3.1	3.2	3.5
Alcohol						
Lifetime	43.4[b]	42.9	42.0	57.0[b]	55.8[b]	54.1
Past Year	34.6	34.3	33.9	49.4[b]	48.3	47.5
Past Month	17.6	17.7	17.6	27.5	27.6	26.9
Cigarettes						
Lifetime	33.3[a,b]	31.0[b]	29.2	39.4[a,b]	35.7	34.3
Past Year	20.3[a,b]	19.0	18.4	--	--	--
Past Month	13.0[b]	12.2	11.9	14.2[b]	13.5	12.6

-- Not available.

[a] Difference between estimate and 2003 estimate is statistically significant at the .05 level.

[b] Difference between estimate and 2004 estimate is statistically significant at the .05 level.

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 (2005). Design effects used for variance estimation are reported in Johnston, O'Malley, Bachman, and Schulenberg (2004c).

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

Table 9.2 Comparison of NSDUH and MTF Prevalence Rates among Young Adults: 2002-2004

	NSDUH Age 18-25			MTF Age 19-24		
	2002	**2003**	**2004**	**2002**	**2003**	**2004**
Marijuana						
Lifetime	53.8	53.9	52.8	56.1	56.4	--
Past Year	29.8[a,b]	28.5	27.8	34.2	33.0	--
Past Month	17.3[b]	17.0	16.1	19.8	19.9	--
Cocaine						
Lifetime	15.4	15.0	15.2	12.9	14.5	--
Past Year	6.7	6.6	6.6	6.5	7.3	--
Past Month	2.0	2.2	2.1	2.5	2.6	--
Ecstasy						
Lifetime	15.1[b]	14.8[b]	13.8	16.0	16.6	--
Past Year	5.8[a,b]	3.7[b]	3.1	8.0	5.3	--
Past Month	1.1[a,b]	0.7	0.7	1.6	1.0	--
LSD						
Lifetime	15.9[a,b]	14.0[b]	12.1	13.9	13.8	--
Past Year	1.8[a,b]	1.1	1.0	2.4	1.5	--
Past Month	0.1[b]	0.2	0.3	0.4	0.2	--
Inhalants						
Lifetime	15.7[b]	14.9	14.0	11.7	11.4	--
Past Year	2.2	2.1	2.1	2.2	1.5	--
Past Month	0.5	0.4	0.4	0.8	0.3	--
Alcohol						
Lifetime	86.7	87.1	86.2	88.4	87.6	--
Past Year	77.9	78.1	78.0	83.9	82.3	--
Past Month	60.5	61.4	60.5	67.7	66.3	--
Cigarettes						
Lifetime	71.2[b]	70.2[b]	68.7	--	--	--
Past Year	49.0[a,b]	47.6	47.5	41.8	40.8	--
Past Month	40.8	40.2	39.5	31.4	29.5	--

-- Not available.

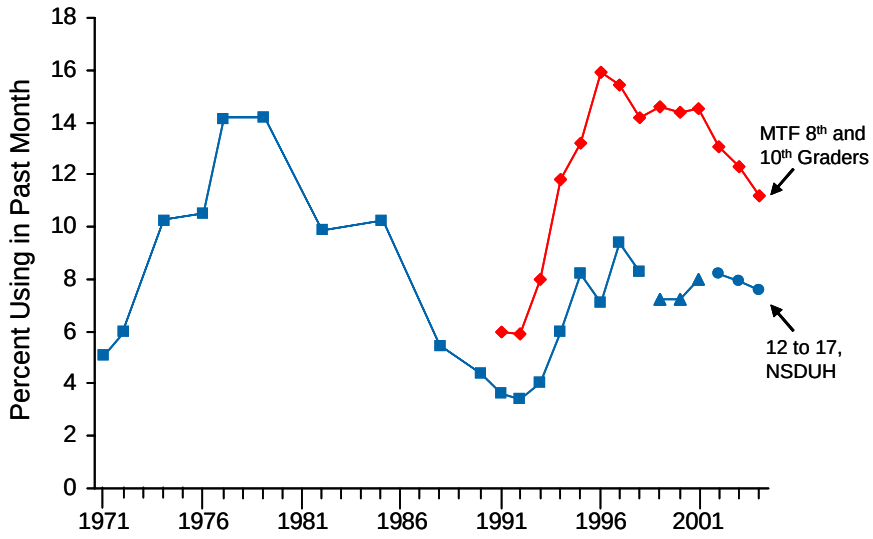
[a] Difference between estimate and 2003 estimate is statistically significant at the .05 level.

[b] Difference between estimate and 2004 estimate is statistically significant at the .05 level.

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

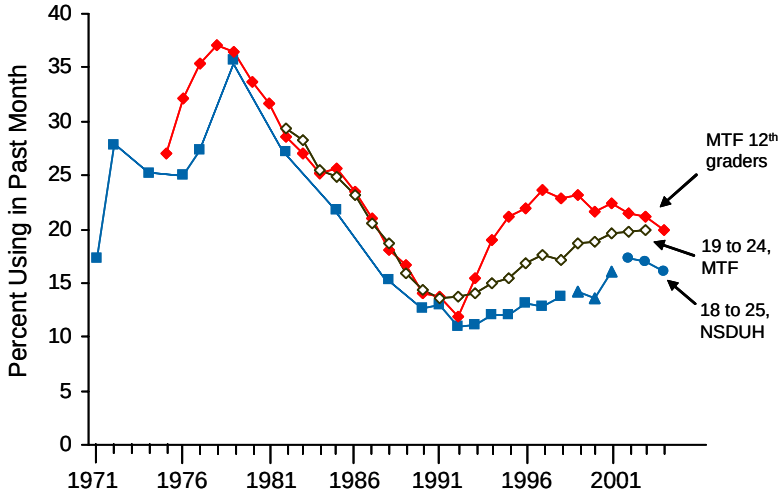
Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004. The Monitoring the Future Study, University of Michigan, 2002 and 2003.

Figure 9.1 Past Month Marijuana Use among Youths Aged 12 to 17: 1971-2004



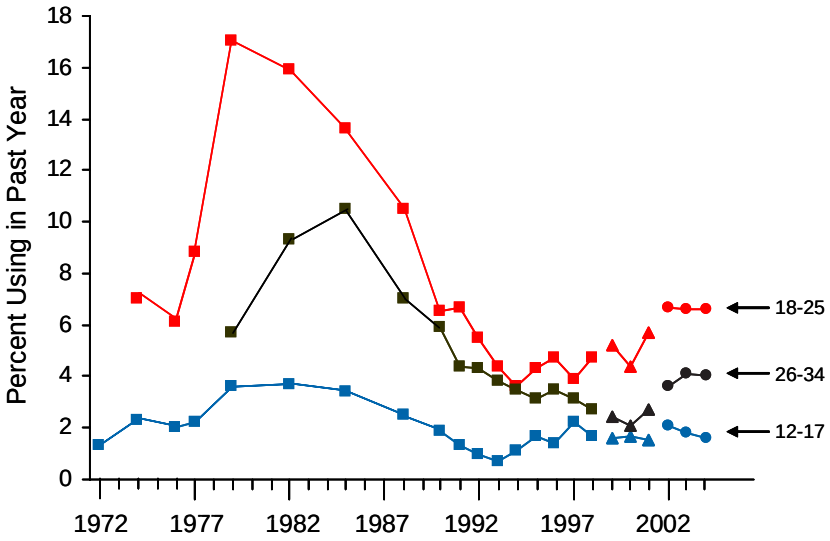
Note: Data points represent surveys conducted since 1971. The 1971-1998 data are from NHSDA (PAPI), the 1999-2001 data are from NHSDA (CAI), and the 2002-2004 data are from NSDUH (CAI). The three series of NSDUH/NHSDA data use different methodologies and are not comparable with the other series. MTF data are average estimates for 8th and 10th graders for 1991-2004.

Figure 9.2 Past Month Marijuana Use among Persons Aged 18 to 25: 1971-2004



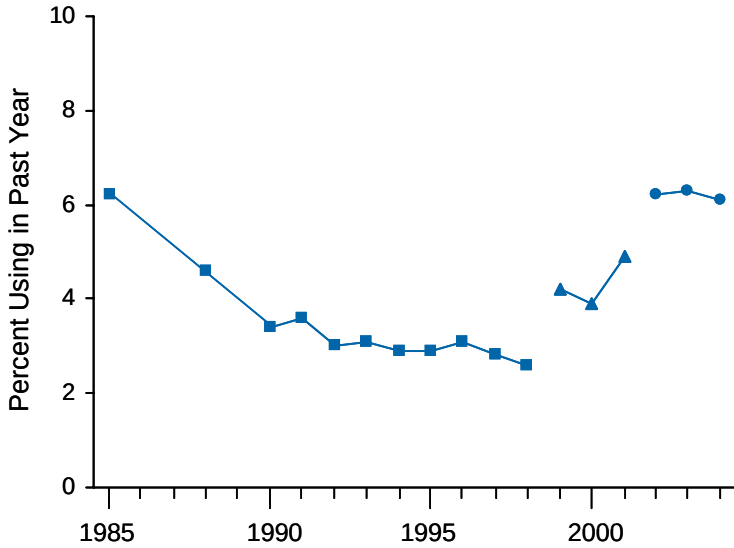
Note: Data points represent surveys conducted since 1971. The 1971-1998 data are from NHSDA (PAPI), the 1999-2001 data are from NHSDA (CAI), and the 2002-2004 data are from NSDUH (CAI). The three series of NSDUH/NHSDA data use different methodologies and are not comparable with the other series. MTF data are estimates for 12th graders for 1976-2004 and average estimates for persons aged 19 to 24 for 1983-2003.

Figure 9.3 Past Year Cocaine Use among Persons Aged 12 or Older, by Age: 1972-2004



Note: Data points represent surveys conducted since 1972. The 1972-1998 data are from NHSDA (PAPI), the 1999-2001 data are from NHSDA (CAI), and the 2002-2004 data are from NSDUH (CAI). The three series of NSDUH/NHSDA data use different methodologies and are not comparable with the other series.

Figure 9.4 Past Year Nonmedical Prescription-Type Psychotherapeutic Use among Persons Aged 12 or Older: 1985-2004



Note: Data points represent surveys conducted since 1985. The 1985-1998 data are from NHSDA (PAPI), the 1999-2001 data are from NHSDA (CAI), and the 2002-2004 data are from NSDUH (CAI). The three series of NSDUH/NHSDA data use different methodologies and are not comparable with the other series.

Appendix A: Description of the Survey

A.1 Sample Design

The 2004 National Survey on Drug Use and Health (NSDUH)[1] sample design is a continuation of a coordinated 5-year sample design providing estimates for all 50 States plus the District of Columbia for the years 1999 through 2003 and continuing through 2004. The respondent universe is the civilian, noninstitutionalized population aged 12 years old or older residing within the United States and the District of Columbia. Persons excluded from the universe include active-duty military personnel, persons with no fixed household address (e.g., homeless and/or transient persons not in shelters), and residents of institutional group quarters, such as jails and hospitals.

The coordinated design for 1999 through 2003 facilitated 50 percent overlap in first-stage units (area segments) between each 2 successive years. The 2004 NSDUH continued the 50 percent overlap by retaining approximately half of the first-stage sampling units from the 2003 survey. The remainder of the sample was drawn from the 1999 through 2003 reserve sample (i.e., area segments not used in previous years). Before selection, composite size measures[2] were adjusted to the 2000 census data.[3] The application of a special probability sampling procedure initially developed by Keyfitz (1951) ensured that most of the overlap segments from 2003 were included in the 2004 sample.

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 2004, sample sizes in these States ranged from 3,575 to 3,725. 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) techniques.[4] Sample sizes in these States ranged from 828 to 934 in 2004.

States were first stratified into a total of 900 field interviewer (FI) 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. Within FI regions, adjacent census blocks were combined to form the first-stage sampling units, called area segments. A total of 96 segments per FI region were selected 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.[5] Of these

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

[2] The composite size measure is an estimate of the population weighted by the sampling fraction in each age group.

[3] Composite size measures were originally formed using 1990 census data and adjusted to population counts from Claritas Incorporated (http://www.claritas.com).

[4] Small area estimation (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 2002-2003 National Surveys on Drug Use and Health* (Wright & Sathe, 2004) for more details.

[5] For more details on the 5-year sample, see the sample design report in the *2003 NSDUH Methodological Resource Book* (Bowman, Chromy, Hunter, Martin, & Odom, 2005b).

segments, 24 were designated for the coordinated 5-year sample, while the other 72 were designated as "reserve" segments. It is from this reserve sample and the 2003 overlap sample that the 2004 NSDUH sample segments were selected. Eight sample segments per FI region were fielded during the 2004 survey year.

These sampled segments were allocated equally into four separate samples, one for each 3-month period (calendar quarter) during the year, so that the survey was essentially continuous in the field. In each of these area segments, a listing of all addresses was made, from which a sample of 169,514 addresses was selected. Of the selected addresses, 142,612 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 130,130. 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 81,973 persons were selected nationwide. Consistent with previous surveys in this series, the final respondent sample of 67,760 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. Definitions of key terms are provided in Appendix C.

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 these types of units (they are given a nonzero probability of selection), sample sizes of most specific groups are too small to provide separate estimates. Persons excluded from the survey include homeless people who do not use shelters, active military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term hospitals. More information on the sample design can be found in a 2004 NSDUH report by Bowman, Chromy, Hunter, and Martin (2005a) on the OAS website (http://www.oas.samhsa.gov/nhsda/methods.cfm#2k3).

An additional stage of sampling occurred within the 2004 computer-assisted interviewing (CAI) questionnaire. Approximately 50 percent of adult respondents aged 18 or older were randomly assigned to receive the full module of serious psychological distress (SPD) questions. The remaining adults received a reduced number of SPD questions and a new set of questions on depression. These complementary samples are together referred to as the SPD "split sample," the full SPD module is referred to as "sample A," and the reduced SPD module is referred to as "sample B."

The split sample was originally set up so that 20 percent of the adult respondents received the full module and 80 percent received the reduced module. When a preliminary analysis indicated that there may be a difference between the two samples, the selection algorithm was modified such that 60 percent received the full module and 40 percent received the reduced module in Quarters 2, 3, and 4. As a result, the sample was split half and half for the year.

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 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) and ACASI. The interview begins in CAPI mode with the 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. All respondents who complete a full interview are given a $30.00 cash payment as a token of appreciation for their time.

No personal identifying information is captured in the CAI record for the respondent. At the end of the day when an interviewer has completed one or more interviews, he or she transmits the data to RTI in Research Triangle Park, North Carolina, via home telephone lines.

A.3 Data Processing

Interviewers initiate nightly data transmissions of interview data and call records on days when they work. 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. 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. 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 were 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 was 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 2004 NSDUH, the models included binomial logistic regression, multinomial logistic regression, Poisson regression, and ordinary linear regression, where the models incorporated the design weights.

In general, hot-deck imputation replaces a missing or ambiguous value taken from a "similar" respondent who has complete 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. 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, 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 further restricted to satisfy logical constraints whenever necessary (e.g., age at first crack use must not be younger 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 (2005b) and 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 inverse of the selection probabilities of the households and persons. 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 total population within State and the five age groups (12 to 17, 18 to 25, 26 to 34, 35 to 49, 50 or older) within 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. Bureau of the Census 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 *2003 NSDUH Methodological Resource Book* (RTI International, 2005b).

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 two.

For the sections on SPD and adult depression in the 2004 questionnaire, the adult (aged 18 or older) sample was divided between two complementary modules: the full SPD module (sample A) and the reduced SPD module plus depression module (sample B). Therefore, two additional sets of analysis weights were required (i.e., one for sample A and one for sample B). The weights for sample A were used as the analysis weights for producing the SPD estimates, and the weights for sample B were used as the analysis weights for producing the adult depression module estimates. These two weights were created by incorporating the inverse quarterly sampling fractions associated with the random sample splits for the two modules into the weights after the person-level nonresponse adjustment. Each subsample then was poststratified separately to the census estimates of the civilian noninstitutionalized population aged 18 or older for various domains defined by age group, race/ethnicity, gender, and State. Note there are six respondents aged 18 or older who had a missing value for the SPD sample indicator variable. It appears that these six respondents broke off the interview before they could be assigned to the full or reduced SPD module. Those six respondents were excluded from either sample A or sample B; thus, they had zero weight of sample A or sample B.

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 E describes other surveys that provide data for these populations.

B.2 Sampling Error and Statistical Significance

The national estimates, along with the associated variance components, were computed 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 [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 in SUDAAN for all estimates presented in this report using a Taylor series linearization approach that takes into account the effects of the complex NSDUH design features. The sampling errors are used to identify unreliable estimates and to test for the statistical significance of differences between estimates.

B.2.1 Variance Estimation for Totals

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 number of substance users in the domain and $\hat{N}_d$ is a linear statistic estimating the total number of persons in domain *d* (both users and nonusers). The SUDAAN software used to develop estimates and their SEs produces direct estimates of $\hat{Y}_d$ and $\hat{N}_d$ and their SEs. The SUDAAN application also uses a Taylor series approximation method to estimate the SEs of the ratio estimate $\hat{p}_d$.

When the domain size, $\hat{N}_d$, is free of sampling error, an appropriate estimate of the SE for the total number of 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. Bureau of the Census population projections through the weight calibration process (Chen et al., 2005). In these cases, $\hat{N}_d$ is not subject to sampling error. 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. Bureau of the Census population projections), this formulation may still 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 a subset of the estimates produced from the 2002, 2003, and 2004 data, the above approach yielded an underestimate of the variance of a total because $\hat{N}_d$ was subject to considerable variation. In these cases, the SEs for the total estimates calculated directly within SUDAAN are reported. Using the SEs from the total estimates directly from SUDAAN does not affect the SE estimates for the corresponding proportions presented in the same sets of tables.

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) on nominal sample size and on effective sample size.

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

$$\text{RSE}[-\ln(\hat{p})] > 0.175 \text{ when } \hat{p} \leq 0.5$$

or

$$\text{RSE}[-\ln(1 - \hat{p})] > 0.175 \text{ when } \hat{p} > 0.5.$$

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

$$\frac{\text{SE}(\hat{p})/\hat{p}}{-\ln(\hat{p})} > 0.175 \text{ when } \hat{p} \leq 0.5$$

or

$$\frac{\text{SE}(\hat{p})/(1-\hat{p})}{-\ln(1-\hat{p})} > 0.175 \text{ when } \hat{p} > 0.5.$$

The separate formulas for $\hat{p} \leq 0.5$ and $\hat{p} > 0.5$ produce a symmetric suppression rule (i.e., if $\hat{p}$ is suppressed, then $1 - \hat{p}$ will be as well). This ad hoc rule requires an effective sample size in excess of 50. When $0.05 < \hat{p} < 0.95$, the symmetric property of the rule produces a local maximum effective sample size of 68 at $\hat{p} = 0.5$. Thus, estimates with these values of $\hat{p}$ along with effective sample sizes falling below 68 are suppressed. See Figure B.1 for a graphical representation of the required minimum effective sample sizes as a function of the proportion estimated.

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 $\hat{p} < 0.00005$ or if $\hat{p} \geq 0.99995$).

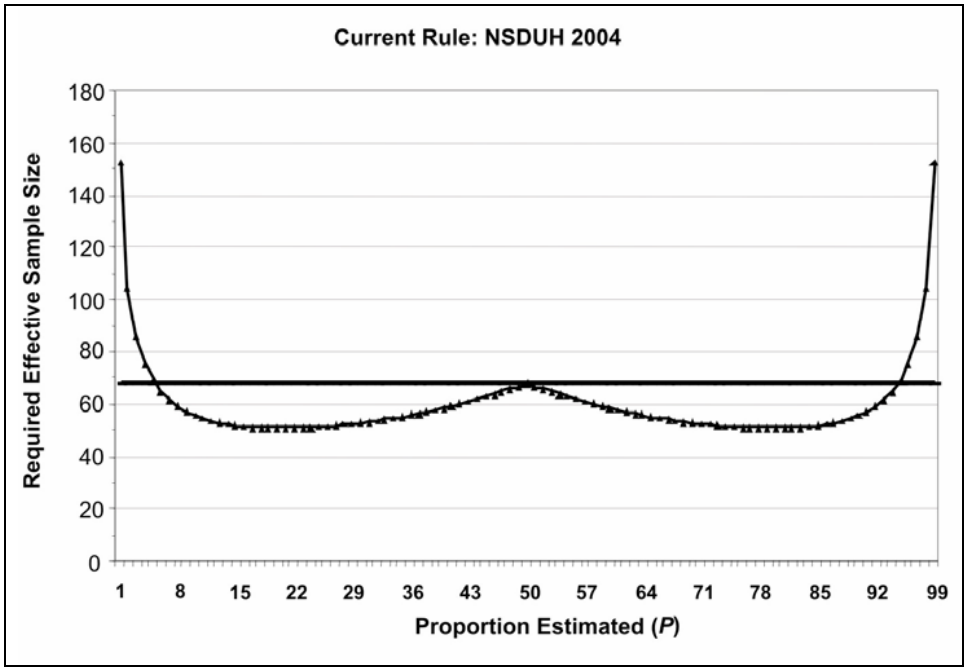
Estimates of other totals (e.g., number of initiates) along with means and rates that are not bounded between 0 and 1 (e.g., mean age at first use and incidence rates) were suppressed if the RSEs of the estimates were larger than 0.5. Additionally, estimates of the mean age at first use were suppressed 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.1 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 generally reported at the 0.05 and 0.01 levels. 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 2003 prevalence estimate becomes the first prevalence estimate and the 2004 estimate 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 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.

When comparing population subgroups defined by 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, 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 Table 9.1). The analyses focused on the average of prevalence estimates for 8th and 10th graders and prevalence estimates for young adults aged 19 to 24, calculated by averaging estimates for persons aged 19 to 20, 21 to 22, and 23 to 24. Published results were not available from NIDA for significant differences in prevalence estimates between years for these averages. The difference between the 8th and 10th grade averages from 2002 and 2003, 2003 and 2004, and 2002 and 2004 were estimated and tested. For the difference between 2003 and 2004, for example, the estimate of the difference of the averages 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 2003; $\overline{p}_2$ is defined similarly for 2004. The variance of some 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., 2002 vs. 2003 and 2003 vs. 2004) estimates and nonadjacent year (i.e., 2002 vs. 2004) 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, 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

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

The test statistic can therefore be written as

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

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

B.3 Other Information on Data Accuracy

Errors can occur from nonresponse, coding errors, computer processing errors, errors in the sampling frame, reporting errors, and other errors not due to sampling. These types of errors 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 2004, respondents continued to receive a $30 incentive in an effort to improve response rates over years prior to 2002. Of the 142,612 eligible households sampled for the 2004 NSDUH, 130,130 were successfully screened for a weighted screening response rate of 90.9 percent (Table B.2). In these screened households, a total of 81,973 sample persons were selected, and completed interviews were obtained from 67,760 of these sample persons, for a weighted interview response rate of 77.0 percent (Table B.3). A total of 9,362 (15.2 percent) sample persons were classified as refusals or parental refusals, 2,918 (3.9 percent) were not available or never at home, and 1,933 (3.9 percent) did not participate for various other reasons, such as physical or mental incompetence or language barrier (see Table B.3, 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 (88.6 percent), females (78.5 percent), blacks (81.9 percent), in nonmetropolitan areas (79.2 percent), and among persons residing in the South (78.7 percent) (Table B.4).

The overall weighted response rate, defined as the product of the weighted screening response rate and weighted interview response rate, was 70.0 percent in 2004. 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}). Thus, assuming the quantity (P_r - P_{nr}) is fixed over time, the improvement in response rates in 2002 through 2004 over prior years will result in estimates with lower nonresponse bias.

B.3.2 Inconsistent Responses and Item Nonresponse

Among survey participants, item response rates were above 99 percent for most drug use items. However, inconsistent responses for some items were common. Estimates of substance use from NSDUH are based on responses to multiple questions by respondents, so that the maximum amount of information is used in determining whether a respondent is classified as a drug user. Inconsistencies in responses are resolved through a logical editing process that involves some judgment on the part of survey analysts. Additionally, missing or inconsistent responses are imputed using statistical methodology. Editing and imputation of missing responses are potential sources of error.

B.3.3 Validity of Self-Reported Use

Most drug 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) by several factors, including the mode of administration, the population under investigation, and the type of drug (Bradburn & Sudman, 1983; Hser & Anglin, 1993). Higher levels of bias also are observed among younger respondents and those with higher levels of drug use (Biglan, Gilpin, Rorhbach, & Pierce, 2004). Methodological 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 community-based epidemiological studies (SRNT Subcommittee on Biochemical Verification, 2002). NSDUH utilizes widely accepted methodological practices for ensuring validity, such as encouraging privacy through audio computer-assisted self-interviewing (ACASI). Comparisons using these methods within NSDUH have been shown to reduce reporting bias (Aquilino, 1994; Turner, Lessler, & Gfroerer, 1992).

B.4 Measurement Issues

Several measurement issues are associated with the 2004 NSDUH that 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), and depression.

B.4.1 Incidence

For diseases, the incidence rate (IR) for a population is defined as the number of new cases of the disease, N, divided by the person time, PT, of exposure or

$$IR = \frac{N}{PT},$$

where the person time of exposure is defined as the length of time a person was exposed to risk. The person time of exposure can be measured for the full period of the study or for a shorter period. The person time of exposure ends at the time of diagnosis (Greenberg, Daniels, Flanders, Eley, & Boring, 1996). Similar conventions are applied for defining the incidence of first use for

a particular substance. For the purposes of this study, respondents are classified as being exposed to risk as long as they reside in the United States and have the potential to initiate use of a particular substance (i.e., once a respondent has started using a substance, he or she is no longer at risk). Because incidence is calculated for respondents belonging to specific age groups, a respondent who enters or exits a particular group during the time period of interest will have a person time of exposure equal to or less than the time he or she was a member of the age group, depending on if and when substance use was initiated. Thus, respondents with a person time of exposure less than the full time period may not have been in scope during the entire period (e.g., they did not reside in the United States or were not members of the particular age group of interest), or they began initiation of the particular substance during the time period for exposure. For example, if the time period for exposure is defined as ranging from January 1, 2003, to December 31, 2003, a respondent initiating use on January 30, 2003, would have only 1 month of exposure rather than the full year.

Beginning in 1999, the survey questionnaire allows for collection of year and month of first use for recent initiates. 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 can be used for estimation purposes. Exposure time can be determined in terms of days and converted to years. Beginning with the 2003 NSDUH summary report, immigrants who initiated drug use outside the United States were not included in calendar year estimates of initiation. However, those immigrants who did not initiate outside the United States were included in the analysis for the time period since they entered the United States. If respondents indicated that they were not born in the United States, they were asked to provide information regarding how long they had lived in the United States. Using this information, an entry age and date were imputed.

Having specific dates of birth, first use, and entry into the United States (for immigrants) also allows the person time of exposure during the targeted period, *t*, to be determined. Let the target time period for measuring incidence be specified in terms of dates; for example, the period 1998 would be specified as

$$t = [t_1, t_2) = [1\ \text{Jan}\ 1998, 1\ \text{Jan}\ 1999),$$

a period that includes January 1, 1998, and all days up to but not including January 1, 1999. The target age group also is defined by a half-open interval as $a = [a_1, a_2)$. For example, the age group 12 to 17 would be defined by $a = [12,18)$ for persons at least aged 12, but not yet aged 18. If person *i* was in age group *a* and residing in the United States during period *t*, the time and age interval referred to as the target period, $L_{t,a,i}$, is defined as follows:

$$L_{t,a,i} = [t_1, t_2) \cap \{[DOB_i MOB_i YOB_i + a_1, DOB_i MOB_i YOB_i + a_2) \cap [I_{\{U.S.-born,\ immigrant\}}(i), \infty)\},$$

and

$$I_{(U.S.-born,\ immigrant)}(i) = \begin{cases} DOB_i MOB_i YOB_i & \text{if } i \text{ is U.S.-born} \\ DOE_i MOE_i YOE_i & \text{if } i \text{ is an immigrant} \end{cases}$$

where DOB_i, MOB_i, and YOB_i, and DOE_i, MOE_i, and YOE_i denote the day, month, and year of birth and entry to the United States, respectively.

Either this intersection will be empty ($L_{t,a,i} = \text{ø}$), or it will be designated by the half-open interval, $L_{t,a,i} = [m_{1,i}, m_{2,i})$, where

$$m_{1,i} = \text{Max}\{t_1, (DOB_i MOB_i YOB_i + a_1),\ DOE_i MOE_i YOE_i\}$$

and

$$m_{2,i} = \text{Min}\{t_2, (DOB_i MOB_i YOB_i + a_2)\}.$$

The date of first use, $t_{fu,d,i}$, also is expressed as an exact date. If an incident of first drug *d* use by person *i* in age group *a* occurs in time $t_{fu,d,i} \in [m_{1,i}, m_{2,i})$, then the indicator function $I_i(d,a,t)$ used to count incidents of first use is set to 1, and 0 otherwise. The person time of exposure measured in years and denoted by $e_i(d,a,t)$ for a person *i* of age group *a* depends on the date of first use. If the date of first use precedes the target period ($t_{fu,d,i} < m_{1,i}$), then $e_i(d,a,t) = 0$. If the date of first use occurs after the target period or if person *i* has never used drug *d*, then

$$e_i(d,a,t) = \frac{m_{2,i} - m_{1,i}}{365}.$$

If the date of first use occurs during the target period $L_{t,a,i}$, then

$$e_i(d,a,t) = \frac{t_{fu,d,i} - m_{1,i}}{365}.$$

Note that both $I_i(d,a,t)$ and $e_i(d,a,t)$ are set to 0 if the target period $L_{t,a,i}$ is empty (i.e., person *i* is not in age group *a* during any part of time *t*). The incidence rate then is estimated as a weighted ratio estimate:

$$IR(d,a,t) = \frac{\sum_i w_i I_i(d,a,t)}{\sum_i w_i e_i(d,a,t)},$$

where the w_i are the analytic weights. For a more detailed explanation of the incidence methodology, see Packer, Odom, Chromy, Davis, and Gfroerer (2002).

Beginning with this report, a new measure related to incidence is being calculated and is the primary focus of Chapter 5. This measure, termed "past year initiation," refers to respondents whose date of first use of a substance, $t_{fu,d,i}$, was within the year prior to their interview. Past year initiation 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.

This measure differs from other incidence measures in that it does not refer to a particular calendar year but rather a time period equivalent to the year prior to the interview. One additional difference to be noted is that the calculation of past year initiation does not take into account whether the respondent initiated substance use while a resident of the United States. This 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 do not restrict to those only initiating substance use in the United States).

One important note for both the calendar year and past year estimates of incidence is the relationship between main and subcategories of substances (e.g., illicit drugs would be a main category and inhalants and marijuana would be examples of subcategories in relation to illicit drugs). Typically, 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 an initiate of a main category, even if he or she were an initiate for a particular subcategory because his or her first initiation of other substances could have occurred earlier.

Because estimates of incidence are based on retrospective reports of age at first drug use by survey respondents, they may be subject to memory-related biases, such as recall decay and telescoping. Recall decay occurs when respondents who initiated many years ago fail to report this use and will tend to result in a downward bias in estimates for earlier years (e.g., 1960s and 1970s). Telescoping occurs, for example, when an 18-year-old respondent who first used at age 12 reports his or her age at first use as 14. Telescoping such as this will tend to result in an upward bias for estimates for more recent years.

There also is likely to be some underreporting bias due to the tendency for respondents to not report socially unacceptable behavior because of respondents' fear of disclosure. This bias is likely to have the greatest impact on recent estimates, which reflect more recent use and are based heavily on reporting by young respondents for some substances, particularly alcohol, cigarettes, and inhalants. Finally, for drug use that is frequently initiated at age 10 or younger, estimates based on retrospective reports 1 year later underestimate total incidence because 11-year-old (or younger) children are not sampled by NSDUH. Prior analyses showed that alcohol and cigarette (any use) incidence estimates could be significantly affected by this.

An evaluation of NSDUH retrospective estimates of incidence suggested that these types of bias are significant and differ by substance and length of recall (Gfroerer, Hughes, Chromy, Heller, & Packer, 2004). This study showed that, for very recent time periods, such as within the past year or in the prior 2 or 3 calendar years, bias in estimates of marijuana, cocaine, alcohol,

and cigarettes appears to be small, but for all other substances there is significant downward bias. Bias for all substances was shown to increase the further back in time the estimates are made, suggesting an association with the length of recall.

The past year incidence estimates are based on the data from the survey conducted that year, and they have a recall period ranging from 0 to 12 months. In other words, at the time the data are collected, the date of first drug use can be any time from today (0-month recall) to 364 days ago (12-month recall). The average length of recall for past year incidence data is 6 months. Calendar year incidence estimates have longer recall periods. For example, the recall period for 2003 calendar year incidence estimates based on the 2004 NSDUH range from 1 month (interview in January 2004, initiation in December 2003) to 23 months (interview in December 2004, initiation in January 2003), with an average recall of about 12 months. Estimates for earlier calendar years would be based on longer recall periods. This suggests that the recall bias affecting the calendar year estimates produced from one survey varies from 1 calendar year to another. For past year incidence estimates, the biases may be similar each year because the recall period is the same. Similarly, differential bias due to recall period differences could be reduced for calendar year estimates by only producing estimates for the most recent calendar year from each successive survey. For example, the 2002 calendar year estimate from the 2003 NSDUH would be expected to have a similar recall bias as the 2003 calendar year estimates from the 2004 NSDUH.

Although prior analyses and research in the literature do not provide a definitive answer to the question of which is the best approach to measure incidence with NSDUH, it is instructive to compare recent calendar year and past year incidence estimates. Exhibit B.1 shows incidence estimates based on the 2002, 2003, and 2004 NSDUHs, for four drugs. If there were no bias, and no large changes over time, it would be expected that for each drug the calendar year and past year incidence estimates would be similar (but not equal). However, for all drugs, the past year incidence estimates are lower than the corresponding calendar year incidence estimates based on each survey year. In addition, a consistent pattern is evident in the calendar year estimates, in which the highest estimate generated from each survey tends to be the calendar year 2 years before the data collection period, and estimates diminish as length of recall increases. This pattern is evident in several cases in which two or more surveys are available to produce the same calendar year estimate. For alcohol, incidence estimates for the calendar year 2 years prior to each survey average 5.4 million, while estimates with a 3-year lag average 4.6 million and those with a 4-year lag average 4.3 million. Alcohol calendar year estimates based on a 1-year lag average 4.8 million, while the past year estimates average 4.1 million. Although it is unknown which estimate is closest to the true level of incidence, clearly it is not reasonable to have a continuing annual number of new users at 5.4 million when recent single-year birth cohorts in the typical age range for alcohol initiation are only about 4 to 4.5 million. This result may be due to telescoping.

Although it is clear that both the calendar year and the past year incidence estimates are affected by a variety of types of bias, both can provide useful epidemiological information for researchers and policymakers. Calendar year estimates, used with caution, can be analyzed to understand historical shifts in substance use as far back as the 1960s, when marijuana use began to become widespread in the United States. To track very recent shifts and patterns in incidence,

Exhibit B.1 Calendar Year and Past Year Initiates' Estimates (in Thousands), by Survey Year and Drug, 2002-2004 NSDUHs

	Calendar Year Estimates (in Thousands)														
	1999			2000			2001			2002			2003		
	Survey Year			Survey Year			Survey Year			Survey Year			Survey Year		
Drug	**2002**	**2003**	**2004**	**2002**	**2003**	**2004**	**2002**	**2003**	**2004**	**2002**	**2003**	**2004**	**2002**	**2003**	**2004**
Alcohol	4,520	4,278	3,922	5,632	4,770	4,287	4,548	5,311	4,708	N/A	4,814	5,324	N/A	N/A	5,103
Cocaine	1,083	877	852	1,139	950	989	1,160	1,208	1,093	N/A	1,061	1,100	N/A	N/A	1,103
Cigarettes	3,287	3,372	3,107	2,963	3,125	3,254	2,344	2,724	2,968	N/A	2,429	2,686	N/A	N/A	2,620
Marijuana	2,903	2,616	2,613	2,976	2,816	2,531	2,604	3,066	2,794	N/A	2,597	2,826	N/A	N/A	2,474

	Past Year Estimates (in Thousands)		
	Survey Year		
Drug	**2002**	**2003**	**2004**
Alcohol	3,942	4,082	4,396
Cocaine	1,032	9,86	998
Cigarettes	1,940	1,983	2,122
Marijuana	2,196	1,973	2,142

N/A = not applicable.

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

however, past year incidence estimates have several important advantages and are the primary focus of this report. The main advantages are as follows:

- Past year incidence estimates reflect a more recent time period than calendar year incidence estimates, thus providing more timely data on emerging patterns of use.

- Past year incidence data can be combined with past year substance use data to provide a more complete and consistent picture of substance users.

- Past year incidence estimates from successive survey rounds provide a more unbiased measure of trends than calendar year trend estimates constructed from retrospective data.

To improve our understanding of the validity of the estimates and to refine the methods, analyses of the bias properties of the calendar year and past year estimates of incidence are continuing.

B.4.2 Nicotine (Cigarette) Dependence

The 2004 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) or 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 2004 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 continuous 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 (Grau et al., 2005).

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 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 2004 NSDUH CAI instrumentation included questions that were designed to measure dependence on and abuse of illicit drugs and alcohol. For these substances,[1] dependence and abuse questions were based on the criteria in the DSM-IV (APA, 1994).

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

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 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 respondent was defined as having dependence if he or she met three or more of seven dependence criteria, including the six standard criteria listed above plus a seventh withdrawal symptom criterion. 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.

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 core substance use and frequency of substance use questions, as well as noncore substance use questions. Unknown 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 could have existed. Because different criteria and different combinations of criteria were used as skip logic for each substance, different types of inconsistencies may have occurred for certain substances between responses to the dependence and abuse questions and the imputed substance use and frequency of substance use as described below.

For alcohol and marijuana, respondents were asked the dependence and abuse questions if they reported substance use in the past year but did not report their frequency of substance use in the past year. 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.

A respondent 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, the respondent was never actually asked the dependence and abuse questions.

B.4.4 Serious Psychological Distress

For this 2004 NSDUH report, serious psychological distress (SPD) was measured using the K6 screening instrument for nonspecific psychological distress (Furukawa, Kessler, Slade, & Andrews, 2003; Kessler et al., 2003a). In previous NSDUH reports, the K6 scale was used to measure serious mental illness (SMI).

SAMHSA's official definition of adults with SMI, based on a notice published in the *Federal Register* (SAMHSA, Center for Mental Health Services, 1993), is as follows:

> Pursuant to section 1912(c) of the Public Health Service Act, adults with serious mental illness (SMI) are persons: (1) age 18 and over and (2) who currently have, or at any time during the past year, had a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-IV or their ICD-9-CM equivalent (and subsequent revisions) with the exception of DSM-IV "V" codes, substance use disorders, and developmental disorders, which are excluded, unless they co-occur with another diagnosable serious mental illness. (3) That has resulted in functional impairment which substantially interferes with or limits one or more major life activities.

In NSDUH reports, the K6 scale was used to measure SMI according to the above definition. 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 SMI was based on a methodological study designed to evaluate several screening scales for measuring SMI in NSDUH. These scales 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 (Furukawa et al., 2003), and the WHO Disability Assessment Schedule (WHO-DAS) (Rehm et al., 1999).

The methodological study to evaluate the scales consisted of 155 respondents selected from a first-stage sample of 1,000 adults aged 18 or older. First-stage respondents were selected from the Boston metropolitan area and screened on the telephone to determine whether they had any emotional problems. Respondents reporting emotional problems at the first stage were oversampled when selecting the 155 respondents at the second stage. The selected respondents were interviewed by trained clinicians in respondents' homes using both the NSDUH methodology and a structured clinical interview. The first interview included the three scales described above using audio computer-assisted self-interviewing (ACASI). Respondents completed the ACASI portion of the interview without discussing their answers with the clinician. After completing the ACASI interview, respondents then were interviewed using the 12-month nonpatient version of the Structured Clinical Interview for DSM-IV (SCID; First, Spitzer, Gibbon, & Williams, 1997) and the Global Assessment of Functioning (GAF; Endicott, Spitzer, Fleiss, & Cohen, 1976) to classify respondents as either having or not having SMI. In the study, SMI was "operationally" defined as any 12-month DSM-IV disorder, other than a substance use disorder, with a GAF score of less than 60, consistent with recommendations of a SAMHSA expert panel.

The data from the 155 respondents were analyzed using logistic regression analysis to predict SMI from the scores on the screening questions. Analysis of the model fit indicated that each of the scales alone and in combination were significant predictors of SMI and the best-fitting models contained either the CIDI-SF or the K10/K6 alone. Receiver operating characteristic (ROC) curve analysis was used to evaluate the precision of the scales to discriminate between respondents with and without SMI. This analysis indicated that the K6 was the most efficient screener. The results of the methodological study and the K10/K6 scale of nonspecific psychological distress are described in more detail in Kessler et al. (2003a).

To create a score, the six items (DSNERV1, DSHOPE, DSFIDG, DSNOCHR, DSEFFORT, and DSDOWN) on the K6 scales 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 a past year SMI. This cutpoint was chosen to equalize false positives and false negatives.

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?

In the 2003 NSDUH, the mental health module contained a truncated version of the CIDI-SF scale, the K10/K6 scale, and the WHO-DAS scale, to mirror the questions used by Kessler et al. (2003a). Thus, the module contained a broad array of questions 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 SMI, 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 differences suggest that the K6 scale is not context-independent; that is, respondents appear to respond to the K6 items differently depending on whether or not the scale is preceded by a broad array of other mental health questions.

This raised concerns about the usefulness of the K6 scale in measuring SMI. There were other concerns as well. For example, the "face validity" of the K6 scale suggests that it may be more useful as a measure of psychological distress or of affective-mood and anxiety-type disorders. Another concern is that the GAF criterion in the operational definition of SMI used by Kessler et al. (2003a) might not best represent the definition in the *Federal Register* (SAMHSA, Center for Mental Health Services, 1993). A GAF score of less than 60 indicates moderate or worse functional impairment, which includes less severe cases than those implied by the definition in the *Federal Register*, which states that functional impairment should substantially interfere with or limit one or more major life activities. For this reason, SAMHSA decided to change the GAF criterion in the operational definition of SMI to reflect a GAF score of less than or equal to 50 (i.e., to indicate serious or worse functional impairment). A direct consequence of these concerns is that a decision was made that the K6 would no longer be used to measure SMI. However, the K6 data are still useful as an indicator of psychological distress. Therefore, using the same cutoff of 13, a new measure, serious psychological distress (SPD), is presented in this report. Estimates for 2002 and 2003, presented as SMI estimates, continue to be used, except that they are referred to as SPD. Given the difference in K6 reporting between the A (long form) and B (short form) samples, the 2004 SPD estimates are based only on the A sample, which used a mental health module identical to that used in 2002 and 2003. SPD potentially reflects a larger constellation of individuals than one might find using a strict application of the *Federal Register* definition of SMI.

Further research is under way in the Office of Applied Studies (OAS) to try to develop a valid module that will provide SMI estimates efficiently (i.e., with a small number of questions) from NSDUH. Unfortunately, given the apparent context effects and data collection differences, it may not be feasible to use results from studies that are done to develop and validate scales (including K6) for other surveys.

B.4.5 Major Depressive Episodes (MDE)

The 2004 NSDUH introduced two new questionnaire modules related to major depressive episodes (MDE). These questions permit estimates of the prevalence of MDE, treatment for MDE, and role impairment resulting from MDE to be calculated. 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). Revisions to these questions were made primarily to reduce the length and to adapt 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.

As described in Section A.1 of Appendix A, a split-sample design was implemented for adults in 2004. Adult respondents in sample A received the full module of mental health questions as administered in prior years of the survey (including the K6 scale), but did not receive the depression module (see Section B.4.4 in Appendix B). Adult respondents in sample B received the new depression module, but only the K6 questions from the previous mental health module. Separate analysis weights were constructed for each subsample.

All adolescents were administered the adolescent depression module. To make the modules developmentally appropriate, there are minor wording differences in a few questions between the adult and adolescent modules. For some estimates constructed using the depression modules, data from adults and adolescents were combined in order to analyze all persons aged 12 or older jointly. However, data on role impairment were analyzed separately because of differences in roles between adults and youths.

According to the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; APA, 1994), a person is defined as having had MDE in their 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: (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. Those reporting past year depression are then asked questions from the Sheehan Disability Scale (SDS) to measure the severity of the past year depression.

NSDUH measures the nine attributes associated with MDE as defined in DSM-IV with the following questions. Note that the questions shown below are taken from the adult depression module. A few of the questions in the adolescent module were slightly modified 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 of 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 suicide idealization

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?

The 2004 NSDUH also collects data on role impairment using the SDS, which is a measure of the impact of depression on a person's daily activities based on four domains in a person's life. Each question uses an 11-point scale, where 0 corresponds to no interference, 1-3 corresponds to mild interference, 4-5 corresponds to moderate interference, 7-9 corresponds to severe interference, and 10 corresponds to very severe interference. The overall role impairment is defined as the highest level of severity of role impairment across all four SDS role domains. Respondents were also asked to report the number of days in the past year in which they were "totally unable to work or carry out normal activities" because of depression. Estimates for role impairment are calculated separately for youths and adults because the four domains are slightly different for the two groups. The questions are listed below.

Adult Depression Module

ASDSHOME Think about the time in the past 12 months when these problems with your mood were **most severe.**

Using the 0 to 10 scale shown below, where 0 means **no** interference and 10 means very **severe** interference, select the number that describes how much these problems interfered with each of the following activities during that period. You can use any number between 0 and 10 to answer. If this activity doesn't apply to you, type 95.

How much did your [depression symptoms] interfere with your home management, like cleaning, shopping, and working around the house, apartment, or yard?

ASDSWORK During the time in the past 12 months when your [depression symptoms] were most severe, how much did this interfere with your ability to work?

ASDSREL How much did your [depression symptoms] interfere with your ability to form and maintain **close** relationships with other people during that period of time?

ASDSSOC How much did [depression symptoms] interfere with your social life during that period of time?

Adolescent Depression Module

YSDSHOME Think about the time in the past 12 months when these problems with your mood were the **worst.**

Using the 0 to 10 scale shown below, where 0 means **no** problems and 10 means very **severe** problems, select the number that describes how much your [depression symptoms] caused problems with each of the following activities during that time. You can use any number between 0 and 10 to answer. If this activity doesn't apply to you, type 95.

How much did your [depression symptoms] cause problems with your chores at home?

YSDSWORK During the time in the past 12 months when your [depression symptoms] was worst, how much did this cause problems with your ability to do well at school or work?

YSDSREL How much did your [depression symptoms] cause problems with your ability to get along with your family during that time?

YSDSSOC How much did your [depression symptoms] cause problems with your social life during that time?

B.5 Impact of Questionnaire Changes on Trends

B.5.1 New OxyContin® Questions

To maintain valid trend measurements, items in the NSDUH core modules on substance use are usually held constant from year to year. However, small refinements or additions to questions in the core modules are sometimes implemented to improve the questionnaire or obtain new information, when analyses indicate that the changes will have negligible impact on the estimates for which trends are needed. In the 2004 NSDUH, new questions were added pertaining to the recency, frequency, and age at initiation of nonmedical use of the prescription-type pain reliever OxyContin®.

In addition to providing prevalence and incidence statistics on OxyContin® use in 2004, responses to these new questions also were incorporated in the 2004 editing and imputation procedures used to generate aggregate estimates on the use of any prescription-type pain reliever, any prescription-type drug, and any illicit drug.

To assess the impact of the new OxyContin® questions, 2004 estimates of drug use calculated with and without responses from the OxyContin® items were compared. Comparisons also were made against 2003 estimates to assess potential effects on trends. These comparisons were made overall and within domains defined according to the demographic and geographic variables included in this report. This analysis indicated that although some 2004 statistics were slightly different when calculated with and without the new OxyContin® questions, the differences were never more than 0.1 percentage point. The trends from 2002 to 2003 in overall rates of use (i.e., pain reliever use, prescription drug use, any illicit drug use, or use of any illicit drug except marijuana) were virtually the same regardless of whether or not the new OxyContin® items were included in the calculations.

The new OxyContin® item on age at first use was used to tabulate trends in incidence of use for calendar years 1965 to 2003. It is unlikely that a person could have used prescription OxyContin® nonmedically before 1995 because OxyContin® was first approved by the Food and Drug Administration (FDA) on December 12, 1995, for prescription pain reliever use (FDA, Center for Drug Evaluation and Research, 1996) and was introduced commercially in late 1995 or early 1996. Because NSDUH data are self-reported and no restrictions are imposed on the

reported date of first use, some respondents may have reported initial use prior to the date the drug became available. In using the information on trends in calendar year incidence of OxyContin® use, data indicating use before 1995 should be viewed with caution.

B.5.2 Adult Mental Health Treatment Data Changes

Similar to the NSDUH CAI instrumentation in previous years, the 2004 NSDUH CAI instrumentation included questions that were designed to measure outpatient treatment or counseling for mental health problems in the past year among adults aged 18 or older. Beginning in 2004, the CAI instrumentation also included questions that were designed to measure alternative mental health treatment or support in the past year from sources that were not listed as locations in the initial question on outpatient treatment for mental health problems. This list included nine alternative sources and one other-specify response.

In addition, a change was implemented in the assignment of "don't know" and "refused" responses for questions regarding the locations of outpatient treatment, source of payment for outpatient treatment, and reasons for not receiving treatment that was needed, which were categorized as "no" for 2003 data but were categorized as "missing" for 2004 data. As a result of this change and the questionnaire change in 2004, the 2003 data on adult outpatient treatment for mental health problems are not strictly comparable with 2004 data. However, the impact in terms of estimates is negligible, based on an analysis of the 2003 data with a recoding of the treatment data such that definitions match the 2004 data. Estimates for 2003 presented in the 2004 NSDUH report and detailed tables incorporate this recoding. Thus, estimates for outpatient treatment or counseling for mental health problems and any past year treatment or counseling for 2003 may differ from the same 2003 adult treatment or counseling estimates presented in the 2003 NSDUH detailed tables. Estimates for inpatient treatment or counseling for mental health problems and prescription medication use for mental health problems were not affected by the method changes. Estimates shown in the 2004 detailed tables for 2003 were changed by at most a few tenths of a percent from the estimates reported in the 2003 NSDUH report. Therefore, 2003 and 2004 estimates on treatment or counseling for mental health problems presented in the 2004 NSDUH detailed tables are comparable with those estimates presented in pre-2004 NSDUH reports.

Table B.1 Summary of 2004 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) $n < 10$.
Incidence rate, $\hat{r}$	(1) The incidence rate, $\hat{r}$, rounds to < 0.1 per 1,000 person-years of exposure, or (2) $\text{RSE}(\hat{r}) > 0.5$.
Number of initiates, $\hat{t}$	(1) The number of initiates, $\hat{t}$, rounds to < 1,000 initiates, or (2) $\text{RSE}(\hat{t}) > 0.5$.

SE = standard error; RSE = relative standard error; deff = design effect.
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004.

Table B.2 Weighted Percentages and Sample Sizes for 2003 and 2004 NSDUHs, by Screening Result Code

	Sample Size		Weighted Percentage	
	2003	2004	2003	2004
Total Sample	170,762	169,514	100.00	100.00
Ineligible cases	27,277	26,902	15.84	15.76
Eligible cases	143,485	142,612	84.16	84.24
Ineligibles	27,277	26,902	15.84	15.76
Vacant	14,588	15,204	52.56	56.24
Not a primary residence	4,377	4,122	17.07	15.54
Not a dwelling unit	2,349	2,062	8.08	7.51
All military personnel	356	282	1.39	1.07
Other, ineligible	5,607	5,232	20.90	19.65
Eligible Cases	143,485	142,612	84.16	84.24
Screening complete	130,605	130,130	90.72	90.92
No one selected	74,310	73,732	51.04	50.86
One selected	30,702	30,499	21.46	21.53
Two selected	25,593	25,899	18.22	18.53
Screening not complete	12,880	12,482	9.28	9.08
No one home	2,446	2,207	1.68	1.55
Respondent unavailable	280	259	0.18	0.18
Physically or mentally incompetent	290	265	0.18	0.17
Language barrier—Hispanic	42	51	0.03	0.04
Language barrier—Other	450	391	0.39	0.32
Refusal	8,414	8,588	5.98	6.10
Other, access denied	923	660	0.81	0.67
Other, eligible	12	10	0.01	0.01
Resident < 1/2 of quarter	0	0	0.00	0.00
Segment not accessible	0	0	0.00	0.00
Screener not returned	16	15	0.01	0.01
Fraudulent case	6	14	0.00	0.02
Electronic screening problem	1	22	0.00	0.02

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

Table B.3 Weighted Percentages and Sample Sizes for 2003 and 2004 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	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Total	81,631	81,973	100.00	100.00	25,387	25,141	100.00	100.00	56,244	56,832	100.00	100.00
Interview Complete	67,784	67,760	77.39	77.00	22,696	22,309	89.57	88.56	45,088	45,451	75.96	75.66
No One at Dwelling Unit	1,242	1,156	1.60	1.50	158	147	0.62	0.54	1,084	1,009	1.71	1.61
Respondent Unavailable	1,809	1,762	2.44	2.40	310	302	1.25	1.28	1,499	1,460	2.58	2.53
Break-Off	33	46	0.09	0.10	2	7	0.01	0.03	31	39	0.10	0.10
Physically/Mentally Incompetent	755	699	1.82	1.71	150	143	0.60	0.57	605	556	1.96	1.84
Language Barrier - Hispanic	177	131	0.21	0.14	6	12	0.02	0.04	171	119	0.23	0.15
Language Barrier - Other	364	398	1.13	1.23	11	27	0.07	0.09	353	371	1.25	1.37
Refusal	7,433	7,871	14.10	14.52	486	583	1.74	2.17	6,947	7,288	15.56	15.96
Parental Refusal	1,476	1,491	0.61	0.65	1,476	1,491	5.81	6.24	0	0	0.00	0.00
Other	558	659	0.62	0.74	92	120	0.31	0.49	466	539	0.65	0.77

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

Table B.4 Response Rates and Sample Sizes for 2003 and 2004 NSDUHs, by Demographic Characteristics

	Selected Persons		Completed Interviews		Weighted Response Rate	
	2003	2004	2003	2004	2003	2004
Total	81,631	81,973	67,784	67,760	77.39%	77.00%
Age in Years						
12-17	25,387	25,141	22,696	22,309	89.57%	88.56%
18-25	27,259	27,408	22,941	23,075	83.47%	83.87%
26 or older	28,985	29,424	22,147	22,376	74.63%	74.22%
Gender						
Male	40,008	40,194	32,627	32,697	75.72%	75.44%
Female	41,623	41,779	35,157	35,063	78.96%	78.46%
Race/Ethnicity						
Hispanic	10,753	11,020	8,985	9,218	79.55%	79.06%
White	55,958	55,544	46,294	45,557	77.21%	76.71%
Black	9,466	9,562	8,099	8,268	80.12%	81.85%
All other races	5,454	5,847	4,406	4,717	69.88%	67.21%
Region						
Northeast	16,736	16,674	13,655	13,523	75.20%	75.14%
Midwest	22,665	22,920	18,993	18,889	78.56%	77.63%
South	24,725	24,820	20,612	20,807	78.38%	78.65%
West	17,505	17,559	14,524	14,541	76.51%	75.38%
County Type						
Large metropolitan	36,610	37,103	29,759	30,077	75.49%	75.72%
Small metropolitan	27,661	27,404	23,349	22,972	79.51%	78.12%
Nonmetropolitan	17,360	17,466	14,676	14,711	79.72%	79.23%

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

Appendix C: Research on the Impact of Changes in NSDUH Methods

C.1 Background

Although the design of the 2002 to 2004 National Surveys on Drug Use and Health (NSDUHs) is similar to the design of the 1999 through 2001 surveys, there are important methodological differences between the 2002 to 2004 NSDUHs and prior surveys:

- The name of the survey was changed in 2002 from the National Household Survey on Drug Abuse (NHSDA) to the National Survey on Drug Use and Health.
- Incentive payments of $30 were given to respondents beginning in 2002.
- Improved data collection quality control procedures were introduced in the survey during 2001 and 2002.
- Population data used in the sample weighting procedures were based on the 2000 decennial census for the first time in the 2002 NSDUH.

These changes improved the quality of the data provided by the survey. There were significant improvements in response rates beginning in January 2002, which had been expected based on an experiment conducted in 2001 (Office of Applied Studies [OAS], 2002d). The initial analysis of this experiment showed that incentives increased response rates, reduced data collection costs, and had no significant effect on prevalence. This result was the basis for the decision to introduce incentives in 2002. However, the results of the 2002 survey, as well as more recent analyses, suggest that the incentive, and possibly the other survey changes, did have an impact on the 2002 estimates. Estimates of rates of substance use, dependence and abuse, and serious psychological distress (SPD) (formerly serious mental illness, or SMI) were significantly higher in 2002 than in 2001. Analyses have shown that many of these "increases" were artifacts of the changes in the survey procedures.

Early results of these analyses were presented to a panel of survey methodology experts convened on September 12, 2002.[1] The panel concluded that, because of the survey improvements, the 2002 estimates should not be compared with 2001 and earlier estimates. The panel also concluded that, because of the multiple changes made to the survey simultaneously, it would not be possible to measure the effects of each change separately or to develop a method of "adjusting" pre-2002 data to make them comparable for trend assessment. The panel also recommended that the Substance Abuse and Mental Health Services Administration (SAMHSA) continue its analyses of the 2001 and 2002 data to learn as much as possible about the impacts of

[1] Experts present for the September 12th meeting were **Jack Fowler,** Center for Survey Research, Boston; **Robert Groves,** Survey Research Center, Institute for Social Research, University of Michigan; **Tim Johnson,** Survey Research Laboratory, University of Illinois at Chicago; **Nancy Mathiowetz,** Joint Program in Survey Methodology, University of Maryland; **Clyde Tucker,** U.S. Bureau of Labor Statistics; and **Alan Zaslavsky,** Department of Health Care Policy, Harvard Medical School, Harvard University.

each of the methodological improvements. Although it was considered unlikely that these studies could lead to the development of an adjustment method, there was hope that a better understanding of the methods effects would be beneficial to analysts using NSDUH data. In addition, given that there were few examples in the literature in which a monetary incentive was introduced to encourage the reporting of sensitive behaviors in a large nationally representative survey of households, it was important to document its effect on national response rates and prevalence estimates and across important subdomains. The results of some of these analyses were presented in Appendix C of the 2002 NSDUH National Findings report (OAS, 2003). Other studies of the methods effects have been completed since that report was published.

The purpose of this appendix is to summarize all of the studies of the effects of the 2002 methods changes and to discuss the implications of this body of research for analyses of NSDUH data. The focus is mainly on analyses involving 1999 to 2004 trend assessment. Brief discussions of approaches to long-term (1971-2004) assessment and analyses of pooled 1999-2004 and later data also are included.

C.2 Summary of Analyses Presented in the 2002 NSDUH Report

A ***retrospective cohort analysis*** was used to evaluate the reasonableness of changes in the estimates of lifetime use reported in the 2002 survey. Comparisons of the changes in lifetime prevalence with trends based on retrospective reporting (i.e., age at first use) demonstrate that the increases in lifetime substance use rates between 2001 and 2002 could not be due to an increase in new initiates or the slight change caused by the addition of a new cohort of youths who were 12 years old. For example, retrospective data from 2002 show that the net changes due to new users and cohort shifts between 2001 and 2002 were 2.2 million for marijuana and 1.0 million for cocaine. However, the changes in lifetime prevalence between the 2001 and 2002 surveys were 10.5 million for marijuana and 5.8 million for cocaine.[2]

A ***response rate pattern analysis*** was used to assess the impact of the methodological changes on the response rates of different demographic subpopulations. Concurrent with the upward shift in prevalence in 2002, there were substantial increases in interview response rates across all geographic and demographic groups. One group who experienced a small increase in their response rate was the population aged 50 or older.

A ***response rate impact analysis*** was used to assess the potential levels of substance use prevalence under different assumed scenarios about the behavior of the respondents "added" as a result of the higher response rates under the new methodological conditions. An analysis of the connection between the response rate increases and the prevalence increases showed that the "additional" respondents in 2002 did not solely account for the increases in prevalence, indicating that the changes in methods did affect the level of reporting of some behaviors among survey respondents. This finding was strongest in the 50 or older age group, where the increase in the response rate was small but the increase in prevalence was large.

An ***analysis of the impact of new census data*** was used to determine whether any part of the increases in substance use observed in 2002 was due to the transition from 1990 census data

[2] After adjustment of 2001 estimates to reflect 2000 census projections.

to 2000 census data for weight calculations. The effect of the switch from the 1990 to the 2000 census-based weights was very small for NSDUH estimates of rates, but the effect was somewhat larger for some estimates of the number of persons using substances. Unlike the other changes implemented in 2002, the impact on the results can be precisely estimated subject to the sampling error of the data. Thus, the use of new census data does not adversely affect the ability to measure trends by themselves.

A series of ***model-based analyses*** of protocol changes, the name change, and the use of incentives was used to better understand how much each of the methodological changes might influence the comparisons of 2001 and 2002 data. One analysis attempted to identify and quantify the impact on lifetime prevalence rates of each of the separate NSDUH methodological improvements. Results of that analysis (reported in Appendix C of the 2002 National Findings) indicated that the impact of each of the interviewer monitoring and training interventions tended to be small and statistically nonsignificant for most measures and subdomains (OAS, 2003).

Another model-based analysis focused on the incentive effect and used data from the 2001 incentive experiment. The analysis controlled for a number of demographic variables and looked again at lifetime use of a number of substances by detailed age groups. Some of those results were statistically significant; however, most were not. The primary finding from that analysis is that the pattern of the incentive effect differs significantly from one age group to the next, and often in opposite directions, so that the incentive effect on prevalence estimates for the 12 or older age group as a whole tend to be quite small. A second analysis focusing on the incentive effect used the difference between quarter 4 of 2001 and quarter 1 of 2002 as a measure of the incentive effect. For the age 12 or older population, the pattern of the incentive effect appeared more comparable with that of the incentive experiment. Because the 2002 effects are larger than those from the 2001 experiment in the 12 or older age group, those results also may reflect other changes that occurred at the same time, such as the name change, further training of field staff, or seasonal or secular trends.

C.3 Other Analyses

Since 2002, two types of analyses have been conducted that extend the analyses described above: (a) more in-depth analysis of the 2001 incentive experiment and (b) further analysis of the 2001 field interventions.

C.3.1 Incentive Experiment Analyses

Initial analyses of the 2001 incentive experiment had indicated little impact of the incentive on screening response rates, a significant impact on individual interview response rates, and no statistically significant differences for any of the five substance use measures studied when comparing the non-incentive cases with those receiving either a $20 or $40 incentive. Two extended analyses of the incentive experiment subsequently were conducted.

In the first analysis, an investigation was carried out to determine whether gains in response rate and reduced data collection costs associated with monetary incentives varied across subgroups in the population (Eyerman, Bowman, Butler, & Wright, in press). Research has demonstrated that cash incentives paid to respondents in sample surveys can increase the level of

cooperation, reduce nonresponse bias, and lower data collection costs. However, recent research has shown that gains in response rate and reduced data collection costs associated with monetary incentives may vary across subgroups in the population. Consequently, monetary incentives may result in inconsistent reductions in nonresponse error and systemic changes in sample composition. Findings of this analysis indicate that the incentive had a positive impact on cooperation. However, it did not eliminate the preexisting differences in cooperation among population subgroups.

In the second analysis, an extended investigation of whether the monetary incentive had an effect on reported drug use rates was conducted (Wright, Bowman, Butler, & Eyerman, in press). Sampling weights were adjusted to account for the differential response rates between the incentive and non-incentive cases. Then logistic regression models of substance use were fitted as a continuous function of the incentive level ($0, $20, and $40) while controlling on other variables that might mask the relationship. The incentive had a statistically significant positive effect on the reported past year use of marijuana ($p = 0.027$), a marginally significant positive effect on past month use of marijuana ($p = 0.056$), but no effect on lifetime use of marijuana. The incentive also had a statistically significant negative effect on the reported past month use of cocaine ($p = 0.033$). Offering a monetary incentive to respond can result in different estimated prevalence rates for the incentive and non-incentive groups. The extent of the difference may be a function of the perceived level of social disapproval of the substance and the reference period (past month, past year, or any past use). Some of the difference appears to be due to differences in substance use rates between the group who had traditionally reported without an incentive and the new group attracted by the incentive. Other differences appear to result from more honest reporting among the traditional respondents.

C.3.2 Extended Analyses of 2001 Field Interventions

During the 2001 and 2002 NSDUHs, six new field interventions were introduced as follows:

1. Starting on July 5, 2001, interviewers were provided additional guidelines ("Steps to Maximize Data Quality") to reinforce and encourage compliance with study protocols.

2. During February-April and July-August 2001, field observations by management staff were conducted on a sample of interviewers.

3. During October and November 2001, "follow-up" to field observations occurred, which consisted of a series of weekly training sessions to review specific survey protocol topics.

4. Starting in January 2002, new training modules were added to the veteran and new-to-project training sessions that placed additional emphasis on respondent rights, gaining cooperation, data quality, and project protocols.

5. Starting in January 2002, a certification process was used to evaluate the adherence of each interviewer to the project protocols during mock screening and interview sessions.

6. Starting in January 2002, an electronic home study was completed by all veteran interviewers prior to the training sessions.

Field interventions 4 to 6 were introduced at the same time as the $30 incentive payment and the survey name change; hence, it is not possible to measure these effects separately. As a consequence, field interventions 1 to 3, which occurred at different times in the 2001 survey, were the only interventions whose effects could be measured separately.

The results of the initial analysis of the field interventions showed that for most models, each of the three interventions had effect sizes that were not statistically significant. However, other analytic approaches had not yet been examined; therefore, the goal was to explore these other possibilities. In the extended analyses, more predictor variables were considered, some existing predictor variables were redefined (e.g., a polynomial spline model was fitted to the continuous age variable), and, where possible, more than one intervention was analyzed simultaneously in the same model. In addition, because an incentive experiment also was conducted in selected field interviewer regions during the first two quarters of 2001, any data associated with this experiment first were excluded to remove any potentially confounding effects, and appropriate new weights then were created for the remaining data so that national estimates could be derived.

Results from the extended analyses were similar to those in the initial analysis; that is, the individual interventions generally were not statistically significant and showed little evidence that the field interventions affected the reporting of lifetime substance use (Odom, Aldworth, & Wright, 2005). In addition, a combined model was developed to assess whether combined effects existed even if the individual effects were small and statistically nonsignificant. In general, the combined model did not show a strong pattern of evidence of an increase apart from the field interventions, and the direction of the change was not consistent among the field interventions. There were serious limitations to this combined analysis, primarily due to the timing of the three interventions. Not all interaction effects could be included, and for some intervention variables data from a greater time interval were used, thus possibly introducing seasonal and other confounding effects. The effect of the field interventions on response bias, whether analyzed individually or collectively, appears to be small, thus corroborating the initial analyses. A summary of the results from the logistic regression analyses for individual and combined models of lifetime use of different substances is given in Table C.1, and predicted prevalences and standard errors based on these models are given in Table C.2.

C.4 Options for Trend Measurement

Although a great deal has been learned from the analyses described above, the results do not point to any reasonable method of quantifying the methods effects well enough to specify an adjustment procedure for the trends between 2001 and 2002. The observed differences between NSDUH estimates for 2001 and 2002 are believed to reflect both the underlying trend between those years and various methods effects, primarily those due to the survey name change and the use of the $30 incentive, both introduced on January 1, 2002. Lacking random subsamples with and without the two main interventions introduced in 2002 to estimate separately the methods effects, there is no direct way to separate a methods effect from a trend effect.

Several other approaches to "connecting" 2002 and later data with the 2001 and earlier data for trend assessment have been suggested and considered by SAMHSA. One alternative approach that has been suggested is to use indirect methods, based on specified assumptions. For

example, it could be assumed that there is no trend over some short period, such as between the fourth quarter of 2001 and the first quarter of 2002. If this assumption is true, the methods effect can be estimated by comparing estimates from quarter 1 of 2002 with estimates from quarter 4 of 2001. The trend then can be estimated as the sum of two components: (a) the change occurring between the estimate based on the combined quarters 1, 2, and 3 of 2001 and the estimate for quarter 4 of 2001, plus (b) the change occurring between the estimate for quarter 1 of 2002 and the estimate based on the combined quarters 2, 3, and 4 of 2002. Because the annual NSDUHs are fielded as four quarterly surveys, each based on a probability subsample of the annual sample, the method is generally feasible.

Another type of approach is one that assumes a linear trend over some period of two or more surveys before and after January 1, 2002. If annual surveys are employed for this purpose, a linear trend over the years 2000, 2001, 2002, and 2003 might be assumed. Annual substance use measures then could be modeled as a function of year and an intervention effect occurring between 2001 and 2002. Because quarterly surveys are employed by NSDUH, a version of this method also could be developed using quarterly survey data and perhaps a shorter period of assumed linear trend.

The use of quarterly estimates to apply either of these methods may reflect seasonality as well as annual trends. Seasonal patterns in substance use have been shown to be present for initiation of some drugs (Gfroerer, Wu, & Penne, 2002; OAS, 2004c).

Another indirect approach to trend measurement with NSDUH is to make use of external data from other surveys to determine the "true" trend between 2001 and 2002, providing a crude method of quantifying the overall NSDUH methods effect (i.e., by subtraction). This could be feasible for measures that are covered by other surveys using similar definitions and survey methods and having sufficient sample sizes.

A summary of all of the results of the 2002 NSDUH methods effects analyses was presented to a second panel of consultants that included NSDUH data users, researchers, and survey methods experts on April 28, 2005.[3] The panel concluded that there was no possibility of developing a valid direct adjustment method for the NSDUH data, and that SAMHSA should not compare 2002 and later estimates with 2001 and earlier estimates for trend assessment. The panel suggested that SAMHSA make this clear recommendation to other users of NSDUH data. The panel also discussed the use of indirect methods described above and recommended that SAMHSA should not use these methods to measure trends because the assumptions required to apply these methods are arbitrary and cannot be verified for the same reasons that direct evaluation of the separate effects of method and trend is not possible. The panel did support the use of external data to better understand how the methods changes affected NSDUH trends from 2001 to 2002, but only if the external data were valid and collected using methods similar to

[3] Experts present for the April 28th meeting were **Raul Caetano,** School of Public Health, University of Texas at Houston; **Barbara Delaney,** Partnership for a Drug-Free America; **Gary Giovino,** Department of Cancer Prevention, Epidemiology and Biostatistics, Roswell Park Cancer Institute; **William Kalsbeek,** Survey Research Unit, Department of Biostatistics, University of North Carolina at Chapel Hill; **Graham Kalton,** Westat; **Philip Leaf,** Department of Mental Hygiene, Mental Health and Psychiatry, School of Public Health, Johns Hopkins University; **Patrick O'Malley,** Survey Research Center, Institute for Social Research, University of Michigan; and **Peter Reuter,** Department of Criminology, School of Public Affairs, University of Maryland.

NSDUH. Finally, the panel recognized the value and uniqueness of the historical NSDUH data and suggested that long-term trends could be presented with sufficient caveats, such as showing breaks in the trends. This approach is used in the trend discussion in Chapter 9 of this report and is discussed further in the next section.

C.5 Long-Term Trend Analysis and Methods Changes from 1971 to 1999

The first national household surveys collecting data on drug use were conducted in 1971 and 1972 under the auspices of the National Commission on Marihuana and Drug Abuse. Similar surveys, which eventually became known as the National Household Survey on Drug Abuse, subsequently were conducted every 2 or 3 years during the 1970s and 1980s by the National Institute on Drug Abuse (NIDA). Annual data collection began in 1990, and sponsorship of the survey was transferred to SAMHSA in 1992. Throughout its history, the survey has undergone a number of changes to its methodology and its questionnaire. Some of these changes affected comparability of estimates over time. For analysts interested in studying long-term trends or comparing estimates from recent years with estimates 20 or 30 years ago, it is important to be aware of the survey changes that have an impact on comparability. A complete assessment of consequential NSDUH methods and questionnaire changes is beyond the scope of this report, but this appendix gives a brief summary of the most important changes that have occurred since 1971. More detailed documentation of changes is provided in various NSDUH reports published by NIDA and SAMHSA (e.g., Gfroerer, Eyerman, & Chromy, 2002; Kennet & Gfroerer, 2005; OAS, 1996a, 2001a; Turner, Lessler, & Gfroerer, 1992). In addition to the changes in 2002 discussed in Section C.1, there were important survey design changes in 1994 and 1999. Thus, the major methods changes affecting data comparability are as follows:

- In 1994, a new questionnaire was introduced, and revised data editing and imputation methods were implemented.

- In 1999, the survey was converted from paper-and-pencil interviewing (PAPI) to computer-assisted interviewing (CAI).

- In 2002, the name of the survey was changed to NSDUH, an incentive payment to respondents was introduced, and improved data collection quality control procedures were implemented.

Based on a statistical model that used data from a supplemental sample fielded in 1994, an adjustment procedure was developed and applied to 1979-1993 NSDUH data to produce estimates that are comparable with the 1994-1998 data. Data from the 1971-1977 surveys (no survey was done in 1978) were collected using the same basic methodology as in 1979-1998, although the editing and imputation methods used were different from those used on 1979 and later data. However, it is possible to employ a similar adjustment to estimates published in the 1971-1977 reports to provide estimates that are comparable with the 1979-1998 data, accounting for the 1994 methodology changes. This adjustment is simply the ratio of the adjusted 1979 estimate (which is adjusted for the 1994 methodological changes) and the unadjusted 1979 estimate from the 1979 NHSDA Main Findings report (NIDA, 1980). The estimates published in the 1979 report employed editing and imputation procedures that were similar to the methods used for the 1971-1977 estimates. Estimates of past month marijuana use and past year cocaine

use for 1971-1977 were computed in this manner for presentation in Chapter 9 of this 2004 NSDUH report. Data for the entire 1971-2004 period are presented, with breaks in trend lines at 1999 and 2002, but continuous lines are used for 1971-1998, 1999-2001, and 2002-2004 to indicate comparable data during each of these three intervals. It should be pointed out that this kind of analysis may be limited for some measures due to questionnaire changes that were made on specific items at specific points in time. For example, the 1985 and later surveys used a different definition and questions on the nonmedical use of prescription-type drugs than had been used for the 1982 and earlier surveys. The data collection mode changed at different times for several substances. Questions were shifted from interviewer-administered to self-administered in 1979 for alcohol, in 1982 for prescription-type drugs, and in 1994 for tobacco, resulting in substantial increases in estimated prevalence of these substances in each of those years.

C.6 Combining Data Prior to 2002 with Data from 2002 and Later for Analytic Studies

Most of the above discussion has dealt with the problems involved in estimating trends in substance use based on the NSDUH data, given all of the methodological changes that have taken place. However, many data users are interested in other statistics for which the methodological effects may be assumed to be relatively smaller. One instance of this is the comparison of domains. It may happen that the sample size for a specific analysis is quite small for a given year, but adequate when multiple years are combined. If an analyst requires fairly current data, he or she may want to combine data from 2001 and earlier with data from 2002 and later in order to improve the precision of estimates for some small domain. The suitability of this approach depends on a number of factors. Users may find it helpful to verify that the estimate based on NSDUH data prior to 2002 and the one based on 2002 and later data are "reasonably" similar for the subdomain of interest prior to combining data across those years. Typically, any differences can be tested for statistical significance given the appropriate software. Whether or not the differences are tested for statistical significance, the size of the difference can be the deciding factor. Sometimes, differences are statistically significant because of a large sample size, but the differences are relatively small. Sometimes, samples are too small to determine statistical significance, but the estimates themselves are relatively similar. In this case, combining data across years will not affect the results unduly.

This suggestion also can apply to estimating relationships between one or more variables based on a model. For example, if one is estimating the relationship between a risk factor and past month use of marijuana and desires to combine pre- and post-2002 data, one may want to first make estimates separately for those two periods and compare them as described above.

Analysts interested in pooling 1999-2001 and 2002-2004 NSDUH data are encouraged to consider the potential impact of the methodological change and incorporate analytic approaches, such as those described above, into their studies to account for methods effects. Reports of results from these kinds of studies always should acknowledge the methodological changes and include a discussion of the steps taken to account for them.

Table C.1 Summary of Field Intervention Analyses: Beta Estimates and *P* Values for Individual and Combined Models of Lifetime Use of Different Substances

	Substance									
	Marijuana		Cocaine		Any Illicit Drug		Alcohol		Cigarettes	
Model / Variable	Beta	*P* Value	Beta	*P* Value	Beta	*P* Value	Beta	*P* Value	Beta	*P* Value
Individual Models										
"Steps"										
Before (RC)	0.00		NA		NA		NA		NA	
After	0.05	0.412	NA		NA		NA		NA	
"FI-obs"										
Never	0.02	0.782	0.08	0.431	0.02	0.803	**-0.23**	**0.046**	0.10	0.341
Before (RC)	0.00		0.00		0.00		0.00		0.00	
After	-0.05	0.685	-0.02	0.903	-0.04	0.788	-0.25	0.091	0.01	0.920
"Follow-up"										
Linear	-0.00	0.779	NA		NA		NA		NA	
Combined Model										
"Steps"										
Before (RC)	0.00		0.00		0.00		0.00		0.00	
After	0.09	0.685	-0.28	0.442	0.08	0.728	-0.36	0.305	0.04	0.898
"FI-obs"										
Never	0.01	0.869	0.03	0.821	0.03	0.728	**-0.28**	**0.021**	0.09	0.402
Before (RC)	0.00		0.00		0.00		0.00		0.00	
After	**0.31**	**0.048**	0.21	0.284	**0.35**	**0.028**	-0.30	0.157	0.20	0.183
"Follow-up"										
Linear	0.01	0.647	0.03	0.307	0.02	0.188	0.01	0.704	0.02	0.381
"Steps"*"FI-obs"										
Bef, Never	-0.06	0.789	0.26	0.478	-0.10	0.658	0.43	0.217	-0.02	0.939
Bef, Before (RC)	0.00		0.00		0.00		0.00		0.00	
Bef, After	-0.55	0.052	-0.18	0.667	**-0.58**	**0.035**	0.38	0.341	-0.28	0.357
Aft, Never (RC)	0.00		0.00		0.00		0.00		0.00	
Aft, Before (RC)	0.00		0.00		0.00		0.00		0.00	
Aft, After (RC)	0.00		0.00		0.00		0.00		0.00	

RC: Reference class; NA: Not available.

Notes:

1. "Steps" variable: Starting on July 5, 2001, interviewers were provided additional guidelines ("Steps to Maximize Data Quality") to reinforce and encourage compliance with study protocols.
2. "FI-obs" variable: During February-April and July-August 2001, field observations by management staff were conducted on a sample of interviewers.
3. "Follow-up" variable: During October and November 2001, "follow-up" to field observations occurred, which consisted of a series of weekly training sessions to review specific survey protocol topics.
4. Statistically significant results are in bold.

Source: Odom, Aldworth, and Wright (2005).

Table C.2 Summary of Field Intervention Analyses: Predicted Marginals for Individual and Combined Models of Lifetime Use of Different Substances

	Substance									
	Marijuana		Cocaine		Any Illicit Drug		Alcohol		Cigarettes	
Model / Variable	**PM**	**SE**	**PM**	**SE**	**PM**	**SE**	**PM**	**SE**	**PM**	**SE**
Individual Models "Steps"										
Before	0.354	0.008	NA		NA		NA		NA	
After	0.363	0.010	NA		NA		NA		NA	
"FI-obs"										
Never	0.358	0.005	0.121	0.004	0.406	0.005	0.810	0.004	0.663	0.006
Before	0.354	0.015	0.113	0.009	0.402	0.015	0.835	0.011	0.643	0.019
After	0.345	0.020	0.112	0.009	0.395	0.020	0.806	0.012	0.646	0.013
Combined Model "Steps"										
Before	0.360	0.006	0.123	0.004	0.413	0.006	0.807	0.005	0.663	0.007
After	0.359	0.007	0.117	0.006	0.402	0.008	0.813	0.006	0.661	0.008
"FI-obs"										
Never	0.358	0.005	0.121	0.004	0.406	0.005	0.810	0.004	0.663	0.006
Before	0.361	0.020	0.102	0.014	0.410	0.020	0.818	0.021	0.647	0.028
After	0.371	0.019	0.124	0.012	0.425	0.020	0.804	0.013	0.659	0.013
"Steps"*"FI-obs"										
Bef, Never	0.355	0.006	0.121	0.004	0.408	0.006	0.806	0.005	0.662	0.007
Bef, Before	0.353	0.016	0.118	0.010	0.402	0.017	0.837	0.012	0.644	0.020
Bef, After	0.412	0.028	0.146	0.020	0.472	0.029	0.803	0.023	0.682	0.021
Aft, Never	0.361	0.007	0.121	0.007	0.404	0.008	0.815	0.005	0.665	0.008
Aft, Before	0.370	0.038	0.086	0.026	0.417	0.039	0.796	0.042	0.651	0.053
Aft, After	0.326	0.023	0.102	0.010	0.373	0.023	0.806	0.014	0.634	0.015

PM: Predicted marginal; SE: standard error of predicted marginal; NA: Not available.

Notes:

1. "Steps" variable: Starting on July 5, 2001, interviewers were provided additional guidelines ("Steps to Maximize Data Quality") to reinforce and encourage compliance with study protocols.
2. "FI-obs" variable: During February-April and July-August 2001, field observations by management staff were conducted on a sample of interviewers.

Source: Odom, Aldworth, and Wright (2005).

Appendix D: Key Definitions, 2004

This appendix provides definitions for many of the measures and terms used in this report on the 2004 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

A respondent was defined with abuse of a substance if he or she met 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 did not meet the definition for dependence for that substance. Additional criteria for alcohol and marijuana abuse are that if respondents reported a specific number of days that they used these drugs in the past 12 months, they must have used these drugs on 6 or more days in that period. These questions have been included in the survey since 2000.

SEE: "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 an 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."

Alternative Treatment/Support for Mental Health Problems

For adults, alternative treatment/support for mental health problems was defined as treatment, counseling, or support for any problem with emotions, nerves, or mental health in the 12 months prior to the interview from any of the following sources: acupuncturist or acupressurist; chiropractor; herbalist; in-person support group or self-help group; Internet support group or chat room; spiritual or religious advisor, such as a pastor, priest, or rabbi; telephone hotline; massage therapist; or other sources specified by respondents. Treatment/support for only a substance abuse problem was not included.

SEE: "Perceived Help from Treatment for Mental Health Problems," "Prevalence," "Treatment for Mental Health Problems," and "Unmet Need for Treatment for Mental Health Problems."

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."

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 some 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."

Calendar Year Incidence

SEE: "Incidence."

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: "These 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 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

Respondents aged 18 to 22 were classified as full-time undergraduate students or as some other status (including part-time students, students in other grades, or nonstudents). Respondents were classified as full-time students if they reported that they were attending (or will be attending) their first through fourth 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.

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 areas have a population of 1 million or more. Small metropolitan areas have a population fewer than 1 million. Nonmetropolitan 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.

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 in rock or chunk form, and <u>not</u> 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

A respondent was defined with dependence on illicit drugs or alcohol if he or she met three out of seven dependence criteria (for substances that included questions to measure a withdrawal criterion) or three out of six 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 are that if respondents reported a specific number of days that they used these drugs in the past 12 months, they must have used these drugs on 6 or more days in that period. This definition did not apply to Nicotine (Cigarette) Dependence. See Section B.4.3 of Appendix B for additional details.

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

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 who completed postgraduate work were classified as 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.

Other "Other" includes all other responses, including being a student, someone who is keeping house or caring for children full time, retired, disabled, or other miscellaneous work statuses. Respondents who reported that they did not have a job, were on layoff, and 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 were asked: "Please indicate if you have had any of these alcohol or drug education classes or experiences in school 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 previously 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: "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.)"

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.

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 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."

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?"

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 were currently 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 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.

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 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.

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.

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. Statistics for this are shown in two categories: by calendar year of incidence and past year incidence.

Statistics for calendar year incidence include all new users of a particular substance between the years 1965 and 2003. Incidence estimates are shown by calendar year of initiation (e.g., 1970, 1971, etc.). For these statistics, respondents who are immigrants are excluded if their first use occurred outside the United States.

Statistics for past year incidence are subset to respondents whose first use of a particular substance occurred in the 12 months prior to the interview. 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.4.4 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 having lifetime daily cigarette use if he or she ever smoked 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 the 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 idealization. This is based on the definition found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). 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.

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."

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: "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," 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 due to low income but not in the form of direct monetary payments, 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 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."

Nonmedical Use of Prescription-Type Psychotherapeutics

This section of the interview instrument deals with nonmedical use of four classes of prescription-type psychotherapeutics: pain relievers, sedatives, stimulants, and tranquilizers.

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," "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?"

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

Pain Reliever Use

Measures of use of 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 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 Prescription-Type Psychotherapeutics," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

Past Month Daily Cigarette Use

A respondent was defined as having past month daily cigarette use 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 Help from Treatment for Mental Health Problems

Respondents who reported they took prescription medication to prevent another manic episode from occurring, saw a doctor or mental health professional for any problem with their emotions, nerves, or mental health, or received treatment for mental health problems in the past year were asked the following question: "You mentioned earlier in the interview that you saw a professional or received prescription medications for your emotional problems in the past 12 months. How much did the counseling or medicine improve your ability to manage daily activities like those asked about in the previous questions?" Response alternatives were (1) none, (2) a little, (3) some, (4) a lot, and (5) a great deal.

SEE: "Alternative Treatment/Support for Mental Health Problems," "Prevalence" and "Treatment for Mental Health Problems."

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 treatment if they reported feeling a need for treatment for the use of one or more drugs when asked specifically about each individual drug, "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 2004 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. Pill

cards have been modified over the years to reflect changes in available psychotherapeutic drugs.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Prescription-Type Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

Prevalence

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). The latter include delinquent behavior, driving under the influence of alcohol or drugs, perceived help from treatment for mental health problems, 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," "Alternative Treatment/Support for Mental Health Problems," "Current Use," "Delinquent Behavior," "Dependence," "Driving Under the Influence," "Need for Illicit Drug or Alcohol Use Treatment," "Nicotine (Cigarette) Dependence," "Perceived Help from Treatment for Mental Health Problems," "Perceived Need for Alcohol Use Treatment," "Perceived Need for Alcohol or Illicit Drug 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.

SEE: "Marijuana Use."

Psychotherapeutic Drugs

Psychotherapeutic drugs are generally prescription medications that also can be used illicitly to "get high" or for other effects. These include pain relievers, sedatives, stimulants, and tranquilizers.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Prescription-Type Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Recency of Use," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

Race/Ethnicity

Race/ethnicity is used to refer to the respondent's self-classification as to 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 race/ethnicity 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. Bureau of the Census.

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), the response alternatives were (1) within the past 30 days; (2) more than 30 days ago but within the past 12 months; (3) more than 12 months ago but within the past 3 years; and (4) 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

There were four regions to consider: Northeast, Midwest, South, and West. These regions are based on classifications developed by the U.S. Bureau of the Census.

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 2004 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 use of 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?"

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 Prescription-Type Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Stimulant Use," and "Tranquilizer Use."

Serious Psychological Distress

Serious psychological distress (SPD), referred to as serious mental illness (SMI) in pre-2004 NSDUHs, 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 2004, half of the 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, while the remaining adults were administered the long-form SPD module that was applied in the 2003 NSDUH. Due to differences in SPD prevalence rates based on the two versions of the module, only estimates from the long-form module are reported. See Section B.4.5 in Appendix B for additional details.

SEE: "Prevalence."

Significance

In tables in which trends are shown, the levels of significance for the changes between the two most recent survey years are noted as follows: 0.05 and 0.01. A significance level of 0.05 is used in comparing two estimates in the text for demographic subgroups of the most recent survey sample.

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."

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" 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.

SEE: "Delinquent Behavior" and "Gang Fighting."

Stimulant Use

Measures of use of 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?"

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," "Nonmedical Use of Prescription-Type Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," 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 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 use of 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 Prescription-Type Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," and "Stimulant Use."

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. 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: "Alternative Treatment/Support for Mental Health Problems," "Perceived Help from Treatment for Mental Health Problems," "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," 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 that was not received in the past 12 months. 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: "Alternative Treatment/Support for Mental Health Problems," "Prevalence" and "Treatment for Mental Health Problems."

Welfare Assistance

Household participation in one or more government 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 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 E: Other Sources of Data

A variety of other surveys and data systems collect data on substance use and mental illness. It is useful to consider the results of these other studies when discussing the National Survey on Drug Use and Health (NSDUH) data. In doing this, 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 illness. This appendix briefly describes several of these other data systems and where possible presents comparisons between NSDUH results and results from the other surveys for 2002, 2003, and 2004 or other recent time periods. For some comparisons, NSDUH estimates were generated to be consistent with the data collection periods or groups surveyed in other studies. In addition, this appendix describes surveys of populations not covered by NSDUH.

In-depth comparisons of the methodologies of the three major federally sponsored national surveys of youth substance use have been done. In 1997, a comparison between the National Household Survey on Drug Abuse[1] (NHSDA) and Monitoring the Future (MTF) was published (Gfroerer, Wright, & Kopstein, 1997). In 2000, a series of papers comparing different aspects of the NHSDA, MTF, and the Youth Risk Behavior Survey (YRBS) was commissioned by the U.S. Department of Health and Human Services (DHHS). Under contract with the Office of the Assistant Secretary for Planning and Evaluation, Westat, Inc., identified and funded several experts in survey methods to prepare these papers. The papers were published in the *Journal of Drug Issues* (Hennessy & Ginsberg, 2001). The major findings of these studies were as follows:

- The design, implementation, and documentation of all three surveys are of high quality. The surveys exhibit no flaws in the execution of basic survey procedures.

- The goals and approaches of these three surveys are very different, making comparisons between them difficult. The surveys differ significantly in terms of populations covered, sampling methods, modes of data collection, questionnaires, and estimation methods.

- Estimates of substance use are generally highest from the YRBS and lowest from the NHSDA. One possibility for these differences is survey location. NHSDA is conducted in the home, and the other two surveys collect data in school classrooms, away from parents and other family members.

- NHSDA prevalence rates also may be lower because of NHSDA's requirement of active parental consent prior to youth participation. The greater parental involvement in consent procedures in NHSDA, compared with the two school surveys, may suppress youth reporting of substance use.

These findings suggest that differences in survey methodology may affect comparisons of prevalence estimates among youths from various surveys. This appendix investigates the

[1] Beginning with the 2002 survey year, the survey name was changed from the National Household Survey on Drug Abuse (NHSDA) to the National Survey on Drug Use and Health (NSDUH).

similarities and differences among rates from NSDUH and other related surveys. Descriptions of the other surveys are provided when they are first discussed in the appendix.

E.1 Other National Surveys on Illicit Drug Use

Monitoring the Future (MTF)

The Monitoring the Future (MTF) study is a national survey that tracks drug 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 8th and 10th graders initiated in 1991. In 2002, for all three grades combined, 394 public and private schools and about 43,700 students were in the sample. In 2003, for all three grades combined, 48,500 students in 392 public and private schools were in the sample, and in 2004, nearly 49,500 students in 406 secondary schools were surveyed. The students complete a self-administered, machine-readable questionnaire during a regular class period (Johnston, O'Malley, & Bachman, 2003a; Johnston, O'Malley, Bachman, & Schulenberg, 2004c; Johnston, O'Malley, Bachman, & Schulenberg, 2005).

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. 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). In 2003 and 2004, for most comparisons of estimates of lifetime, past year, and past month prevalence of use of marijuana, cocaine, and inhalants among 8th, 10th, and 12th graders between NSDUH and MTF, NSDUH estimates were lower (see Table E.1 at the end of this appendix). However, both surveys showed that use of these three illicit drugs was stable for most measures between 2003 and 2004. Exceptions were a decrease in past year inhalants use among 8th graders in NSDUH and a decrease in past month marijuana use and an increase in lifetime inhalants use among 8th graders in MTF.

Youth Risk Behavior Survey (YRBS)

The Youth Risk Behavior Survey (YRBS) is a component of the Centers for Disease Control and Prevention's (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 and intentional injuries; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs); (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 latest YRBS was conducted in 2003 (CDC, 2005b). The 2003 national school-based survey used a three-stage cluster sample design to produce a nationally

representative sample of students in grades 9 through 12. The 2003 State and local surveys used a two-stage cluster sample design to produce representative samples of students in grades 9 through 12 in their jurisdictions. The 2003 national YRBS sample included 15,214 students in grades 9 through 12 in the 50 States and the District of Columbia. The national survey and all of the State and local surveys were conducted during the spring of 2003, with the exception of Hawaii. The Hawaii surveys were conducted in the fall of 2003. The students completed a self-administered, machine-readable questionnaire during a regular class period.

In general, this school-based survey has found higher rates of alcohol, cigarette, marijuana, cocaine, and inhalant use for youths than those found in NSDUH (Table E.2) (Grunbaum et al., 2004). To examine estimates that are comparable to YRBS, NSDUH estimates are based on data collected in the first 6 months of the survey year. The prevalence of illicit drug use was generally much higher in the YRBS than in NSDUH. For example, past month marijuana use was 22.4 percent in the 2003 national YRBS compared with 13.2 percent for persons in grades 9 through 12 in January-June of the 2003 NSDUH and 12.1 percent in January-June of the 2004 NSDUH. This is likely due to the differences in study design (school-based vs. home-based).

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 computer-assisted personal interviewing (CAPI) and audio computer-assisted self-interviewing (ACASI) design. In Wave 2, students were interviewed a second time in their homes. In 2001 and 2002, 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.

Survey results from the first two waves indicated that nearly one fourth of teenagers had ever smoked marijuana. Nearly 7 percent of 7th and 8th graders used marijuana at least once in the past month as did 15.7 percent of 9th through 12th graders (Resnick et al., 1997). In the 2003 NSDUH, 19.6 percent of youths aged 12 to 17 had ever used marijuana, and 7.9 percent were past month users; in 2004, these percentages were 19.0 and 7.6 percent, respectively.

Partnership Attitude Tracking Study (PATS)

The Partnership Attitude Tracking Study (PATS) is an ongoing national research study that tracks drug use and drug-related attitudes among children, teenagers, and their parents. It is sponsored by the Partnership for a Drug-Free America (PDFA). In the 2002 PATS, 7,084

teenagers in grades 7 through 12 completed self-administered, machine-readable questionnaires during a regular class period with their teacher remaining in the room (PDFA, 2005a). For the first time in 2002, PATS included questions on prescription drug abuse. The 2002 PATS found that 20 percent of youths in grades 7 to 12 had ever used prescription pain killers without a doctor's prescription, 19 percent of adolescents reported lifetime use of inhalants, and 40 percent reported lifetime use of marijuana. In 2003, 7,270 youths completed the survey, and prevalence rates remained very similar to rates in 2002 (PDFA, 2005a). The 2003 PATS found that 21 percent of youths in grades 7 to 12 had ever used prescription drugs, 18 percent had used inhalants, and 39 percent reported using marijuana in their lifetime (PDFA, 2003). The 2004 PATS was conducted with 7,314 youths in grades 7 through 12 and found that 19 percent had used inhalants and 37 percent had used marijuana at least once in their lifetime (PDFA, 2005b). NSDUH reported notably lower prevalence rates than PATS. For youths aged 12 to 17, NSDUH estimated the rate of lifetime prescription pain reliever use to be 11.2 percent in both 2002 and 2003 and 11.4 percent in 2004; lifetime inhalant use was 10.5 percent in the 2002, 10.7 percent in 2003, and 11.0 percent in 2004; and lifetime marijuana use was 20.6 percent in 2002, 19.6 percent in 2003, and 19.0 percent in 2004. The major difference in these prevalence estimates is 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.

National Survey of Parents and Youth (NSPY)

The National Survey of Parents and Youth (NSPY) is sponsored by the National Institute on Drug Abuse (NIDA) to evaluate the Office of National Drug Control Policy's (ONDCP's) National Youth Anti-Drug Media Campaign. The survey is specifically designed to evaluate Phase III of the campaign, covering the period between September 1999 and June 2003. Data collection provides estimates of trends in drug use between 2000 and the first half of 2003, as well as changes between 2002 and 2003.

In Phase I (Waves 1 through 3 of data collection), a sample of youths aged 9 to 18 and their parents were recruited to participate in the in-home audio computer-assisted self-interviewing (ACASI) survey. In Phase II (Waves 4 through 7 of data collection), the respondents from Phase I participated in two additional interviews at intervals of 6 to 24 months. In December 2003, ONDCP released the sixth semiannual report of findings that contained data from all three phases (Hornik et al., 2003).

Wave 5's data were collected between January and June 2002 and included 4,040 youths and 2,882 parents. Wave 6's data were collected between July and December 2002 and included 2,267 youths and 1,640 parents. An average of the estimates from Waves 5 and 6 showed that the past year rate of marijuana use among 12 to 18 year olds was 16.4 percent. The corresponding 2002 NSDUH estimate for past year marijuana use among youths aged 12 to 18 was 18.4 percent.

Wave 7's data were collected between January and June 2003 and included 3,587 youths and 2,621 parents. The two surveys produced similar estimates for youths (see Table E.3). For example, the latest wave of NSPY data indicated that 16.7 percent of youths aged 12 to 18 had

used marijuana in the past year, and the 2003 NSDUH yielded an estimate of 18.1 percent among this age group for this time period. One explanation for the similarity in estimates is that both surveys used ACASI.

In past waves of NSPY data collection, parents also have been asked about their drug use behaviors; however, parental use was not asked in the Wave 5 or Wave 7 data collections. Lifetime use of marijuana among parents was 53.7 percent in 2001, and past month use was 3.4 percent. According to the full-year data of NSDUH, lifetime use of marijuana among adults aged 18 or older was 42.7 percent in 2002, 43.1 percent in 2003, and 42.7 percent in 2004; past month use was 6.0 percent in 2002 and 2003 and 5.9 percent in 2004.

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 (2004 and 2005) is currently under way (Grant, Kaplan, Shepard, & Moore, 2003).

Over the decade from 1992 to 2002, the prevalence of past year marijuana use among adults remained about the same in the two surveys, at about 4.0 percent (Compton, Grant, Colliver, Glantz, & Stinson, 2004). The rate of past year marijuana use among adults was 10.1 percent in both the 2003 and 2004 NSDUHs. The discrepancy between the estimates is likely due to the differences in administration; NSDUH is self-administered, and the NLAES and NESARC are interviewer-administered.

E.2 Alcohol and Cigarette Use Surveys

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. The data presented are from January through September of 2003 and 2004. In the NHIS, current smokers are defined as those who smoke daily, smoked on 1 or more days in the past month, or quit smoking fewer than 30 days ago (for those who smoked 100 or more cigarettes in their lifetime). The survey estimated in 2003 that 21.6 percent of the population were reporting current

cigarette smoking (23.7 percent among males and 19.4 percent among females) (NCHS, 2005). The rates were slightly lower in 2004, with 20.7 percent of the population reporting current cigarette smoking (23.3 percent among males and 18.3 percent among females).

In NSDUH, current cigarette smoking is defined as any use in the past month. The full-year NSDUH rate was 27.0 percent in 2003 and 26.4 percent in 2004 for those aged 18 or older. Although the two surveys employ different methodologies, NSDUH still produces higher estimates when using the NHIS definition. For example, when using a definition similar to the NHIS definition and data from January through September, NSDUH estimates 25.1 percent of adults aged 18 or older were current smokers in 2003 and 24.7 percent of adults were current smokers in 2004. See Table E.4 for a comparison of smoking rates between these two surveys by age and gender.

The NHIS defines excessive alcohol drinkers as those who consumed an amount greater than or equal to five drinks in 1 day at least once during the past 12 months. The NHIS rate for excessive alcohol consumption among those aged 18 or older was 18.7 percent in 2004, down slightly from 19.4 percent in 2003 (NCHS, 2005). NSDUH defines heavy alcohol use as having five or more drinks on the same occasion on at least 5 different days in the past 30 days. The full-year NSDUH rates for heavy drinking among those aged 18 or older were 7.3 percent in 2003 and 7.4 percent in 2004.

Monitoring the Future (MTF)

Compared with NSDUH estimates, MTF estimates of cigarette use are higher among 8th graders, about the same among 10th graders, and somewhat lower among 12th graders. However, both surveys showed slight, but not necessarily significant, decreases in smoking in most grade levels between 2003 and 2004. For example, among 10th graders, there was a significant decrease in lifetime smoking estimates from 43.0 percent in 2003 to 40.7 percent in 2004 according to the MTF. The NSDUH lifetime smoking rates for 10th graders decreased significantly from 43.2 percent in 2003 to 38.3 percent in 2004. See Table E.1 for a comparison of the MTF and NSDUH cigarette use estimates by grade level.

Rates of alcohol consumption are higher overall in the MTF sample compared with NSDUH. In addition, the trends of alcohol consumption differed for the two surveys. Although the NSDUH showed both increases and decreases between 2003 and 2004, only the decrease in lifetime alcohol use among 10th graders was statistically significant; lifetime, past year, and past month alcohol use was more stable among 8th, 10th, and 12th graders in the MTF sample. Both surveys indicate a varying pattern of alcohol consumption by grade level. Table E.1 shows how the MTF estimates of alcohol use compare with NSDUH estimates.

Youth Risk Behavior Survey (YRBS)

As seen with illicit drug use, the YRBS estimates of cigarette and alcohol consumption were higher than the NSDUH estimates. According to YRBS data, in 2003, 58.4 percent of high school students had tried cigarettes and 21.9 percent of students had smoked cigarettes during the past 30 days (CDC, 2005b). Using only data from January through June, the 2003 NSDUH rates were 46.0 percent for lifetime cigarette use and 20.2 percent for past month cigarette use among

students in the 9th through 12th grade, and in 2004 the NSDUH rates were 43.7 percent for lifetime cigarette use and 19.8 percent for past month cigarette use.

Past month alcohol use among 9th to 12th graders in the YRBS was 47.1 percent in the 2001 survey and 44.9 percent in 2003. In contrast, January-June data from NSDUH showed a past month alcohol use rate of 29.1 percent in both 2003 and 2004 among 9th to 12th graders. Lifetime alcohol use rates among students were 63.1 percent using January-June NSDUH data in 2003 and 60.8 percent in 2004, while they were 74.9 percent in the YRBS in 2003.

Partnership Attitude Tracking Study (PATS)

Data from PATS show that the prevalence of past month cigarette for adolescents in grades 7 through 12 was 28 percent in 2002, 26 percent in 2003, and 23 percent in 2004 (PDFA, 2003, 2005a, 2005b). The NSDUH prevalence of past month cigarette smoking among youths aged 12 to 17 was 13.0 percent in 2002, 12.2 percent in 2003, and 11.9 percent in 2004. Again, the lower prevalence estimates in NSDUH are likely due to its home-based study design and slightly younger age group.

Even though the PATS estimates were higher than the NSDUH estimates, both surveys showed relatively steady rates of drinking among youths from 2002 to 2004. PATS found that 53 percent of teenagers reported past year alcohol use in 2002, 51 percent reported past year use in 2003, and 50 percent reported past year use in 2004. This compares with NSDUH estimates of 34.6 percent of youths aged 12 to 17 reporting past year use in 2002, 34.3 percent in 2003, and 33.9 percent in 2004. The 2002 PATS also found that 36 percent of teenagers reported past month alcohol use and 30 percent reported binge drinking in 2002. In 2003, an estimated 34 percent of youths used alcohol in the past month, while 29 percent reported binge drinking. In 2004, about 33 percent of youths used alcohol in the past month and 28 percent reported binge drinking. In comparison, the 2002 NSDUH rates for past month alcohol use and binge drinking for 12 to 17 year olds were 17.6 and 10.7 percent, respectively. For the 2003 NSDUH, 17.7 percent of youths reported past month alcohol use, and 10.6 reported binge drinking. In 2004, the NSDUH rates for past month alcohol use and binge drinking were 17.6 and 11.1 percent, respectively.

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 CDC. In 2002, 2003, and 2004, BRFSS 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, and national data are calculated using a median score across States. Although both surveys looked at the percentage of adults who reported having five or more alcoholic drinks on at least one occasion in the past month, the median binge alcohol use rates among adults in the BRFSS sample (16.1 percent in 2002, 16.4 percent in 2003, and 14.9 percent in 2004) (CDC, 2005a) were lower than among adults aged 18 or older in the NSDUH sample (24.0 percent in 2003 and 24.1 percent in 2004). The median percentages of adults who

had five or more drinks on an occasion at least five times in the past month, or heavy drinking, were similar among the BRFSS sample, 7.0 percent in 2001 and 7.3 percent in 2002 (CDC, 2002, 2005a), and the NSDUH sample, 7.3 percent in the 2003 NSDUH and 7.4 percent in 2004. Comparisons of estimates of adult binge drinking from BRFSS and NSDUH showed that BRFSS estimates were considerably lower than NSDUH estimates for the total United States and most States, even among demographic subgroups; however, the differences were not statistically significant. The use of 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).

National Longitudinal Study of Adolescent Health (Add Health)

Results from the 1994-95 National Longitudinal Study of Adolescent Health indicated that nearly 3.2 percent of 7th and 8th graders smoked six or more cigarettes a day, as did 12.8 percent of 9th through 12th graders (Resnick et al., 1997). In addition, the Add Health study found that 7.3 percent of 7th and 8th graders used alcohol on 2 or more days in the past month, as did 23.1 percent of 9th through 12th graders.

National Survey of Parents and Youth (NSPY)

Past waves of the NSPY collected information on cigarette and alcohol use, but Wave 5 in 2002 did not. In 2001, this survey estimated that 34.9 percent of youths aged 12 to 18 had used cigarettes at some point in their lifetime, and past month cigarette use was 11.7 percent. The 2002 NSDUH rates of lifetime and past month cigarette use for youths aged 12 to 18 were 38.8 and 16.7 percent, respectively; these rates were 36.2 and 15.8 percent, respectively, in 2003 and 35.1 and 15.6 percent in 2004.

In 2001, the NSPY estimated that 45.9 percent of youths aged 12 to 18 had used alcohol at some point in their lifetime, and the estimate for past month use was 36.5 percent for the same age group. The 2002 NSDUH rates for lifetime and past month alcohol use were 49.1 and 22.2 percent, respectively; the 2003 rates were 49.0 and 22.2 percent; and the 2004 rates were 47.7 and 22.4 percent.

These NSDUH estimates for cigarette and alcohol use in 2002, 2003, and 2004 are based on data collected from January through June to reflect the same data collection period as the NSPY.

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).

The 2001 survey found that the overall rate of binge drinking was 44.4 percent. The CAS defined binge drinking as the consumption of five or more drinks in a row for men and four or more drinks in a row for women. The study found that 22.8 percent of the students binge drank frequently and that 19.3 percent did not drink at all. The 2003 NSDUH binge drinking rate among full-time undergraduates aged 18 to 22 was 43.5 percent, and the 2004 estimate was 43.4 percent. It is useful to note that NSDUH defines binge drinking as five or more drinks in a row on at least one occasion in the past month for both men and women. Despite using different definitions of binge drinking, the CAS estimate and the NSDUH estimate are similar, but it is important to note that the two studies were conducted in different time periods.

E.3 Other Surveys of Substance Abuse and Dependence

National Comorbidity Surveys (NCS)

The National Comorbidity Survey (NCS) was sponsored by the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the W.T. Grant Foundation. It was designed to measure the prevalence of the illnesses in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III-R) (American Psychiatric Association [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 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.

Estimates from the NCS-R indicated that 3.1 percent of persons were alcohol abusers and 1.3 percent were dependent on alcohol in the past year (Kessler et al., 2005b). Excluding those who met the criteria for dependence from those who met the criteria for abuse according to the NCS-R, the resulting rate indicated that 1.8 percent had abused alcohol in the past year. According to the 2002 NSDUH, 4.3 percent of persons aged 18 or older were alcohol abusers in the past year, and 3.7 percent were dependent on alcohol; 7.9 percent were dependent on or abused alcohol. Comparable rates for alcohol abuse, dependence, and abuse or dependence from

the 2003 NSDUH were 4.4 percent, 3.3 percent, and 7.7 percent, respectively; in 2004, these rates were 4.3 percent, 3.6 percent, and 8.0 percent, respectively. Therefore, the past year estimate for those with either alcohol abuse and/or dependence from the NCS-R (3.1 percent) is lower than the estimate from the 2002 NSDUH (7.9 percent).

Based on the NCS-R, an estimated 1.4 percent of persons aged 18 or older met the criteria for abuse of illicit drugs, and 0.4 percent met the criteria for dependence on illicit drugs in the past year. In the 2002 NSDUH, 0.9 percent abused illicit drugs, and 1.8 percent were dependent on illicit drugs; 2.7 percent were dependent on or abused illicit drugs. Comparable rates for illicit drug abuse, dependence, and abuse or dependence from the 2003 NSDUH were 0.9 percent, 1.7 percent, and 2.6 percent, respectively; in 2004, these rates were 0.9 percent, 1.9 percent, and 2.8 percent, respectively. This latter rate is higher than the corresponding estimate in the NCS-R (1.4 percent) for substance abuse, which also includes those with dependence. Similarly, NCS-R indicated that 3.8 percent were dependent on or abused alcohol or illicit drugs in the past year compared with 9.4 percent based on the 2002 NSDUH; this rate was 9.1 percent in the 2003 NSDUH and 9.4 percent in the 2004 NSDUH.

National Longitudinal Alcohol Epidemiologic Survey (NLAES) and National Epidemiologic Survey on Alcohol and Related Conditions (NESARC)

The NLAES and NESARC included an extensive set of questions designed to assess the presence of symptoms of alcohol and drug abuse and dependence in persons' lifetimes and during the prior 12 months, based on the criteria from the DSM-IV (APA, 1994). The 1991-92 NLAES found that 7.4 percent of adults were abusing or dependent on alcohol (Grant, 1995). In the 2001-02 NESARC, the rate of alcohol abuse among adults was 4.7 percent, and the rate of alcohol dependence was 3.8 percent. Between 1992 and 2002, the prevalence of alcohol abuse increased and the prevalence of dependence declined (Grant et al., 2004). In 2002, NSDUH found that 7.9 percent of adults were abusing or dependent on alcohol; in 2003, this rate was 7.7 percent, and in 2004 the rate was 8.0 percent. The NLAES and NESARC also found that the prevalence of marijuana dependence or abuse among adults increased from 1.2 percent in 1992 to 1.5 percent in 2002 (Compton et al., 2004). In comparison, the 2002 NSDUH found that 2.7 percent of adults were dependent on or abusing some illicit drug; the rates were 2.6 percent in 2003 and 2.8 percent in 2004. The 2002 and 2003 NSDUHs both estimated that 3.2 million adults (1.5 percent) were dependent on or abusing marijuana; this estimate was 3.5 million (1.6 percent) in 2004. Although the estimates from these two surveys are relatively close, one should note that they were conducted using different methodologies.

E.4 Other National Surveys of Mental Illness

Epidemiologic Catchment Area Survey (ECA)

The Epidemiologic Catchment Area (ECA) Study (1981-83) was the first survey to administer a structured psychiatric interview and provided population-based estimates of psychiatric disorders. The prevalence rates 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 DSM-III (APA, 1980) diagnoses of psychiatric and substance use disorders. 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.

National Comorbidity Surveys (NCS)

The National Comorbidity Survey (NCS) was conducted in response to the limitations of the ECA and a broader need to produce nationally representative data on psychiatric conditions. The first wave of the survey revealed that 48.7 percent of the population had at least one axis I or II disorder in their lifetime. This percentage can be broken down into the following: 21 percent with one disorder, 13 percent with two disorders, and 14 percent with three or more disorders (Kessler, 1994). In 2004, NSDUH estimated that 9.9 percent of persons aged 18 or older were classified as having serious psychological distress (SPD) in the past year (see Section B.4.4 in Appendix B for SPD's comparability with SMI).

Preliminary findings from the NCS-R study in 2001-02 indicate that the lifetime and past year prevalence of major depressive disorder was 16.2 and 6.6 percent, respectively. A large percentage of those with lifetime (71.1 percent) and 12-month (78.5 percent) psychiatric disorders also had at least one additional DSM-defined psychiatric disorder, suggesting that the burden of mental disorders is pervasive in the general population (Kessler et al., 2003a, 2003b). In 2004, NSDUH estimated that 14.8 percent of adults experienced a major depressive episode in their lifetime, and 8.0 percent experienced one in the past year.

The National Epidemiologic Survey on Alcohol and Alcohol Related Conditions (NESARC)

NESARC was sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and designed to be a longitudinal study with the first wave of data (43,093) collected between 2001 and 2002. An additional wave (2004 and 2005) is currently under way. The study contains comprehensive assessments of drug use, abuse, and dependence, as well as associated mental disorders. Extensive data on the utilization of treatment programs and medical care also are being collected. NESARC is a representative sample of the noninstitutionalized population aged 18 or older residing in the contiguous United States, the District of Columbia, or Hawaii. The design also oversampled young adults aged 18 to 24 and minorities to increase precision, ensure adequate cell sizes for variables with low event rates, and ensure representation of major racial/ethnic categories. 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. The 12-month prevalence estimates show that 9.2 percent of respondents experienced an independent (i.e., not attributable to illness or substance use) mood disorder in the past year, whereas 11.0 percent experienced an independent anxiety disorder (Grant et al., 2004).

E.5 Surveys of Populations Not Covered by NSDUH

National Survey of Parents and Youth (NSPY)

The NSPY, described above, is distinct in that it measures drug use and attitudes among youths as young as 9 years. The earlier NSPY results showed that youths aged 9 to 11 were strongly opposed to marijuana use. Wave 3 of the survey estimated that only 0.3 percent of youths aged 9 to 11 had used marijuana in the past year. The corresponding rates for Waves 1 and 2 were 0.8 and 0.0 percent, respectively (ONDCP, 2005).

Washington, DC, Metropolitan Area Drug Study (DC*MADS)

The Washington, DC, Metropolitan Area Drug Study (DC*MADS) was designed (a) to estimate the prevalence, correlates, and consequences of drug abuse among all types of people residing in one metropolitan area of the country during one period of time with a special focus on populations who were underrepresented or unrepresented in household surveys and (b) to develop a methodological model for similar types of research in other metropolitan areas of the country. Sponsored by NIDA and conducted from 1989 to 1995 by RTI International and Westat, Inc., the project included 11 separate but coordinated studies that focused on different population subgroups (e.g., homeless people, institutionalized individuals, adult and juvenile offenders, new mothers, drug use treatment clients) or different aspects of the drug abuse problem (e.g., adverse consequences of drug abuse). DC*MADS provided a replicable methodological approach for developing representative estimates of the prevalence of drug abuse among all population subgroups, regardless of their residential setting, in a metropolitan area. The key population domains in DC*MADS were homeless people, institutionalized persons, and the household population.

A major finding of DC*MADS was that, when data are aggregated for populations from each of the three domains, the overall prevalence estimates for the use of drugs differ only marginally from those that would be obtained from the household population alone (i.e., from NSDUH), largely because the other populations are very small compared with the household population. However, a somewhat different picture emerged when the numbers of drug users were examined. Adding in the nonhousehold populations resulted in an increase of approximately 14,000 illicit drugs users compared with the corresponding estimates for the household population. About 25 percent of past year crack users, 20 percent of past year heroin users, and one third of past year needle users were found in the nonhousehold population (Bray & Marsden, 1999).

Department of Defense (DoD) Survey of Health Related Behaviors among Military Personnel

The 2002 DoD Survey of Health Related Behaviors among Military Personnel was the 8th in a series of studies conducted since 1980. The sample consisted of 12,756 active-duty Armed Forces personnel worldwide who anonymously completed self-administered questionnaires that assessed substance use and other health behaviors. For the total DoD, during 30 days prior to the survey, heavy alcohol use declined from 20.8 percent in 1980 to 15.4 percent in 1998 and increased significantly to 18.1 percent in 2002; past month cigarette smoking decreased from 51.0 percent in 1980 to 29.9 percent in 1998 and increased significantly to 33.8 percent in 2002;

and past month use of any illicit drugs declined from 27.6 percent in 1980 to 2.7 percent in 1998 and also showed a nonsignificant change in 2002 to 3.4 percent (Bray et al., 1999, 2003). In 2002, military personnel had significantly higher rates of heavy alcohol use than their civilian counterparts (16.9 vs. 11.2 percent) when demographic differences between the military and civilian populations were taken into account (civilian data were drawn from the 2001 NSDUH and adjusted to reflect demographic characteristics of the military). Differences in military and civilian heavy alcohol use rates were largest for men aged 18 to 25. Among this age group, the military rate was nearly twice as high as the adjusted civilian rate (32.2 vs. 17.8 percent). Military personnel showed similar rates of cigarette use (31.6 vs. 31.1 percent) compared with civilians. Rates of illicit drug use in the military were significantly lower than those observed for the comparable civilian population when demographic differences between the military and civilian populations were taken into account (3.3 vs. 12.1 percent).

Survey of Inmates in State and Federal Correctional Facilities

The 1997 Survey of Inmates in State and Federal Correctional Facilities sampled inmates from a universe of 1,409 State prisons and 127 Federal Prisons for the Bureau of Justice Statistics (BJS). Systematic random sampling was used to select the inmates for the computer-assisted personal interviews. The final numbers interviewed were 14,285 State prisoners and 4,041 Federal prisoners. Among other items, these surveys collected information on the use of drugs in the month before the offense for convicted inmates. Women in State prisons (62.4 percent) were more likely than men (56.1 percent) to have used drugs in the month before the offense (BJS, 1999, 2000). Women also were more likely to have committed their offense while under the influence of drugs (40.4 vs. 32.1 percent of male prisoners). Among Federal prisoners, men (45.4 percent) were more likely than women (36.7 percent) to have used drugs in the past month. Male and female Federal prisoners were equally likely to report the influence of drugs during their offense (22.7 percent of male and 19.3 percent of female prisoners). The survey results indicate substantially higher rates of drug use among State and Federal prisoners as compared with the household population.

Table E.1 Use of Specific Substances in Lifetime, Past Year, and Past Month among 8th, 10th, and 12th Graders in NSDUH and MTF: Percentages, 2003 and 2004

	SURVEY/TIME PERIOD											
	NSDUH (January-June)						MTF					
	Lifetime		Past Year		Past Month		Lifetime		Past Year		Past Month	
Drug/Current Grade Level	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Marijuana												
8th grade	8.9	9.3	7.3	7.3	3.0	3.6	17.5	16.3	12.8	11.8	7.5[a]	6.4
10th grade	29.3	28.2	23.5	20.9	12.0	10.5	36.4	35.1	28.2	27.5	17.0	15.9
12th grade	42.4	43.1	30.4	31.5	18.2	16.1	46.1	45.7	34.9	34.3	21.2	19.9
Cocaine												
8th grade	0.8	0.7	0.6	0.5	0.2	0.0	3.6	3.4	2.2	2.0	0.9	0.9
10th grade	4.1	2.9	2.8	2.1	0.9	0.8	5.1	5.4	3.3	3.7	1.3	1.7
12th grade	8.1	7.7	5.0	5.4	1.7	1.7	7.7	8.1	4.8	5.3	2.1	2.3
Inhalants												
8th grade	14.2	11.6	7.6[a]	4.8	1.6	1.3	15.8[a]	17.3	8.7	9.6	4.1	4.5
10th grade	12.5	12.1	4.9	4.6	1.3	1.0	12.7	12.4	5.4	5.9	2.2	2.4
12th grade	13.2	11.1	3.3	3.5	0.7	0.3	11.2	10.9	3.9	4.2	1.5	1.5
Cigarettes												
8th grade	20.8	22.1	10.8	12.1	4.5[a]	6.3	28.4	27.9	--	--	10.2	9.2
10th grade	43.2[a]	38.3	27.1	24.5	17.0	15.9	43.0[a]	40.7	--	--	16.7	16.0
12th grade	56.0	54.5	35.7	39.1	27.7	28.5	53.7	52.8	--	--	24.4	25.0
Alcohol												
8th grade	29.8	31.6	21.5	23.8	9.7	8.4	45.6	43.9	37.2	36.7	19.7	18.6
10th grade	61.4[a]	56.5	50.9	47.1	27.3	23.9	66.0	64.2	59.3	58.2	35.4	35.2
12th grade	75.8	72.7	64.6	63.3	39.4	41.5	76.6	76.8	70.1	70.6	47.5	48.0

-- Not available.

[a] Difference between 2003 estimate and 2004 estimate is statistically significant at the .05 level.
[b] Difference between 2003 estimate and 2004 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, 2003 and 2004.
The Monitoring the Future Study, University of Michigan, 2003 and 2004.

Table E.2 Past Year and Past Month Substance Use among Students in Grades 9 to 12 in YRBS and NSDUH: 2003 and 2004

Substance	YRBS		NSDUH (January–June)	
	2003	2004	2003	2004
Alcohol				
Lifetime Use	74.9	--	63.1	60.8
Past Month Use	44.9	--	29.1	29.1
Cigarettes				
Lifetime Use	58.4	--	46.0	43.7
Past Month Use	21.9	--	20.2	19.8
Marijuana				
Lifetime Use	40.2	--	32.5	31.7
Past Month Use	22.4	--	13.2	12.1
Cocaine				
Lifetime Use	8.7	--	5.3	4.5
Past Month Use	4.1	--	1.2	1.0
Inhalants				
Lifetime Use	12.1	--	11.8	11.7
Past Month Use	3.9	--	0.9	1.0

-- Not available. The YRBS is only conducted every 2 years.

YRBS = Youth Risk Behavior Survey.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, January-June for 2003 and 2004.
Centers for Disease Control and Prevention, Youth Risk Behavior Survey, 2003.

Table E.3 Past Year and Past Month Marijuana Use among Youths Aged 12 to 18 in NSPY and NSDUH, by Age Group: 2002-2004

Use Measure	Age Group	Percent Reporting Use					
		NSPY			NSDUH		
		2002[1] (Full Year)	2003 (January-June)	2004	2002 (Full Year)	2003 (January-June)	2004 (Full Year)
Past Year	12 to 13	3.3	4.0	--	3.1	2.3	2.8
	14 to 16	17.0	18.3	--	19.1	19.5	17.4
	12 to 18	16.4	16.7	--	18.4	18.1	17.1
Past Month	12 to 13	1.1	1.8	--	1.4	0.9	1.1
	14 to 16	8.3	8.2	--	9.4	9.7	9.0
	12 to 18	8.9	7.9	--	9.8	9.9	9.1

-- Not available.

[1]NSPY estimates for 2002 are averages of data from Wave 5 (collected between January and June 2002) and Wave 6 (collected between July and December 2002).

NSPY = National Survey of Parents and Youth.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.
National Institute on Drug Abuse, National Survey of Parents and Youth, 2002, January–June 2003.

Table E.4 Past Month Cigarette Use among Persons Aged 18 or Older in NHIS and NSDUH, by Gender and Age Group: Percentages, 2003 and 2004

Gender/Age	NHIS (January –September)		NSDUH (January – September)	
	2003	2004	2003	2004
Total	21.6	20.7	25.1	24.7
18 to 44	25.3	23.5	31.1	30.5
45 to 64	21.6	22.3	22.5	23.5
65 or Older	9.4	8.5	10.6	8.8
Male	23.7	23.3	28.0	27.7
18 to 44	28.1	25.8	34.2	33.6
45 to 64	23.3	25.1	24.9	25.5
65 or Older	10.5	10.0	10.9	10.5
Female	19.4	18.3	22.4	22.0
18 to 44	22.5	21.3	28.2	27.4
45 to 64	20.1	19.6	20.2	21.6
65 or Older	8.5	7.3	10.3	7.5

Note: For the NHIS, *past month cigarette use* is defined as currently smoking daily or smoking on 1 or more days in the past month or quitting smoking fewer than 30 days ago (for those who smoked 100+ cigarettes in the lifetime). The analysis excluded those with unknown use status (about 1 percent each year). For NSDUH, *past month cigarette use* is defined as having smoked in the past month. For comparison purposes, the NSDUH definition was adjusted to include those who had smoked in the past month and smoked at least 100 cigarettes in their lifetime.

NHIS = National Health Interview Survey.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004.
National Center for Health Statistics, National Health Interview Survey, 2003 and 2004.

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Appendix G: Sample Size and Population Tables

50408 (8.1N)

Table G.1 Survey Sample Size for Respondents Aged 12 or Older, by Gender and Detailed Age Category: 2003 and 2004

Age Category	Total		GENDER			
			Male		Female	
	2003	2004	2003	2004	2003	2004
TOTAL	67,784	67,760	32,611	32,696	35,173	35,064
12	3,809	3,558	1,997	1,776	1,812	1,782
13	3,954	3,903	2,036	1,989	1,918	1,914
14	3,797	3,902	1,938	1,980	1,859	1,922
15	3,748	3,790	1,924	1,951	1,824	1,839
16	3,714	3,613	1,864	1,853	1,850	1,760
17	3,643	3,535	1,878	1,814	1,765	1,721
18	3,191	3,252	1,605	1,654	1,586	1,598
19	2,801	2,889	1,304	1,437	1,497	1,452
20	2,818	2,793	1,363	1,335	1,455	1,458
21	2,810	2,799	1,301	1,322	1,509	1,477
22	2,796	2,822	1,318	1,334	1,478	1,488
23	2,941	2,789	1,305	1,298	1,636	1,491
24	2,723	2,893	1,296	1,344	1,427	1,549
25	2,658	2,592	1,262	1,199	1,396	1,393
26-29	2,870	2,982	1,333	1,409	1,537	1,573
30-34	3,700	3,592	1,704	1,654	1,996	1,938
35-39	3,191	3,190	1,471	1,439	1,720	1,751
40-44	3,413	3,397	1,588	1,558	1,825	1,839
45-49	3,227	3,364	1,458	1,582	1,769	1,782
50-54	1,489	1,483	693	681	796	802
55-59	1,176	1,271	531	589	645	682
60-64	945	958	419	450	526	508
65 or Older	2,370	2,393	1,023	1,048	1,347	1,345

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

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Table G.2 Numbers (in Thousands) of Persons Aged 12 or Older, by Gender and Detailed Age Category: 2003 and 2004

Age Category	Total		GENDER			
			Male		Female	
	2003	2004	2003	2004	2003	2004
TOTAL	237,682	240,515	114,985	116,483	122,697	124,032
12	4,117	3,974	2,132	1,988	1,985	1,986
13	4,334	4,392	2,230	2,258	2,104	2,134
14	4,127	4,373	2,113	2,210	2,014	2,163
15	4,133	4,293	2,113	2,237	2,020	2,056
16	4,192	4,116	2,072	2,077	2,120	2,039
17	4,092	4,066	2,111	2,106	1,981	1,960
18	4,608	4,596	2,476	2,430	2,132	2,166
19	3,886	3,937	1,854	2,027	2,032	1,909
20	4,027	3,990	2,061	2,006	1,967	1,984
21	3,924	4,080	1,920	1,990	2,004	2,090
22	4,016	4,019	2,021	2,056	1,995	1,963
23	4,004	3,927	1,922	1,909	2,082	2,018
24	3,635	4,047	1,857	1,994	1,778	2,053
25	3,629	3,598	1,809	1,760	1,820	1,838
26-29	14,766	15,345	7,584	7,908	7,182	7,437
30-34	20,195	19,630	9,753	9,463	10,442	10,166
35-39	20,927	20,945	10,337	9,895	10,590	11,051
40-44	22,689	22,678	11,155	11,399	11,535	11,279
45-49	21,415	21,504	10,416	10,700	10,999	10,804
50-54	19,993	19,384	9,733	9,043	10,261	10,341
55-59	14,917	16,401	7,359	8,178	7,558	8,223
60-64	11,756	12,541	5,443	6,125	6,312	6,416
65 or Older	34,300	34,679	14,515	14,722	19,785	19,957

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

Table G.3 Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Demographic Characteristics: 2003 and 2004

Demographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	67,784	67,760	22,665	22,301	22,738	22,829	22,381	22,630
GENDER								
Male	32,611	32,696	11,637	11,363	10,754	10,923	10,220	10,410
Female	35,173	35,064	11,028	10,938	11,984	11,906	12,161	12,220
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	58,711	58,372	19,432	18,981	19,339	19,315	19,940	20,076
White	45,870	45,174	14,549	14,176	14,950	14,737	16,371	16,261
Black or African American	8,153	8,290	3,119	3,077	2,771	2,868	2,263	2,345
American Indian or Alaska Native	845	860	321	329	275	276	249	255
Native Hawaiian or Other Pacific Islander	252	238	84	62	108	109	60	67
Asian	2,048	2,125	656	578	746	806	646	741
Two or More Races	1,543	1,685	703	759	489	519	351	407
Hispanic or Latino	9,073	9,388	3,233	3,320	3,399	3,514	2,441	2,554
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	22,145	21,980	7,486	7,271	7,167	7,174	7,492	7,535
Female, White, Not Hispanic	23,725	23,194	7,063	6,905	7,783	7,563	8,879	8,726
Male, Black, Not Hispanic	3,667	3,698	1,556	1,503	1,197	1,221	914	974
Female, Black, Not Hispanic	4,486	4,592	1,563	1,574	1,574	1,647	1,349	1,371
Male, Hispanic	4,529	4,649	1,680	1,722	1,651	1,717	1,198	1,210
Female, Hispanic	4,544	4,739	1,553	1,598	1,748	1,797	1,243	1,344
EDUCATION[1]								
< High School	8,091	7,892	N/A	N/A	4,698	4,584	3,393	3,308
High School Graduate	15,074	15,259	N/A	N/A	7,975	8,062	7,099	7,197
Some College	12,788	12,985	N/A	N/A	7,175	7,292	5,613	5,693
College Graduate	9,166	9,323	N/A	N/A	2,890	2,891	6,276	6,432
CURRENT EMPLOYMENT[1]								
Full-Time	24,535	24,816	N/A	N/A	10,563	10,657	13,972	14,159
Part-Time	8,489	8,366	N/A	N/A	5,867	5,831	2,622	2,535
Unemployed	2,601	2,491	N/A	N/A	1,836	1,790	765	701
Other[2]	9,494	9,786	N/A	N/A	4,472	4,551	5,022	5,235

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.
[2] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

50408 (8.2A)

Table G.4 Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Demographic Characteristics: 2003 and 2004

Demographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	237,682	240,515	24,995	25,214	31,728	32,194	180,958	183,106
GENDER								
Male	114,985	116,483	12,770	12,877	15,920	16,172	86,295	87,434
Female	122,697	124,032	12,225	12,337	15,808	16,022	94,663	95,673
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	207,800	209,485	20,931	20,981	26,069	26,475	160,800	162,029
White	166,257	167,051	15,565	15,508	19,642	19,951	131,050	131,592
Black or African American	27,452	28,009	3,741	3,803	4,278	4,358	19,433	19,848
American Indian or Alaska Native	1,256	1,298	177	165	183	172	896	961
Native Hawaiian or Other Pacific Islander	490	636	75	65	159	120	256	452
Asian	9,769	9,933	971	1,001	1,445	1,522	7,353	7,411
Two or More Races	2,575	2,559	401	440	362	352	1,812	1,766
Hispanic or Latino	29,882	31,030	4,065	4,233	5,659	5,719	20,158	21,077
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	80,551	81,039	7,981	7,932	9,815	9,934	62,756	63,173
Female, White, Not Hispanic	85,706	86,012	7,584	7,576	9,827	10,017	68,295	68,419
Male, Black, Not Hispanic	12,397	12,694	1,886	1,949	2,004	2,111	8,507	8,634
Female, Black, Not Hispanic	15,055	15,315	1,855	1,854	2,274	2,247	10,925	11,214
Male, Hispanic	15,299	15,907	2,075	2,161	3,045	3,064	10,178	10,682
Female, Hispanic	14,584	15,123	1,989	2,072	2,614	2,655	9,980	10,395
EDUCATION[1]								
< High School	37,899	36,514	N/A	N/A	6,876	6,671	31,023	29,842
High School Graduate	67,139	68,096	N/A	N/A	10,985	11,054	56,155	57,042
Some College	52,506	54,753	N/A	N/A	9,894	10,319	42,611	44,434
College Graduate	55,143	55,937	N/A	N/A	3,973	4,149	51,170	51,788
CURRENT EMPLOYMENT[1]								
Full-Time	116,965	119,053	N/A	N/A	14,567	15,128	102,397	103,925
Part-Time	28,636	27,538	N/A	N/A	8,184	8,100	20,452	19,438
Unemployed	8,087	7,376	N/A	N/A	2,695	2,575	5,392	4,800
Other[2]	58,999	61,334	N/A	N/A	6,281	6,390	52,718	54,943

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.
[2] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table G.5 Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Geographic Characteristics: 2003 and 2004

Geographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	67,784	67,760	22,665	22,301	22,738	22,829	22,381	22,630
GEOGRAPHIC DIVISION								
Northeast	13,655	13,523	4,536	4,361	4,595	4,532	4,524	4,630
New England	5,566	5,409	1,786	1,779	1,947	1,788	1,833	1,842
Middle Atlantic	8,089	8,114	2,750	2,582	2,648	2,744	2,691	2,788
Midwest	18,993	18,889	6,292	6,297	6,532	6,361	6,169	6,231
East North Central	12,727	12,666	4,203	4,302	4,405	4,227	4,119	4,137
West North Central	6,266	6,223	2,089	1,995	2,127	2,134	2,050	2,094
South	20,612	20,807	6,934	6,823	6,794	7,055	6,884	6,929
South Atlantic	10,768	10,853	3,609	3,595	3,541	3,600	3,618	3,658
East South Central	3,542	3,623	1,213	1,147	1,138	1,262	1,191	1,214
West South Central	6,302	6,331	2,112	2,081	2,115	2,193	2,075	2,057
West	14,524	14,541	4,903	4,820	4,817	4,881	4,804	4,840
Mountain	7,260	7,223	2,368	2,357	2,427	2,435	2,465	2,431
Pacific	7,264	7,318	2,535	2,463	2,390	2,446	2,339	2,409
COUNTY TYPE								
Large Metro	29,759	30,077	10,044	9,918	9,699	9,904	10,016	10,255
Small Metro	23,349	22,972	7,500	7,370	8,373	8,215	7,476	7,387
250K - 1 Mil. Pop.	14,944	14,729	4,904	4,845	5,225	5,083	4,815	4,801
< 250K Pop.	8,405	8,243	2,596	2,525	3,148	3,132	2,661	2,586
Nonmetro	14,676	14,711	5,121	5,013	4,666	4,710	4,889	4,988
Urbanized	6,550	6,150	2,174	1,946	2,274	2,184	2,102	2,020
Less Urbanized	6,499	7,043	2,309	2,476	2,002	2,156	2,188	2,411
Completely Rural	1,627	1,518	638	591	390	370	599	557

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

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Table G.6 Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Geographic Characteristics: 2003 and 2004

Geographic Characteristic	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	237,682	240,515	24,995	25,214	31,728	32,194	180,958	183,106
GEOGRAPHIC DIVISION								
Northeast	45,310	45,497	4,491	4,536	5,633	5,684	35,185	35,277
New England	11,887	11,947	1,173	1,174	1,470	1,488	9,243	9,284
Middle Atlantic	33,423	33,551	3,318	3,362	4,164	4,196	25,942	25,993
Midwest	53,767	54,212	5,695	5,681	7,358	7,441	40,715	41,089
East North Central	37,666	37,937	3,995	4,008	5,083	5,127	28,588	28,802
West North Central	16,101	16,274	1,700	1,674	2,274	2,314	12,127	12,287
South	84,774	86,141	8,927	9,001	11,325	11,538	64,522	65,602
South Atlantic	44,432	45,192	4,502	4,579	5,584	5,706	34,346	34,906
East South Central	14,216	14,392	1,453	1,449	1,934	1,951	10,829	10,992
West South Central	26,126	26,557	2,972	2,972	3,807	3,881	19,347	19,704
West	53,831	54,665	5,883	5,996	7,412	7,531	40,535	41,138
Mountain	15,614	15,986	1,728	1,745	2,237	2,287	11,649	11,954
Pacific	38,217	38,679	4,155	4,251	5,176	5,244	28,886	29,184
COUNTY TYPE								
Large Metro	126,099	128,322	13,310	13,345	16,604	16,650	96,186	98,327
Small Metro	71,397	71,638	7,401	7,645	10,206	10,604	53,790	53,389
250K - 1 Mil. Pop.	46,928	47,167	4,980	5,103	6,651	6,888	35,296	35,176
< 250K Pop.	24,469	24,471	2,420	2,542	3,555	3,716	18,493	18,213
Nonmetro	40,186	40,555	4,285	4,224	4,918	4,940	30,983	31,390
Urbanized	17,865	16,696	1,858	1,700	2,362	2,303	13,644	12,694
Less Urbanized	18,223	20,291	1,985	2,147	2,192	2,313	14,046	15,830
Completely Rural	4,098	3,568	441	377	363	324	3,293	2,866

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

Appendix H: Selected Prevalence Tables

Table H.1 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older: Numbers in Thousands, 2002-2004

Drug	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	108,255	110,205	110,057	35,132	34,993	34,807	19,522	19,470	19,071
Marijuana and Hashish	94,946	96,611	96,772	25,755	25,231	25,451	14,584	14,638	14,576
Cocaine	33,910	34,891	34,153	5,902	5,908	5,658	2,020	2,281	2,021
Crack	8,402	7,949	7,840	1,554	1,406	1,304	567	604	467
Heroin	3,668	3,744[a]	3,145	404	314	398	166	119	166
Hallucinogens	34,314	34,363	34,333	4,749[b]	3,936	3,878	1,196[b]	1,042	929
LSD	24,516	24,424	23,398	999[b]	558	592	112	133	141
PCP	7,418	7,107	6,762	235	219	210	58	56	49
Ecstasy	10,150[a]	10,904	11,130	3,167[b]	2,119	1,915	676[b]	470	450
Inhalants	22,870	22,995	22,798	2,084	2,075	2,255	635	570	638
Nonmedical Use of Psychotherapeutics[2]	46,558	47,882	48,013	14,680	14,986	14,643	6,210	6,336	6,007
Pain Relievers	29,611[a]	31,207	31,768	10,992	11,671	11,256	4,377	4,693	4,404
OxyContin®	1,924[b]	2,832	3,072	--	--	1,213	--	--	325
Tranquilizers	19,267	20,220	19,852	4,849	5,051	5,068	1,804	1,830	1,616
Stimulants	21,072	20,798	19,982	3,181	2,751	2,918	1,218	1,191	1,189
Methamphetamine	12,383	12,303	11,726	1,541	1,315	1,440	597	607	583
Sedatives	9,960	9,510	9,891	981	831	737	436[a]	294	265
ILLICIT DRUG OTHER THAN MARIJUANA[1]	70,300	71,128	70,657	20,423	20,305	19,658	8,777	8,849	8,247

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.2 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older: Percentages, 2002-2004

Drug	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	46.0	46.4	45.8	14.9	14.7	14.5	8.3	8.2	7.9
Marijuana and Hashish	40.4	40.6	40.2	11.0	10.6	10.6	6.2	6.2	6.1
Cocaine	14.4	14.7	14.2	2.5	2.5	2.4	0.9	1.0	0.8
Crack	3.6	3.3	3.3	0.7	0.6	0.5	0.2	0.3	0.2
Heroin	1.6[a]	1.6[a]	1.3	0.2	0.1	0.2	0.1	0.1	0.1
Hallucinogens	14.6	14.5	14.3	2.0[b]	1.7	1.6	0.5[b]	0.4	0.4
LSD	10.4[a]	10.3	9.7	0.4[b]	0.2	0.2	0.0	0.1	0.1
PCP	3.2[a]	3.0	2.8	0.1	0.1	0.1	0.0	0.0	0.0
Ecstasy	4.3	4.6	4.6	1.3[b]	0.9	0.8	0.3[b]	0.2	0.2
Inhalants	9.7	9.7	9.5	0.9	0.9	0.9	0.3	0.2	0.3
Nonmedical Use of Psychotherapeutics[2]	19.8	20.1	20.0	6.2	6.3	6.1	2.6	2.7	2.5
Pain Relievers	12.6	13.1	13.2	4.7	4.9	4.7	1.9	2.0	1.8
OxyContin®	0.8[b]	1.2	1.3	--	--	0.5	--	--	0.1
Tranquilizers	8.2	8.5	8.3	2.1	2.1	2.1	0.8	0.8	0.7
Stimulants	9.0[a]	8.8	8.3	1.4	1.2	1.2	0.5	0.5	0.5
Methamphetamine	5.3	5.2	4.9	0.7	0.6	0.6	0.3	0.3	0.2
Sedatives	4.2	4.0	4.1	0.4	0.3	0.3	0.2[a]	0.1	0.1
ILLICIT DRUG OTHER THAN MARIJUANA[1]	29.9	29.9	29.4	8.7[a]	8.5	8.2	3.7[a]	3.7	3.4

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.3 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17: Percentages, 2002-2004

Drug	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	30.9	30.5	30.0	22.2[a]	21.8	21.0	11.6[a]	11.2	10.6
Marijuana and Hashish	20.6[b]	19.6	19.0	15.8[b]	15.0	14.5	8.2	7.9	7.6
Cocaine	2.7	2.6	2.4	2.1[b]	1.8	1.6	0.6	0.6	0.5
Crack	0.7	0.6	0.5	0.4[a]	0.4[a]	0.3	0.1	0.1	0.1
Heroin	0.4	0.3	0.3	0.2	0.1	0.2	0.0	0.1	0.1
Hallucinogens	5.7[b]	5.0	4.6	3.8[b]	3.1	3.0	1.0	1.0	0.8
LSD	2.7[b]	1.6[a]	1.2	1.3[b]	0.6	0.6	0.2	0.2	0.2
PCP	0.9[a]	0.8	0.7	0.4[a]	0.4	0.3	0.1	0.1	0.0
Ecstasy	3.3[b]	2.4	2.1	2.2[b]	1.3	1.2	0.5[a]	0.4	0.3
Inhalants	10.5	10.7	11.0	4.4	4.5	4.6	1.2	1.3	1.2
Nonmedical Use of Psychotherapeutics[2]	13.7	13.4	13.5	9.2	9.2	8.8	4.0	4.0	3.6
Pain Relievers	11.2	11.2	11.4	7.6	7.7	7.4	3.2	3.2	3.0
OxyContin®	0.9[a]	1.0	1.2	--	--	0.8	--	--	0.3
Tranquilizers	3.4	3.5	3.2	2.3	2.3	2.1	0.8	0.9[a]	0.6
Stimulants	4.3[b]	4.0[b]	3.4	2.6[b]	2.3	2.0	0.8	0.9	0.7
Methamphetamine	1.5[a]	1.3	1.2	0.9[a]	0.7	0.6	0.3	0.3	0.2
Sedatives	1.0	1.0	1.0	0.6	0.5	0.5	0.2[a]	0.2	0.1
ILLICIT DRUG OTHER THAN MARIJUANA[1]	21.4	21.3	21.2	13.5	13.4	13.0	5.7	5.7	5.3

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.4 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 18 to 25: Percentages, 2002-2004

Drug	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	59.8	60.5	59.2	35.5[a]	34.6	33.9	20.2	20.3	19.4
Marijuana and Hashish	53.8	53.9	52.8	29.8[b]	28.5	27.8	17.3[a]	17.0	16.1
Cocaine	15.4	15.0	15.2	6.7	6.6	6.6	2.0	2.2	2.1
Crack	3.8	3.8	3.5	0.9	0.9	0.8	0.2	0.2	0.3
Heroin	1.6	1.6	1.6	0.4	0.3	0.4	0.1	0.1	0.1
Hallucinogens	24.2[b]	23.3[b]	21.3	8.4[b]	6.7	6.0	1.9[a]	1.7	1.5
LSD	15.9[b]	14.0[b]	12.1	1.8[b]	1.1	1.0	0.1[b]	0.2	0.3
PCP	2.7[a]	3.0[b]	2.3	0.3	0.4	0.3	0.0	0.1	0.1
Ecstasy	15.1[a]	14.8[a]	13.8	5.8[b]	3.7[a]	3.1	1.1[b]	0.7	0.7
Inhalants	15.7[b]	14.9	14.0	2.2	2.1	2.1	0.5	0.4	0.4
Nonmedical Use of Psychotherapeutics[2]	27.7[a]	29.0	29.2	14.2	14.5	14.8	5.4[a]	6.0	6.1
Pain Relievers	22.1[b]	23.7	24.3	11.4	12.0	11.9	4.1[a]	4.7	4.7
OxyContin®	2.6[b]	3.6[b]	4.3	--	--	1.7	--	--	0.4
Tranquilizers	11.2[a]	12.3	12.2	4.9	5.3	5.2	1.6	1.7	1.8
Stimulants	10.8	10.8	10.6	3.7	3.5	3.7	1.2	1.3	1.4
Methamphetamine	5.7	5.2	5.2	1.7	1.6	1.6	0.5	0.6	0.6
Sedatives	2.1	1.8	1.9	0.5	0.5	0.5	0.2	0.2	0.2
ILLICIT DRUG OTHER THAN MARIJUANA[1]	40.1	40.2	39.2	20.2	19.7	19.3	7.9	8.4	8.1

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.5 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 26 or Older: Percentages, 2002-2004

Drug	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	45.7	46.1	45.6	10.4	10.3	10.2	5.8	5.6	5.5
Marijuana and Hashish	40.8	41.2	41.0	7.0	6.9	7.0	4.0	4.0	4.1
Cocaine	15.9	16.3	15.6	1.8	1.9	1.7	0.7	0.8	0.7
Crack	3.9	3.6	3.6	0.7	0.6	0.5	0.3	0.3	0.2
Heroin	1.7[a]	1.7[a]	1.4	0.1	0.1	0.1	0.1	0.0	0.1
Hallucinogens	14.1	14.2	14.4	0.7	0.6	0.6	0.2	0.1	0.1
LSD	10.5	10.8	10.5	0.1	0.0	0.1	0.0	0.0	0.0
PCP	3.5	3.3	3.2	0.0	0.0	0.0	0.0	*	0.0
Ecstasy	2.6[b]	3.1	3.4	0.5	0.3	0.3	0.1	0.1	0.1
Inhalants	8.6	8.6	8.5	0.2	0.2	0.2	0.1	0.1	0.1
Nonmedical Use of Psychotherapeutics[2]	19.3	19.5	19.2	4.5	4.5	4.2	2.0	1.9	1.7
Pain Relievers	11.1	11.5	11.5	3.1	3.3	3.0	1.3	1.3	1.2
OxyContin®	0.5[b]	0.8	0.8	--	--	0.2	--	--	0.1
Tranquilizers	8.3	8.5	8.3	1.5	1.5	1.6	0.6	0.6	0.5
Stimulants	9.3[a]	9.0	8.6	0.8	0.6	0.7	0.4	0.3	0.3
Methamphetamine	5.7	5.7	5.3	0.4	0.4	0.4	0.2	0.2	0.2
Sedatives	5.1	4.8	4.9	0.4	0.3	0.2	0.2[a]	0.1	0.1
ILLICIT DRUG OTHER THAN MARIJUANA[1]	29.3	29.3	28.8	6.0	5.9	5.6	2.7[a]	2.6	2.3

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

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Table H.6 Illicit Drug Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2003 and 2004

Age Category	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	46.4	45.8	14.7	14.5	8.2	7.9
12	12.2	11.2	6.2	6.7	2.7	2.8
13	18.7	18.4	11.9	11.6	4.9	4.6
14	26.3	25.2	18.7	17.8	8.5	9.0
15	34.2	34.7	25.2	24.6	13.3	12.7
16	43.8	42.5	33.2	31.0	18.6[b]	15.5
17	48.4	48.4	36.1	34.9	19.7	19.1
18	53.5	53.4	38.2	38.8	22.6	21.2
19	58.3	56.6	39.9	38.6	23.5	22.8
20	62.0	59.0	40.3	38.1	24.0	21.3
21	61.6	62.3	35.0	36.6	20.7	21.7
22	64.0	62.9	33.5	35.1	19.6	20.5
23	63.4[a]	59.5	32.2[a]	28.3	18.0[a]	15.4
24	62.3	59.8	30.1	27.6	17.2	16.2
25	60.1	60.5	25.9	26.7	15.7	15.2
26-29	57.9	60.0	23.6	23.5	13.4	13.2
30-34	56.8	54.5	16.6	15.7	8.8	9.4
35-39	61.7	59.4	15.0	14.1	8.4	7.2
40-44	65.3	64.9	14.0	14.4	8.1	7.5
45-49	62.3	61.8	12.6	11.8	6.8	6.8
50-54	52.0	56.3	7.4	9.0	3.9	4.8
55-59	38.3	38.2	4.4	5.1	2.0	2.6
60-64	23.8	24.2	2.9	2.0	1.1	1.1
65 or Older	9.9	8.3	0.7	0.9	0.6	0.4

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.7 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	46.4	45.8	14.7	14.5	8.2	7.9
AGE						
12-17	30.5	30.0	21.8	21.0	11.2	10.6
18-25	60.5	59.2	34.6	33.9	20.3	19.4
26 or Older	46.1	45.6	10.3	10.2	5.6	5.5
GENDER						
Male	51.2	50.7	17.2	16.9	10.0	9.9
Female	41.9	41.1	12.4	12.2	6.5	6.1
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	47.7	47.3	14.7	14.7	8.2	8.0
White	49.2	49.1	14.9	15.0	8.3	8.1
Black or African American	44.6	43.3	15.4	14.6	8.7	8.7
American Indian or Alaska Native	62.4	58.4	18.9	26.2	12.1	12.3
Native Hawaiian or Other Pacific Islander	51.0	*	18.5	*	11.1	*
Asian	25.6	24.3	7.1	6.9	3.8	3.1
Two or More Races	60.1	54.9	20.1	21.0	12.0	13.3
Hispanic or Latino	37.0	35.4	14.7[a]	12.9	8.0	7.2

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.8 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	30.5	30.0	21.8	21.0	11.2	10.6
GENDER						
Male	31.1	30.7	21.7	20.6	11.4	10.6
Female	30.0	29.3	21.9	21.5	11.1	10.6
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	30.3	30.0	21.9	21.2	11.3	10.7
White	30.8	30.6	22.9	22.2	11.8	11.1
Black or African American	30.4	28.2	19.2	18.4	9.6	9.3
American Indian or Alaska Native	42.3	50.3	32.5	41.4	19.3	26.0
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	20.1	20.4	12.6	13.3	6.5	6.0
Two or More Races	32.9	37.9	24.2	24.6	15.1	12.2
Hispanic or Latino	31.5	30.0	21.6	19.9	11.0	10.2
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	30.9	30.6	22.4	21.5	12.0[a]	10.8
Female, White, Not Hispanic	30.6	30.7	23.4	22.9	11.6	11.5
Male, Black, Not Hispanic	32.1	29.7	20.3	19.1	9.7	10.5
Female, Black, Not Hispanic	28.6	26.7	18.2	17.6	9.4	8.1
Male, Hispanic	31.7	30.0	21.3[a]	17.9	10.7	10.1
Female, Hispanic	31.2	29.9	21.8	22.1	11.3	10.4

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.9 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 18 to 25, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	60.5	59.2	34.6	33.9	20.3	19.4
GENDER						
Male	63.6	62.2	38.6	37.9	24.0	23.3
Female	57.4	56.1	30.5	29.9	16.5	15.4
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	62.3	61.7	36.1	35.7	21.3	20.5
White	65.1	65.0	38.2	37.9	22.5	21.6
Black or African American	54.6	54.5	30.6	31.2	18.2	18.7
American Indian or Alaska Native	77.9	77.6	44.2	46.6	31.0	24.2
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	43.1[b]	32.9	22.1	16.7	11.8	8.1
Two or More Races	71.4	77.0	45.4	48.0	29.2	30.7
Hispanic or Latino	52.2[b]	47.5	27.5	25.4	15.6	14.1
EDUCATION						
< High School	59.7	58.7	36.8	35.3	23.0	21.6
High School Graduate	60.6	59.5	34.4	33.6	20.1	19.4
Some College	61.6	59.6	35.5	35.6	20.6	20.0
College Graduate	58.8	58.0	28.9	28.1	15.3	14.4
CURRENT EMPLOYMENT						
Full-Time	63.0	61.8	33.1	32.2	19.2	18.1
Part-Time	58.8	57.2	36.8	35.8	21.6[a]	19.6
Unemployed	66.6	68.1	44.1	45.0	27.6	29.3
Other[1]	54.2	51.8	31.1	30.9	17.9	18.1

*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 2004 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

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Table H.10 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 26 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	46.1	45.6	10.3	10.2	5.6	5.5
GENDER						
Male	51.8	51.6	12.6	12.5	7.2	7.3
Female	40.8	40.1	8.1	8.1	4.3	4.0
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	47.6	47.2	10.3	10.4	5.7	5.7
White	49.0	48.9	10.5	10.6	5.8	5.7
Black or African American	45.1	43.7	11.3	10.3	6.4	6.3
American Indian or Alaska Native	63.2	*	11.0	20.0	6.8	7.9
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	22.8	23.1	3.5	4.1	1.9	1.7
Two or More Races	63.8	54.7	14.2	14.7	7.9	10.1
Hispanic or Latino	33.9	33.2	9.7	8.1	5.2	4.7
EDUCATION						
< High School	33.2	32.4	9.8	9.6	5.8	5.7
High School Graduate	43.7	41.9	10.3	9.9	6.0	5.6
Some College	53.2	52.5	12.1	11.4	6.6	6.1
College Graduate	50.5	51.3	9.0	9.8	4.4	4.9
CURRENT EMPLOYMENT						
Full-Time	55.7	55.7	12.2	12.0	6.3	6.5
Part-Time	48.5	47.3	11.2	11.3	6.4	6.4
Unemployed	59.9	62.0	21.0	20.2	13.5	13.8
Other[1]	25.1	24.5	5.0	5.3	3.2	2.7

*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 2004 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table H.11 Nonmedical Use of Specific Pain Relievers in Lifetime, by Age Group: Percentages, 2003 and 2004

Pain Reliever	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
Darvocet®, Darvon®, or Tylenol® with Codeine	8.3	8.1	5.8	6.0	12.7	13.1	7.8	7.5
Percocet®, Percodan®, or Tylox®	4.5	4.6	1.9	2.1	7.8[a]	8.7	4.3	4.2
Vicodin®, Lortab®, or Lorcet®	6.6	6.9	4.5[a]	5.1	15.0[b]	16.5	5.4	5.5
Codeine	2.9	2.8	2.1	2.1	6.5	6.4	2.4	2.2
Demerol®	1.3[b]	1.0	0.4	0.5	2.2	1.9	1.2[b]	0.9
Dilaudid®	0.4	0.4	0.1	0.1	0.3	0.3	0.5	0.4
Fioricet®	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Fiorinal®	0.2	0.2	0.1	0.0	0.1	0.1	0.3	0.2
Hydrocodone	2.4	2.5	1.6	1.7	6.6	6.7	1.8	1.8
Methadone	0.5	0.5	0.4	0.5	1.2	1.4	0.4	0.4
Morphine	0.9	0.9	0.9	0.9	2.3	2.5	0.6	0.6
OxyContin®	1.2	1.3	1.0	1.2	3.6[a]	4.3	0.8	0.8
Phenaphen® with Codeine	0.4[b]	0.2	0.3[a]	0.2	0.7	0.6	0.3[a]	0.2
Propoxyphene	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.1
SK-65®	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Stadol®	0.1	0.1	0.0	0.0	0.1[b]	0.2	0.1	0.1
Talacen®	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Talwin®	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1
Talwin® NX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tramadol	0.1[a]	0.1	0.1	0.1	0.2	0.3	0.1	0.1
Ultram®	0.5	0.5	0.3	0.2	1.0	1.0	0.4	0.4
SELECTED GROUPS OF DRUGS								
Propoxyphene or Codeine Products[1,2]	9.0	8.8	6.8	6.7	14.5	14.6	8.4	8.0
Oxycodone Products[1,3]	4.9	5.0	2.4	2.7	8.9[b]	10.1	4.5	4.4
Hydrocodone Products[1,4]	7.1	7.4	5.0	5.6	16.3[a]	17.4	5.7	5.9
Tramadol Products[1,5]	0.5	0.5	0.3	0.3	1.2	1.2	0.4	0.5

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Includes other-specify drug responses that are not asked about explicitly in the Pain Relievers module but fall into this category.
[2] Includes Darvocet®, Darvon® or Tylenol® with Codeine, codeine, Phenaphen® with Codeine, propoxyphene, and SK-65®.
[3] Includes Percocet®, Percodan® or Tylox®, and OxyContin®.
[4] Includes Vicodin®, Lortab®, or Lorcet®, and hydrocodone.
[5] Includes tramadol and Ultram®.

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

Table H.12 Nonmedical Use of Specific Tranquilizers in Lifetime, by Age Group: Percentages, 2003 and 2004

Tranquilizer	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
Klonopin® or Clonazepam	1.2	1.1	0.6	0.7	3.0	3.3	1.0	0.8
Xanax®, Alprazolam, Ativan®, or Lorazepam	4.0	3.9	1.7	1.8	7.5	7.7	3.7	3.5
Valium® or Diazepam	6.2	6.1	1.7	1.5	7.8	7.6	6.5	6.4
Atarax®	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
BuSpar®	0.2	0.3	0.2	0.2	0.6	0.8	0.2	0.2
Equanil®	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0
Flexeril®	0.8	0.8	0.2	0.1	1.2	1.4	0.9	0.8
Librium®	0.5	0.4	0.1	0.1	0.3	0.2	0.6	0.5
Limbitrol®	0.0[a]	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Meprobamate	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Miltown®	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Rohypnol®	0.2	0.1	0.2	0.1	0.6	0.4	0.1	0.1
Serax®	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Soma®	1.1	1.1	0.6	0.5	2.5[a]	3.0	0.9	0.8
Tranxene®	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Vistaril®	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1
SELECTED GROUPS OF DRUGS								
Benzodiazepines[1,2]	8.0	7.8	2.9	2.8	11.5	11.2	8.0	7.8
Meprobamate Products[1,3]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Muscle Relaxants[1,4]	1.6	1.6	0.7	0.6	3.1[b]	3.8	1.4	1.4

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Includes other-specify drug responses that are not asked about explicitly in the Tranquilizers module but fall into this category.
[2] Includes Klonopin® or clonazepam, Xanax®, alprazolam, Ativan®, or lorazepam, Valium® or diazepam, Librium®, Limbitrol®, Rohypnol®, Serax®, and Tranxene®.
[3] Includes Equanil®, meprobamate, and Miltown®.
[4] Includes Flexeril® and Soma®.

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

Table H.13 Nonmedical Use of Specific Stimulants in Lifetime, by Age Group: Percentages, 2003 and 2004

Stimulant	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
Methamphetamine,[1] Desoxyn®, or Methedrine	5.2	4.9	1.3	1.2	5.2	5.2	5.7	5.3
Prescription Diet Pills[2]	3.6	3.4	1.0	0.9	2.3	2.1	4.2	3.9
Ritalin® or Methylphenidate	1.8	1.7	2.2[b]	1.8	5.7	5.4	1.0	1.1
Cylert®	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dexedrine®	1.1	1.1	0.3	0.2	0.9	1.0	1.2	1.2
Dextroamphetamine	0.2	0.3	0.1	0.1	0.3	0.3	0.2	0.3
Didrex®	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Eskatrol®	0.0[a]	0.1	0.0	0.1	0.0	0.0	0.0[a]	0.1
Ionamin®	0.2	0.2	0.1	0.0	0.1	0.0	0.3	0.2
Mazanor®	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Obedrin-LA®	0.0	*	0.1	*	0.0	*	*	*
Plegine®	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Preludin®	0.3	0.2	0.1	0.1	0.2[a]	0.1	0.4	0.3
Sanorex®	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0
Tenuate®	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1
SELECTED GROUPS OF DRUGS								
Amphetamine, Dextroamphetamine, and Phentermine Products[3,4]	4.2	4.0	1.5	1.4	3.5	3.7	4.7	4.4
Mazindol Products[3,5]	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Also known as crank, crystal, ice, or speed.
[2] Respondents were asked about their use of prescription diet pills and were given the following as examples: amphetamines, Benzedrine®, Biphetamine®, Fastin®, or phentermine. However, respondents were not given an exhaustive list of examples of prescription diet pills.
[3] Includes other-specify drug responses that are not asked about explicitly in the Stimulants module but fall into this category.
[4] Includes prescription diet pills, Dexedrine®, dextroamphetamine, and Ionamin®.
[5] Includes Mazanor® and Sanorex®.

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

Table H.14 Nonmedical Use of Specific Sedatives in Lifetime, by Age Group: Percentages, 2003 and 2004

Sedative	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
Methaqualone, Sopor®, or Quaalude®	2.9	3.0	0.3	0.2	0.8	0.8	3.7	3.7
Barbiturates[1]	1.4[b]	1.1	0.2	0.1	0.3	0.4	1.7[b]	1.3
Restoril® or Temazepam	0.4	0.3	0.2	0.2	0.3	0.4	0.4	0.3
Amytal®	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Butisol®	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0
Chloral Hydrate	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
Dalmane®	0.2	0.2	0.1	0.2	0.1	0.0	0.2	0.2
Halcion®	0.3	0.3	0.1	0.1	0.2	0.2	0.3	0.3
Phenobarbital	0.5	0.5	0.1	0.1	0.3	0.3	0.7	0.6
Placidyl®	0.3	0.4	0.0	0.0	0.0	0.0	0.4	0.5
Tuinal®	0.5	0.4	0.1	0.0	0.0	0.0	0.6	0.5
SELECTED GROUPS OF DRUGS								
Temazepam, Flurazepam, or Triazolam[2,3]	0.7	0.6	0.3	0.4	0.4	0.5	0.8	0.7
Any Barbiturates[2,4]	1.7[a]	1.4	0.4	0.3	0.6	0.6	2.1[a]	1.7

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Respondents were asked about their use of barbiturates and were given the following as examples: Nembutal®, pentobarbital, Seconal®, secobarbital, or butalbital. However, respondents were not given an exhaustive list of examples of barbiturates.
[2] Includes other-specify drug responses that are not asked about explicitly in the Sedatives module but fall into this category.
[3] Includes Restoril®, temazepam, Dalmane®, or Halcion®.
[4] Includes barbiturates, Amytal®, Butisol®, phenobarbital, and Tuinal®.

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

Table H.15 Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older: Numbers in Thousands, 2002-2004

Substance	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
TOBACCO PRODUCT[1]	171,838	172,843	171,827	84,731	83,415	83,066	71,499	70,757	70,257
Cigarettes	162,553	163,240	161,842	71,310	69,853	69,909	61,136	60,434	59,896
Smokeless Tobacco	46,870[a]	46,065	44,625	10,577	10,347	9,756	7,787	7,725	7,154
Cigars	88,053	88,096	87,409	25,928	25,386	25,974	12,751	12,837	13,727
Pipe Tobacco[2]	40,003	40,064	39,499	--	--	--	1,816	1,619	1,835
ALCOHOL	195,452	197,533	198,220	155,476	154,540	156,686	119,820	118,965	120,934
Binge Alcohol Use[3]	--	--	--	--	--	--	53,787	53,770	54,725
Heavy Alcohol Use[3]	--	--	--	--	--	--	15,860	16,144	16,689

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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. Tobacco product use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.
[2] Information about past year use of pipe tobacco was not collected.
[3] 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, and 2004.

Table H.16 Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older: Percentages, 2002-2004

Substance	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
TOBACCO PRODUCT[1]	73.1[b]	72.7[b]	71.4	36.0[b]	35.1	34.5	30.4[a]	29.8	29.2
Cigarettes	69.1[b]	68.7[b]	67.3	30.3[b]	29.4	29.1	26.0[a]	25.4	24.9
Smokeless Tobacco	19.9[b]	19.4[a]	18.6	4.5[a]	4.4	4.1	3.3[a]	3.3	3.0
Cigars	37.4[a]	37.1	36.3	11.0	10.7	10.8	5.4	5.4	5.7
Pipe Tobacco[2]	17.0	16.9	16.4	--	--	--	0.8	0.7	0.8
ALCOHOL	83.1	83.1	82.4	66.1	65.0	65.1	51.0	50.1	50.3
Binge Alcohol Use[3]	--	--	--	--	--	--	22.9	22.6	22.8
Heavy Alcohol Use[3]	--	--	--	--	--	--	6.7	6.8	6.9

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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. Tobacco product use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.
[2] Information about past year use of pipe tobacco was not collected.
[3] 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, and 2004.

Table H.17 Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17: Percentages, 2002-2004

Substance	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
TOBACCO PRODUCT[1]	36.8[b]	34.5[b]	32.7	23.6[b]	22.5	22.1	15.2	14.4	14.4
Cigarettes	33.3[b]	31.0[b]	29.2	20.3[b]	19.0	18.4	13.0[a]	12.2	11.9
Smokeless Tobacco	8.0[b]	7.6	7.1	4.3	4.1	4.3	2.0	2.0	2.3
Cigars	16.3[b]	15.1	14.8	10.1	10.0	10.2	4.5	4.5	4.8
Pipe Tobacco[2]	2.8	2.6	2.8	--	--	--	0.6	0.6	0.7
ALCOHOL	43.4[a]	42.9	42.0	34.6	34.3	33.9	17.6	17.7	17.6
Binge Alcohol Use[3]	--	--	--	--	--	--	10.7	10.6	11.1
Heavy Alcohol Use[3]	--	--	--	--	--	--	2.5	2.6	2.7

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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. Tobacco product use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.
[2] Information about past year use of pipe tobacco was not collected.
[3] 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, and 2004.

Table H.18 Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 18 to 25: Percentages, 2002-2004

Substance	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
TOBACCO PRODUCT[1]	75.5[b]	74.8[a]	73.5	54.9	53.8	54.3	45.3	44.8	44.6
Cigarettes	71.2[b]	70.2[a]	68.7	49.0[a]	47.6	47.5	40.8	40.2	39.5
Smokeless Tobacco	23.7[b]	22.0	21.4	8.0	7.8	8.0	4.8	4.7	4.9
Cigars	45.6[a]	45.2	44.1	22.7[a]	22.7[a]	24.0	11.0[b]	11.4[b]	12.7
Pipe Tobacco[2]	8.0	7.7	8.3	--	--	--	1.1	0.9[a]	1.2
ALCOHOL	86.7	87.1	86.2	77.9	78.1	78.0	60.5	61.4	60.5
Binge Alcohol Use[3]	--	--	--	--	--	--	40.9	41.6	41.2
Heavy Alcohol Use[3]	--	--	--	--	--	--	14.9	15.1	15.1

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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. Tobacco product use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.
[2] Information about past year use of pipe tobacco was not collected.
[3] 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, and 2004.

Table H.19 Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 26 or Older: Percentages, 2002-2004

Substance	TIME PERIOD								
	Lifetime			Past Year			Past Month		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
TOBACCO PRODUCT[1]	77.7[a]	77.6[a]	76.4	34.5[b]	33.5	32.8	29.9[a]	29.3	28.5
Cigarettes	73.7[a]	73.6[a]	72.3	28.5	27.6	27.3	25.2	24.7	24.1
Smokeless Tobacco	20.9[b]	20.6	19.6	3.9[b]	3.8[a]	3.3	3.2[a]	3.2[a]	2.7
Cigars	39.0	38.7	37.9	9.1	8.7	8.6	4.6	4.5	4.6
Pipe Tobacco[2]	20.5	20.4	19.7	--	--	--	0.8	0.6	0.7
ALCOHOL	88.0	88.0	87.3	68.4	67.0	67.2	53.9	52.5	53.0
Binge Alcohol Use[3]	--	--	--	--	--	--	21.4	21.0	21.1
Heavy Alcohol Use[3]	--	--	--	--	--	--	5.9	5.9	6.1

*Low precision; no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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. Tobacco product use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.
[2] Information about past year use of pipe tobacco was not collected.
[3] 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, and 2004.

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Table H.20 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month, by Detailed Age Category: Percentages, 2003 and 2004

Age Category	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	50.1	50.3	22.6	22.8	6.8	6.9
12	2.9	2.3	0.9	1.1	0.1	0.1
13	6.1	6.1	2.2	2.9	0.2	0.4
14	13.1	12.3	7.1[a]	5.6	1.3	1.0
15	20.9	20.4	11.7	12.7	3.1[a]	2.2
16	28.5	27.7	18.0	18.3	4.3	4.5
17	35.3	37.3	24.5	26.6	6.8	8.1
18	43.7	46.3	31.5	33.1	10.1	11.0
19	52.4	51.5	36.3	37.4	13.8	13.9
20	59.6	56.3	41.4	40.3	16.1	16.3
21	69.7	69.8	47.8	48.2	18.7	19.2
22	69.8	69.1	47.0	46.8	17.4	17.8
23	67.4[a]	63.8	46.1	43.1	16.5	14.3
24	65.5	63.7	44.0[a]	40.3	15.3	13.7
25	66.1	65.7	40.0	41.5	13.6	14.8
26-29	61.7	63.2	38.0	36.8	11.4	10.7
30-34	59.2	58.4	29.1	28.6	7.9	8.3
35-39	59.5	60.6	28.1	29.8	7.9	7.3
40-44	58.6	60.1	25.7	26.9	7.9	8.4
45-49	57.7	57.5	23.2	23.2	6.8	6.9
50-54	54.0	55.6	17.9	18.9	4.9	6.2
55-59	52.9	48.3	15.5	14.1	4.2	4.3
60-64	46.2	49.9	11.9	13.6	2.5	3.7
65 or Older	34.4	35.3	7.2	6.9	1.8	1.8

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.21 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	50.1	50.3	22.6	22.8	6.8	6.9
AGE						
12-17	17.7	17.6	10.6	11.1	2.6	2.7
18-25	61.4	60.5	41.6	41.2	15.1	15.1
26 or Older	52.5	53.0	21.0	21.1	5.9	6.1
GENDER						
Male	57.3	56.9	30.9	31.1	10.4	10.6
Female	43.2	44.0	14.8	14.9	3.4	3.5
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	51.3	51.8	22.4	22.6	7.0	7.2
White	54.4	55.2	23.6	23.8	7.7	7.9
Black or African American	37.9	37.1	19.0	18.3	4.5	4.4
American Indian or Alaska Native	42.0	36.2	29.6	25.8	10.0	7.7
Native Hawaiian or Other Pacific Islander	43.3	*	29.8	*	10.4	4.9
Asian	39.8	37.4	11.0	12.4	2.3	2.7
Two or More Races	44.4[a]	52.4	21.8	23.5	6.1	6.9
Hispanic or Latino	41.5	40.2	24.2	24.0	5.2	5.3

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.22 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	17.7	17.6	10.6	11.1	2.6	2.7
GENDER						
Male	17.1	17.2	11.1	11.6	2.9	3.2
Female	18.3	18.0	10.1	10.5	2.3	2.1
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	18.0	17.5	10.9	10.8	2.8	2.7
White	20.5	19.9	12.8	12.6	3.5	3.3
Black or African American	10.1	9.8	4.6	4.9	0.5	0.6
American Indian or Alaska Native	16.3	18.5	12.4	15.1	1.7	4.2
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	8.7	9.4	3.2	5.0	1.2	0.5
Two or More Races	17.0	18.2	10.8	11.8	0.8	3.3
Hispanic or Latino	16.2	18.0	9.4[b]	12.3	1.7[a]	2.7
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	20.0	19.4	13.2	13.3	3.8	3.8
Female, White, Not Hispanic	21.1	20.5	12.4	11.9	3.1	2.8
Male, Black, Not Hispanic	9.9	9.8	5.1	4.8	0.8	0.9
Female, Black, Not Hispanic	10.3	9.7	4.1	5.0	0.2	0.2
Male, Hispanic	15.8	17.3	10.2	12.2	2.1	3.3
Female, Hispanic	16.7	18.7	8.6[a]	12.3	1.3	2.0

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.23 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 18 to 25, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	61.4	60.5	41.6	41.2	15.1	15.1
GENDER						
Male	66.9[a]	64.9	51.3	50.1	21.2	21.2
Female	55.8	56.0	31.8	32.3	9.0	8.8
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	63.4	63.1	42.7	42.6	16.0	16.4
White	68.0	67.7	47.8	47.7	19.0	19.4
Black or African American	47.2	48.5	24.2	25.7	5.4	5.9
American Indian or Alaska Native	52.3	55.8	41.6	42.3	13.0	13.1
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	12.3
Asian	48.9	46.6	27.8	23.1	7.8	6.9
Two or More Races	66.6	68.6	40.0	47.2	16.6	17.7
Hispanic or Latino	52.1[a]	48.2	36.5	35.0	10.8	9.0
EDUCATION						
< High School	48.5	48.4	37.4	36.5	12.5[a]	10.4
High School Graduate	56.7	55.9	39.0	38.8	13.7	13.7
Some College	68.7[a]	66.2	45.1	44.2	17.5	18.5
College Graduate	78.2	78.0	47.2	48.0	17.3	17.6
CURRENT EMPLOYMENT						
Full-Time	66.3	66.3	45.7	45.7	16.4	16.5
Part-Time	62.2[a]	59.7	40.2	39.5	14.9	14.8
Unemployed	58.6	59.9	42.4	42.9	16.7	16.4
Other[1]	50.0	48.1	33.4	32.3	11.5	11.5

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table H.24 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 26 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	52.5	53.0	21.0	21.1	5.9	6.1
GENDER						
Male	61.5	61.3	30.1	30.4	9.5	9.8
Female	44.3	45.4	12.6	12.6	2.6	2.7
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	53.7	54.4	20.6	20.8	6.1	6.3
White	56.4	57.5	21.2	21.5	6.5	6.7
Black or African American	41.1	39.8	20.6	19.2	5.1	4.8
American Indian or Alaska Native	45.0	*	30.5	24.7	11.0	*
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	42.1	39.3	8.8	11.2	1.3	2.1
Two or More Races	46.0[a]	57.6	20.6	21.7	5.2	5.7
Hispanic or Latino	43.5	42.5	23.8	23.4	4.4	4.8
EDUCATION						
< High School	34.1	33.7	21.4	20.0	6.8[a]	5.3
High School Graduate	47.5	47.5	22.3	22.5	6.6	6.9
Some College	57.0	56.9	22.2	21.5	6.2	6.4
College Graduate	65.6	66.7	18.1	19.8	4.4[a]	5.5
CURRENT EMPLOYMENT						
Full-Time	60.5	60.5	26.5	26.8	7.5	7.8
Part-Time	53.3	55.4	17.4	16.5	5.2	4.9
Unemployed	56.1	54.8	31.3	29.2	11.5	12.1
Other[1]	36.4	37.7	10.6	11.2	2.5	2.8

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

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Table H.25 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 12 to 20, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF ALCOHOL USE					
	Alcohol Use		Binge Alcohol Use		Heavy Alcohol Use	
	2003	2004	2003	2004	2003	2004
TOTAL	29.0	28.7	19.2	19.6	6.1	6.3
GENDER						
Male	29.9	29.6	21.7	22.1	7.9	8.2
Female	28.1	27.8	16.5	17.0	4.3	4.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	29.7	29.2	19.6	19.7	6.5	6.6
White	33.2	32.6	22.8	22.8	8.0	8.1
Black or African American	18.2	19.1	9.1	9.9	1.6	2.0
American Indian or Alaska Native	26.0	24.3	20.8	19.0	4.0	4.7
Native Hawaiian or Other Pacific Islander	*	*	*	*	5.7	1.1
Asian	18.2	16.4	9.6	8.0	3.1	1.6
Two or More Races	27.7	26.4	16.5	18.0	2.9[a]	6.2
Hispanic or Latino	25.6	26.6	16.9[a]	19.3	4.1	4.7
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	33.8	33.5	25.4	25.7	10.1	10.4
Female, White, Not Hispanic	32.6	31.6	20.0	19.8	5.8	5.7
Male, Black, Not Hispanic	19.5	20.3	11.0	11.7	2.5	3.4
Female, Black, Not Hispanic	17.0	17.7	7.2	8.1	0.7	0.6
Male, Hispanic	27.8	26.9	20.3	21.1	5.7	6.2
Female, Hispanic	23.2	26.2	13.1[b]	17.5	2.3	3.1

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

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Table H.26 Cigarette Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2003 and 2004

Age Category	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	68.7[b]	67.3	29.4	29.1	25.4	24.9
12	7.8	7.0	3.5	3.3	1.7	1.1
13	15.3	14.9	7.5	8.2	3.3[a]	4.3
14	25.6	25.1	14.9	15.0	8.4	8.4
15	37.2[a]	34.2	22.5	21.3	13.6	13.5
16	46.7[a]	43.5	30.4	29.0	20.1	19.1
17	54.2	51.1	35.4	34.2	26.4	25.4
18	60.0	59.2	42.8	43.1	33.7	34.8
19	67.8	64.9	45.4	47.1	37.2	37.2
20	71.2	67.8	51.2	49.0	44.1[a]	40.3
21	70.7	71.4	48.2	49.5	42.0	41.2
22	75.6	72.7	50.8	50.2	43.5	42.9
23	73.1[a]	69.6	48.9	47.7	41.6	40.6
24	73.4	72.7	49.0	47.0	42.1	39.7
25	71.7	73.0	45.2	46.7	38.6	40.5
26-29	73.1	72.0	42.7	42.9	36.8	36.8
30-34	71.7	69.6	35.4	34.3	30.9	29.0
35-39	74.2	72.9	32.9	34.1	29.0	29.6
40-44	75.6	77.0	34.0	34.2	31.1	30.4
45-49	76.8	76.4	31.7	30.8	28.9	28.1
50-54	75.9	77.1	27.4	26.9	25.0	24.6
55-59	77.2	74.7	23.5	22.9	21.8	20.8
60-64	77.4	74.8	18.3	19.8	16.5	18.2
65 or Older	67.2[a]	63.3	11.8	10.7	10.0	9.2

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.27 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	68.7[b]	67.3	29.4	29.1	25.4	24.9
AGE						
12-17	31.0[b]	29.2	19.0	18.4	12.2	11.9
18-25	70.2[a]	68.7	47.6	47.5	40.2	39.5
26 or Older	73.6[a]	72.3	27.6	27.3	24.7	24.1
GENDER						
Male	73.2	72.4	32.4	32.5	28.1	27.7
Female	64.4[b]	62.4	26.6	25.9	23.0	22.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	70.4	69.4	29.8	29.4	26.0	25.4
White	74.0	73.0	30.6	30.4	26.6	26.4
Black or African American	58.6	56.6	28.8	27.4	25.9	23.5
American Indian or Alaska Native	71.8	77.2	41.1	37.1	36.1	31.0
Native Hawaiian or Other Pacific Islander	55.0	*	38.6	*	33.1	*
Asian	42.4	43.5	16.3	13.4	12.6	10.3
Two or More Races	71.0	74.1	35.4	43.0	30.7	38.3
Hispanic or Latino	56.8[a]	52.9	26.5	26.8	21.4	21.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.28 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	31.0[b]	29.2	19.0	18.4	12.2	11.9
GENDER						
Male	30.9[b]	28.6	18.4	17.3	11.9	11.3
Female	31.2	29.8	19.5	19.6	12.5	12.5
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	31.0[a]	29.6	19.3	18.8	12.8	12.5
White	33.3	32.0	21.6	21.3	14.7	14.4
Black or African American	24.3	22.6	11.9	11.1	6.9	6.0
American Indian or Alaska Native	46.1	*	30.9	30.5	23.2	17.9
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	17.7	13.7	7.8	7.5	3.7	5.4
Two or More Races	31.8	34.5	19.1	20.0	12.9	13.5
Hispanic or Latino	31.0[a]	27.1	17.4	16.4	8.8	9.1
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	32.8[a]	30.7	20.7	19.3	14.1	13.3
Female, White, Not Hispanic	33.8	33.4	22.6	23.4	15.4	15.7
Male, Black, Not Hispanic	24.5	23.4	11.9	12.0	7.4	6.5
Female, Black, Not Hispanic	24.1	21.7	11.8	10.1	6.3	5.5
Male, Hispanic	31.4[a]	25.8	17.3	15.4	8.9	8.8
Female, Hispanic	30.6	28.4	17.5	17.6	8.6	9.4

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.29 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 18 to 25, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	70.2[a]	68.7	47.6	47.5	40.2	39.5
GENDER						
Male	72.7	72.1	51.6	51.6	44.2	43.5
Female	67.6[b]	65.3	43.7	43.3	36.2	35.5
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	71.0	70.2	48.9	49.1	41.6	41.2
White	75.6	74.6	53.3	53.2	45.4	45.1
Black or African American	55.8	55.4	33.0	34.7	28.5	28.8
American Indian or Alaska Native	81.0	83.3	65.8	55.6	58.1	49.7
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	52.4	51.9	33.4	34.5	26.9	25.2
Two or More Races	75.9	73.6	52.0	55.9	43.8	44.3
Hispanic or Latino	66.2[a]	61.9	41.9	39.9	33.9	31.7
EDUCATION						
< High School	71.7	70.0	55.1	55.0	49.2	49.4
High School Graduate	70.0	68.9	49.0	48.6	42.3	40.9
Some College	70.6[a]	68.1	44.8	45.5	36.3	36.2
College Graduate	66.9	67.6	38.1	37.4	28.7	28.4
CURRENT EMPLOYMENT						
Full-Time	74.7	73.1	50.9	50.3	43.9	43.0
Part-Time	67.1	65.1	44.8	43.6	35.8	34.5
Unemployed	71.6	72.6	54.7	56.2	48.2	49.8
Other[1]	63.2	61.2	40.8	42.4	34.0	33.7

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table H.30 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 26 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TIME PERIOD					
	Lifetime		Past Year		Past Month	
	2003	2004	2003	2004	2003	2004
TOTAL	73.6[a]	72.3	27.6	27.3	24.7	24.1
GENDER						
Male	79.6	79.0	30.9	31.1	27.5	27.2
Female	68.2[a]	66.2	24.7	23.8	22.1	21.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	75.4	74.5	28.1	27.5	25.2	24.5
White	78.6	77.6	28.2	28.0	25.3	25.0
Black or African American	65.8	63.4	31.2	29.0	28.9	25.7
American Indian or Alaska Native	75.0	*	38.0	*	34.2	*
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	43.8	45.8	14.0[a]	9.8	10.9	7.9
Two or More Races	78.6	84.0	35.7	46.1	32.0	43.3
Hispanic or Latino	59.3	55.6	24.0	25.3	20.5	20.9
EDUCATION						
< High School	68.1	65.0	35.3	34.8	32.2	31.5
High School Graduate	74.5	73.6	31.8	31.2	29.4	28.3
Some College	77.9	76.5	30.5	30.3	27.1	27.3
College Graduate	72.4	71.4	16.0	16.1	12.9	12.4
CURRENT EMPLOYMENT						
Full-Time	76.2[a]	74.6	30.8	30.4	27.4	26.6
Part-Time	72.8	73.5	24.1	24.6	20.9	21.3
Unemployed	75.2	77.7	42.5	43.1	40.0	41.0
Other[1]	68.8	67.1	21.3	21.0	19.1	18.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table H.31 Past Year Initiation of Substance Use among Persons Aged 12 or Older, Persons Aged 12 or Older At Risk for Initiation of Substance Use, and Past Year Substance Users Aged 12 or Older: Numbers in Thousands and Percentages, 2003 and 2004

Substance	NUMBER OF PAST YEAR INITIATES (1,000s)[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG TOTAL POPULATION[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG PERSONS AT RISK FOR INITIATION[1,2]		PERCENTAGE OF PAST YEAR INITIATES AMONG PAST YEAR USERS[1]	
	2003	2004	2003	2004	2003	2004	2003	2004
ILLICIT DRUG[3]	2,627	2,784	1.1	1.2	2.0	2.1	7.5	8.0
Marijuana and Hashish	1,973	2,142	0.8	0.9	1.4	1.5	7.8	8.4
Cocaine	986	998	0.4	0.4	0.5	0.5	16.7	17.6
Crack	269	215	0.1	0.1	0.1	0.1	19.1	16.5
Heroin	92	118	0.0	0.0	0.0	0.0	*	29.6
Hallucinogens	886	934	0.4	0.4	0.4	0.5	22.5	24.1
LSD	200	235	0.1	0.1	0.1	0.1	35.6	39.7
PCP	105	106	0.0	0.0	0.0	0.0	48.1	*
Ecstasy	642	607	0.3	0.3	0.3	0.3	29.9	31.7
Inhalants	871	857	0.4	0.4	0.4	0.4	41.9	38.0
Nonmedical Use of Psychotherapeutics[4]	2,583	2,836	1.1	1.2	1.3	1.5	17.2[a]	19.4
Pain Relievers	2,456	2,422	1.0	1.0	1.2	1.1	21.0	21.5
OxyContin®	--	615	--	0.3	--	0.3	--	50.7
Tranquilizers	1,071	1,180	0.5	0.5	0.5	0.5	21.2	23.3
Stimulants	715	793	0.3	0.3	0.3	0.4	26.0	27.2
Methamphetamine	260	318	0.1	0.1	0.1	0.1	19.7	22.1
Sedatives	194	240	0.1	0.1	0.1	0.1	23.3	32.5
ILLICIT DRUG OTHER THAN MARIJUANA[3]	2,523	2,664	1.1	1.1	1.5	1.5	12.4	13.5
CIGARETTES	1,983	2,122	0.8	0.9	2.6	2.6	2.8	3.0
Daily Cigarette Use[5]	1,064	1,101	0.4	0.5	0.7	0.7	--	--
SMOKELESS TOBACCO	928	999	0.4	0.4	0.5	0.5	9.0	10.2
CIGARS	2,736[a]	3,058	1.2	1.3	1.8	2.0	10.8	11.8
ALCOHOL	4,082[a]	4,396	1.7	1.8	9.2	9.4	2.6	2.8

*Low precision, no estimate reported.
-- Not available.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] 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.
[2] At Risk for Initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.
[3] 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.
[4] Nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.
[5] 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, 2003 and 2004.

Table H.32 Mean Age at First Use among Past Year Initiates of Substance Use Aged 12 or Older, by Gender: 2003 and 2004

Substance	MEAN AGE					
	Total		Male		Female	
	2003	2004	2003	2004	2003	2004
ILLICIT DRUG[1]	19.7	20.1	17.7	18.5	21.2	21.2
Marijuana and Hashish	17.5	18.0	17.8	16.7	17.2	19.0
Cocaine	19.8	20.0	20.0	20.0	19.7	20.2
Crack	22.9	21.9	23.8	20.5	21.9	23.1
Heroin	20.9	24.4	21.5	22.7	19.8	26.4
Hallucinogens	17.9	18.7	18.6	18.7	17.2	18.7
LSD	17.2	18.4	17.9	18.2	16.2	18.6
PCP	17.4	18.9	17.4	17.7	17.4	20.3
Ecstasy	19.7	19.5	20.2	20.5	19.2	18.3
Inhalants	16.0	16.0	16.5	15.7	15.5	16.3
Nonmedical Use of Psychotherapeutics[2]	23.9	24.7	19.8	24.1	26.4	25.1
Pain Relievers	24.0	23.3	20.0[a]	22.9	26.8	23.8
OxyContin®	--	24.5	--	25.2	--	23.6
Tranquilizers	22.9[a]	25.2	21.1	23.1	24.0	26.5
Stimulants	22.1	24.1	19.3	27.2	23.8	21.7
Methamphetamine	20.4	22.1	19.9	20.8	20.8	23.1
Sedatives	31.1	29.3	19.1	21.6	37.3	33.1
ILLICIT DRUG OTHER THAN MARIJUANA[1]	21.7	21.7	18.3[a]	20.5	24.2	22.7
CIGARETTES	16.9	16.7	16.6	16.6	17.1	16.8
Daily Cigarette Use[3]	19.8	18.8	18.1	19.0	21.2[a]	18.6
SMOKELESS TOBACCO	18.3	19.7	17.9	19.1	19.4	21.3
CIGARS	21.2	21.3	19.5	20.1	23.1	22.7
ALCOHOL	16.5	17.5	16.3	16.6	16.6	18.3

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; 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, 2003 and 2004.

Table H.33 Past Year Initiation of Marijuana Use among Persons Aged 12 or Older, Persons Aged 12 or Older At Risk for Initiation of Marijuana Use, and Past Year Marijuana Users Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands and Percentages, 2003 and 2004

Demographic Characteristic	NUMBER OF PAST YEAR INITIATES (1,000s)[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG TOTAL POPULATION[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG PERSONS AT RISK FOR INITIATION[1,2]		PERCENTAGE OF PAST YEAR INITIATES AMONG PAST YEAR USERS[1]	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	1,973	2,142	0.8	0.9	1.4	1.5	7.8	8.4
AGE								
12-17	1,219	1,252	4.9	5.0	5.7	5.8	32.5	34.2
12-13	113	138	1.3	1.6	1.4	1.7	57.4	59.8
14-15	480	511	5.8	5.9	6.6	6.7	39.4	42.8
16-17	626	603	7.6	7.4	10.7	10.3	26.8	27.0
18-25	666	714	2.1	2.2	4.4	4.5	7.4	8.0
18-20	495	575	3.9	4.6	7.4	8.3	12.0[a]	14.2
21-25	172	138	0.9	0.7	2.0	1.5	3.5	2.8
26 or Older	88	176	0.0	0.1	0.1	0.2	0.6	1.4
GENDER								
Male	929	918	0.8	0.8	1.5	1.4	6.1	6.0
Female	1,044[a]	1,224	0.9[a]	1.0	1.3	1.5	10.3[a]	12.0
GENDER/AGE								
Male 12-17	562	577	4.4	4.5	5.2	5.3	28.7	30.1
Female 12-17	657	675	5.4	5.5	6.2	6.3	36.6	38.8

*Low precision, no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] 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.
[2] At Risk for Initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

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

Table H.34 Past Year Initiation of Cigarette Use among Persons Aged 12 or Older, Persons Aged 12 or Older At Risk for Initiation of Cigarette Use, and Past Year Cigarette Users Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands and Percentages, 2003 and 2004

Demographic Characteristic	NUMBER OF PAST YEAR INITIATES (1,000s)[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG TOTAL POPULATION[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG PERSONS AT RISK FOR INITIATION[1,2]		PERCENTAGE OF PAST YEAR INITIATES AMONG PAST YEAR USERS[1]	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	1,983	2,122	0.8	0.9	2.6	2.6	2.8	3.0
AGE								
12-17	1,226	1,294	4.9	5.1	6.6	6.8	25.9	27.9
12-13	202	230	2.4	2.7	2.6	3.0	42.7	46.6
14-15	485	477	5.9	5.5	7.9	7.2	31.4	30.4
16-17	539	587	6.5	7.2	11.6	12.0	19.8	22.7
18-25	659	765	2.1	2.4	6.5	7.1	4.4	5.0
18-20	517	607	4.1	4.8	10.8	11.8	8.9	10.5
21-25	142	158	0.7	0.8	2.7	2.8	1.5	1.7
26 or Older	98	63	0.1	0.0	0.2	0.1	0.2	0.1
GENDER								
Male	919	973	0.8	0.8	2.9	2.9	2.5	2.6
Female	1,063	1,150	0.9	0.9	2.4	2.4	3.3	3.6
GENDER/AGE								
Male 12-17	548	565	4.3	4.4	5.8	5.8	23.3	25.3
Female 12-17	679	729	5.6	5.9	7.5	7.8	28.4	30.2

*Low precision, no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] 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.
[2] At Risk for Initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

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

Table H.35 Past Year Initiation of Alcohol Use among Persons Aged 12 or Older, Persons Aged 12 or Older At Risk for Initiation of Alcohol Use, and Past Year Alcohol Users Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands and Percentages, 2003 and 2004

Demographic Characteristic	NUMBER OF PAST YEAR INITIATES (1,000s)[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG TOTAL POPULATION[1]		PERCENTAGE OF PAST YEAR INITIATES AMONG PERSONS AT RISK FOR INITIATION[1,2]		PERCENTAGE OF PAST YEAR INITIATES AMONG PAST YEAR USERS[1]	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	4,082[a]	4,396	1.7	1.8	9.2	9.4	2.6	2.8
AGE								
12-17	2,593	2,743	10.4	10.9	15.4	15.8	30.2	32.1
12-13	451	472	5.3	5.6	6.1	6.4	43.9[a]	49.9
14-15	1,125	1,222	13.6	14.1	19.6	20.0	39.0	40.4
16-17	1,017	1,049	12.3	12.8	27.0	27.5	21.8	23.0
18-25	1,430	1,484	4.5	4.6	25.8	25.0	5.8	5.9
18-20	961	1,004	7.7	8.0	29.5	29.4	10.7	11.1
21-25	468	481	2.4	2.4	20.6	19.1	3.0	3.0
26 or Older	60	169	0.0	0.1	0.3	0.7	0.0	0.1
GENDER								
Male	1,827	1,985	1.6	1.7	10.4	10.8	2.3	2.4
Female	2,255	2,411	1.8	1.9	8.4	8.5	3.0	3.2
GENDER/AGE								
Male 12-17	1,156	1,285	9.1	10.0	13.5	14.6	28.1	30.6
Female 12-17	1,436	1,458	11.7	11.8	17.3	17.1	32.2	33.7

*Low precision, no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] 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.
[2] At Risk for Initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

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

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Table H.36 Perceived Risk and Availability of Substances, by Age Group: Percentages, 2003 and 2004

Risk/Availability[1]	Total		AGE GROUP					
			12-17		18-25		26 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
PERCEPTIONS OF GREAT RISK								
Cigarettes								
Smoke One or More Packs Per Day	71.4[b]	74.3	64.2[b]	67.5	65.7[b]	69.8	73.4[b]	75.9
Marijuana								
Smoke Once a Month	39.6	39.7	34.9	35.0	24.8	25.6	42.9	42.9
Smoke Once or Twice a Week	52.8	52.4	54.4	54.7	36.8[a]	38.1	55.4	54.7
Cocaine								
Use Once a Month	71.0	70.8	51.4[b]	49.6	63.6	62.6	75.0	75.2
Use Once or Twice a Week	89.0	89.0	80.7	79.8	86.6	85.9	90.6	90.8
Heroin								
Try Once or Twice	82.2[b]	81.3	58.8[b]	57.0	77.5	76.9	86.2[a]	85.3
Use Once or Twice a Week	93.9	93.7	82.6[a]	81.4	93.5	93.3	95.5	95.5
LSD								
Try Once or Twice	73.4[b]	72.1	53.4	52.6	63.0	62.6	77.9[b]	76.4
Use Once or Twice a Week	88.7	88.8	76.9	76.4	85.3	85.7	90.9	91.0
Alcohol								
Four or Five Drinks Nearly Every Day	68.9	68.5	61.6	61.8	61.1	61.7	71.2	70.6
Five or More Drinks Once or Twice a Week	41.7	40.9	38.5	38.1	31.9	31.5	43.9	42.9
PERCEIVED AVAILABILITY								
Fairly or Very Easy to Obtain								
Marijuana	58.8[a]	57.5	53.6[a]	52.2	77.9[b]	76.1	56.0	54.9
Cocaine	31.8	31.4	25.0	24.4	41.2	41.0	31.1	30.6
Crack	30.0	29.3	26.2[a]	25.0	32.5	32.2	30.1	29.4
Heroin	18.4	18.0	15.3[b]	14.0	20.2[a]	19.2	18.6	18.3
LSD	19.8[b]	18.7	17.6	16.9	26.7[b]	23.7	18.8	18.0
Approached by Someone Selling Drugs in the Past Month	7.9	7.8	16.1	16.3	19.6	18.9	4.7	4.6

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Respondents with unknown data were excluded.

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

Table H.37 Substance Dependence or Abuse for Specific Substances in the Past Year, by Age Group: Numbers in Thousands, 2002-2004

Past Year Dependence or Abuse	Total			AGE GROUP								
				12-17			18-25			26 or Older		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	7,116	6,835	7,298	1,376	1,287	1,347	2,548	2,486	2,684	3,192	3,062	3,267
Marijuana and Hashish	4,294	4,198	4,469	1,055	955	979	1,860	1,886	1,936	1,378	1,357	1,554
Cocaine	1,488	1,515	1,571	105	86	91	377	393	462	1,006	1,036	1,018
Heroin	214	189	270	13	12	21	47	42	70	153	135	179
Hallucinogens	426	321[a]	449	138	106	121	242	152[a]	214	46	63	114
Inhalants	180	169	233	101	104	134	29	41	52	50	25	47
Nonmedical Use of Psychotherapeutics[2]	2,018	1,923	2,048	333	361	388	587	516[b]	652	1,098	1,046	1,008
Pain Relievers	1,509	1,424	1,388	237[a]	281	309	419	350[a]	454	853	793	624
Tranquilizers	509	435	573	87	96	75	144	147	154	278	192	344
Stimulants	436	378	470	98	98	86	137	142	172	202	138	212
Sedatives	154	158	128	28	40	22	26	20	24	100	99	82
ALCOHOL	18,100	17,805	18,654	1,453	1,471	1,517	5,477	5,462	5,609	11,169	10,872	11,528
ILLICIT DRUG OR ALCOHOL[1]	22,006	21,586	22,506	2,209	2,214	2,228	6,733	6,678	6,840	13,064	12,694	13,438
BOTH ILLICIT DRUG AND ALCOHOL[1]	3,210	3,054	3,445	620	544[a]	635	1,292	1,270[a]	1,453	1,298	1,240	1,357

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.38 Substance Dependence or Abuse for Specific Substances in the Past Year, by Age Group: Percentages, 2002-2004

Past Year Dependence or Abuse	Total			AGE GROUP								
				12-17			18-25			26 or Older		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
ILLICIT DRUG[1]	3.0	2.9	3.0	5.6	5.1	5.3	8.2	7.8	8.3	1.8	1.7	1.8
Marijuana and Hashish	1.8	1.8	1.9	4.3	3.8	3.9	6.0	5.9	6.0	0.8	0.7	0.8
Cocaine	0.6	0.6	0.7	0.4	0.3	0.4	1.2	1.2	1.4	0.6	0.6	0.6
Heroin	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1
Hallucinogens	0.2	0.1[a]	0.2	0.6	0.4	0.5	0.8	0.5[a]	0.7	0.0	0.0	0.1
Inhalants	0.1	0.1	0.1	0.4	0.4	0.5	0.1	0.1	0.2	0.0	0.0	0.0
Nonmedical Use of Psychotherapeutics[2]	0.9	0.8	0.9	1.3	1.4	1.5	1.9	1.6[a]	2.0	0.6	0.6	0.6
Pain Relievers	0.6	0.6	0.6	1.0[a]	1.1	1.2	1.4	1.1[a]	1.4	0.5	0.4	0.3
Tranquilizers	0.2	0.2	0.2	0.4	0.4	0.3	0.5	0.5	0.5	0.2	0.1	0.2
Stimulants	0.2	0.2	0.2	0.4	0.4	0.3	0.4	0.4	0.5	0.1	0.1	0.1
Sedatives	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0
ALCOHOL	7.7	7.5	7.8	5.9	5.9	6.0	17.7	17.2	17.4	6.2	6.0	6.3
ILLICIT DRUG OR ALCOHOL[1]	9.4	9.1	9.4	8.9	8.9	8.8	21.7	21.0	21.2	7.3	7.0	7.3
BOTH ILLICIT DRUG AND ALCOHOL[1]	1.4	1.3	1.4	2.5	2.2	2.5	4.2	4.0[a]	4.5	0.7	0.7	0.7

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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 pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

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

Table H.39 Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	TYPE OF PAST YEAR DEPENDENCE OR ABUSE					
	Illicit Drug[1]		Alcohol		Illicit Drug or Alcohol[1]	
	2003	2004	2003	2004	2003	2004
TOTAL	2.9	3.0	7.5	7.8	9.1	9.4
AGE						
12-17	5.1	5.3	5.9	6.0	8.9	8.8
18-25	7.8	8.3	17.2	17.4	21.0	21.2
26 or Older	1.7	1.8	6.0	6.3	7.0	7.3
GENDER						
Male	3.7	3.9	10.3	10.8	12.2	12.7
Female	2.1	2.2	4.9	4.9	6.2	6.2
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	2.8	3.0	7.4	7.7	9.0	9.3
White	2.8	2.9	7.6	8.1	9.2	9.6
Black or African American	3.1	3.7	6.2	6.3	8.1	8.3
American Indian or Alaska Native	4.8	8.0	15.3	14.8	17.2	20.2
Native Hawaiian or Other Pacific Islander	5.6	*	9.8	*	12.9	*
Asian	1.5	1.3	5.5[a]	3.7	6.3	4.7
Two or More Races	5.0	6.5	8.5	9.9	11.3	12.2
Hispanic or Latino	3.4	3.4	8.1	8.0	9.8	9.8

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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, 2003 and 2004.

Table H.40 Needed and Received Treatment for an Illicit Drug Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands, 2003 and 2004

Demographic Characteristic	NEEDED TREATMENT FOR AN ILLICIT DRUG 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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	7,333[a]	8,053	1,103[a]	1,427	6,230	6,626	15.0	17.7
AGE								
12-17	1,327	1,397	113	134	1,214	1,262	8.5	9.6
18-25	2,624	2,856	340	352	2,284	2,505	13.0	12.3
26 or Older	3,382	3,801	649[a]	941	2,732	2,860	19.2	24.8
GENDER								
Male	4,559	5,049	732	914	3,828	4,135	16.0	18.1
Female	2,774	3,004	371	513	2,403	2,492	13.4	17.1
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	6,278[a]	6,938	1,014	1,285	5,264	5,652	16.1	18.5
White	4,947	5,158	757	845	4,190	4,313	15.3	16.4
Black or African American	945[a]	1,268	202	334	743	933	21.4	26.4
American Indian or Alaska Native	72	108	21	7	51	101	*	*
Native Hawaiian or Other Pacific Islander	28	*	*	*	28	24	*	*
Asian	150	171	9	46	141	125	*	*
Two or More Races	137	190	24	34	112	156	*	*
Hispanic or Latino	1,055	1,116	89	142	966	974	8.4	12.7

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an illicit drug problem if they met at least one of three criteria during the past year: (1) dependent on illicit drugs; (2) abuse of illicit drugs; or (3) received treatment for an illicit drug 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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.41 Needed and Received Treatment for an Illicit Drug Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	NEEDED TREATMENT FOR AN ILLICIT DRUG 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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	3.1[a]	3.3	0.5[a]	0.6	2.6	2.8	15.0	17.7
AGE								
12-17	5.3	5.5	0.5	0.5	4.9	5.0	8.5	9.6
18-25	8.3	8.9	1.1	1.1	7.2	7.8	13.0	12.3
26 or Older	1.9	2.1	0.4[a]	0.5	1.5	1.6	19.2	24.8
GENDER								
Male	4.0	4.3	0.6	0.8	3.3	3.5	16.0	18.1
Female	2.3	2.4	0.3	0.4	2.0	2.0	13.4	17.1
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	3.0[a]	3.3	0.5	0.6	2.5	2.7	16.1	18.5
White	3.0	3.1	0.5	0.5	2.5	2.6	15.3	16.4
Black or African American	3.4[a]	4.5	0.7	1.2	2.7	3.3	21.4	26.4
American Indian or Alaska Native	5.7	8.3	1.7	0.5	4.0	7.8	*	*
Native Hawaiian or Other Pacific Islander	5.6	*	*	*	5.6	3.8	*	*
Asian	1.5	1.7	0.1	0.5	1.4	1.3	*	*
Two or More Races	5.3	7.4	0.9	1.3	4.4	6.1	*	*
Hispanic or Latino	3.5	3.6	0.3	0.5	3.2	3.1	8.4	12.7

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an illicit drug problem if they met at least one of three criteria during the past year: (1) dependent on illicit drugs; (2) abuse of illicit drugs; or (3) received treatment for an illicit drug 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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.42 Perceived Need for Illicit Drug 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 Problem, by Demographic Characteristics: Numbers in Thousands, 2003 and 2004

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			
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	6,230	6,626	426[a]	598	123	194	303	404	5,805	6,028
AGE										
12-17	1,214	1,262	46	50	7	11	38	39	1,168	1,212
18-25	2,284	2,505	103[b]	211	21[b]	63	83[b]	148	2,180	2,294
26 or Older	2,732	2,860	276	338	95	121	182	217	2,456	2,522
GENDER										
Male	3,828	4,135	256	336	83	108	173	228	3,572	3,799
Female	2,403	2,492	170	262	40	86	130	176	2,232	2,229

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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, but have not received treatment for an illicit drug 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 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, 2003 and 2004.

Table H.43 Needed and Received Treatment for an Alcohol Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands, 2003 and 2004

Demographic Characteristic	NEEDED TREATMENT FOR AN 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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	18,215	19,360	1,298	1,535	16,917	17,824	7.1	7.9
AGE								
12-17	1,501	1,570	95	126	1,406	1,444	6.3	8.0
18-25	5,589	5,744	305	323	5,284	5,421	5.5	5.6
26 or Older	11,125	12,045	898	1,086	10,228	10,960	8.1	9.0
GENDER								
Male	12,118[a]	13,073	897	1,149	11,221	11,924	7.4	8.8
Female	6,097	6,287	401	386	5,696	5,901	6.6	6.1
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	15,761	16,685	1,159	1,301	14,602	15,384	7.4	7.8
White	12,955	13,866	832	928	12,123	12,938	6.4	6.7
Black or African American	1,793	1,913	251	285	1,542	1,628	14.0	14.9
American Indian or Alaska Native	201	194	38	26	163	168	*	*
Native Hawaiian or Other Pacific Islander	48	*	5	*	43	39	*	*
Asian	541	381	7	12	534	369	*	*
Two or More Races	223	273	26	31	197	242	*	11.5
Hispanic or Latino	2,455	2,675	140	234	2,315	2,441	5.7	8.8

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an alcohol problem if they met at least one of three criteria during the past year: (1) dependent on alcohol; (2) abuse of alcohol; or (3) received treatment for an alcohol 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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.44 Needed and Received Treatment for an Alcohol Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	NEEDED TREATMENT FOR AN 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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	7.7	8.0	0.5	0.6	7.1	7.4	7.1	7.9
AGE								
12-17	6.0	6.2	0.4	0.5	5.6	5.7	6.3	8.0
18-25	17.6	17.8	1.0	1.0	16.7	16.8	5.5	5.6
26 or Older	6.1	6.6	0.5	0.6	5.7	6.0	8.1	9.0
GENDER								
Male	10.5	11.2	0.8	1.0	9.8	10.2	7.4	8.8
Female	5.0	5.1	0.3	0.3	4.6	4.8	6.6	6.1
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	7.6	8.0	0.6	0.6	7.0	7.3	7.4	7.8
White	7.8	8.3	0.5	0.6	7.3	7.7	6.4	6.7
Black or African American	6.5	6.8	0.9	1.0	5.6	5.8	14.0	14.9
American Indian or Alaska Native	16.0	15.0	3.0	2.0	13.0	13.0	*	*
Native Hawaiian or Other Pacific Islander	9.8	*	1.1	*	8.7	6.1	*	*
Asian	5.5	3.8	0.1	0.1	5.5[a]	3.7	*	*
Two or More Races	8.7	10.7	1.0	1.2	7.7	9.4	*	11.5
Hispanic or Latino	8.2	8.6	0.5	0.8	7.7	7.9	5.7	8.8

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an alcohol problem if they met at least one of three criteria during the past year: (1) dependent on alcohol; (2) abuse of alcohol; or (3) received treatment for an alcohol 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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.45 Perceived Need for 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 Alcohol Problem, by Demographic Characteristics: Numbers in Thousands, 2003 and 2004

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			
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	16,917	17,824	642	724	173	283	469	442	16,275	17,100
AGE										
12-17	1,406	1,444	32	35	11	12	21	23	1,373	1,409
18-25	5,284	5,421	145	177	31[a]	65	114	112	5,138	5,244
26 or Older	10,228	10,960	464	513	130	206	334	306	9,764	10,447
GENDER										
Male	11,221	11,924	409	459	117	154	292	305	10,813	11,465
Female	5,696	5,901	233	265	56	129	177	137	5,463	5,635

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Needing But Not Receiving Treatment refers to respondents classified as needing treatment for alcohol, but have not received treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).
[2] Felt Need for Treatment includes persons who did not receive but felt they needed treatment for an 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, 2003 and 2004.

Table H.46 Needed and Received Treatment for an Illicit Drug or Alcohol Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Numbers in Thousands, 2003 and 2004

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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	22,165[a]	23,476	1,874[a]	2,327	20,290	21,149	8.5	9.9
AGE								
12-17	2,253	2,288	168	185	2,085	2,103	7.4	8.1
18-25	6,824	7,047	486	548	6,338	6,499	7.1	7.8
26 or Older	13,088	14,142	1,221	1,594	11,867	12,547	9.3	11.3
GENDER								
Male	14,390[a]	15,422	1,263	1,571	13,127	13,850	8.8	10.2
Female	7,775	8,054	612	755	7,163	7,299	7.9	9.4
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	19,182	20,252	1,683	2,013	17,499	18,240	8.8	9.9
White	15,647	16,487	1,286	1,425	14,362	15,062	8.2	8.6
Black or African American	2,328	2,563	305	443	2,023	2,120	13.1	17.3
American Indian or Alaska Native	228	264	43	27	185	237	*	*
Native Hawaiian or Other Pacific Islander	63	*	5	*	58	56	*	*
Asian	616	527	11	58	604	469	1.9	*
Two or More Races	299	336	32	40	267	297	10.8	11.8
Hispanic or Latino	2,983	3,224	191	314	2,792	2,910	6.4	9.7

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.47 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, 2003 and 2004

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			
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	9.3	9.8	0.8[a]	1.0	8.5	8.8	8.5	9.9
AGE								
12-17	9.0	9.1	0.7	0.7	8.3	8.3	7.4	8.1
18-25	21.5	21.9	1.5	1.7	20.0	20.2	7.1	7.8
26 or Older	7.2	7.7	0.7	0.9	6.6	6.9	9.3	11.3
GENDER								
Male	12.5	13.2	1.1	1.3	11.4	11.9	8.8	10.2
Female	6.3	6.5	0.5	0.6	5.8	5.9	7.9	9.4
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	9.2	9.7	0.8	1.0	8.4	8.7	8.8	9.9
White	9.4	9.9	0.8	0.9	8.6	9.0	8.2	8.6
Black or African American	8.5	9.1	1.1	1.6	7.4	7.6	13.1	17.3
American Indian or Alaska Native	18.2	20.4	3.4	2.1	14.7	18.2	*	*
Native Hawaiian or Other Pacific Islander	12.9	*	1.1	*	11.8	8.8	*	*
Asian	6.3	5.3	0.1	0.6	6.2	4.7	1.9	*
Two or More Races	11.6	13.1	1.3	1.6	10.4	11.6	10.8	11.8
Hispanic or Latino	10.0	10.4	0.6	1.0	9.3	9.4	6.4	9.7

*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 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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

Table H.48 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, 2003 and 2004

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			
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	20,290	21,149	1,037	1,233	273[a]	441	764	792	19,254	19,916
AGE										
12-17	2,085	2,103	71	69	18	17	53	52	2,014	2,034
18-25	6,338	6,499	232[a]	333	42[b]	115	189	218	6,106	6,166
26 or Older	11,867	12,547	734	831	213	309	521	522	11,133	11,716
GENDER										
Male	13,127	13,850	657	727	180	230	477	496	12,470	13,124
Female	7,163	7,299	380	506	93[a]	210	287	296	6,783	6,793

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 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, 2003 and 2004.

Table H.49 Serious Psychological Distress in the Past Year among Persons Aged 18 or Older, by Age Group and Demographic Characteristics: Numbers in Thousands, 2003 and 2004

Demographic Characteristic	Total		AGE GROUP					
			18-25		26-49		50 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	19,588	21,417	4,420	4,413	10,418	10,408	4,750[a]	6,596
GENDER								
Male	6,887	7,976	1,690	1,640	3,438	3,941	1,758	2,395
Female	12,702	13,441	2,730	2,773	6,980	6,467	2,992[a]	4,201
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	17,257	18,520	3,735	3,801	9,186	9,201	4,336	5,517
White	14,308	15,543	2,877	2,913	7,575	7,814	3,856	4,816
Black or African American	1,992	1,972	532	509	1,108	946	351	517
American Indian or Alaska Native	96	*	22	*	66	*	*	*
Native Hawaiian or Other Pacific Islander	52	*	*	*	*	*	*	*
Asian	536	608	196	262	311	247	29	*
Two or More Races	273	166	79	*	103	71	*	*
Hispanic or Latino	2,331	2,897	686	611	1,231	1,207	414	*
EDUCATION								
< High School	4,276	4,635	1,030	977	1,949	1,769	1,297	1,889
High School Graduate	6,360	6,955	1,525	1,494	3,212	3,324	1,623	2,138
Some College	5,388	5,543	1,388	1,514	3,022	2,568	979	1,460
College Graduate	3,564	4,283	478	428	2,235	2,747	851	1,109
CURRENT EMPLOYMENT								
Full-Time	9,583	8,986	1,948	1,822	6,034	5,473	1,601	1,691
Part-Time	2,861	3,003	1,061	1,162	1,366	1,505	435	336
Unemployed	1,230	1,526	445	530	540	680	*	*
Other[1]	5,914[a]	7,902	967	899	2,478	2,750	2,469[a]	4,253

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on a subsample of respondents aged 18 or older. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

NOTE: Serious Psychological Distress (SPD), referred to as Serious Mental Illness (SMI) in prior NSDUH reports, is defined as having a score of 13 or higher on the K6 scale. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004 (subsample).

Table H.50 Serious Psychological Distress in the Past Year among Persons Aged 18 or Older, by Age Group and Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	Total		AGE GROUP					
			18-25		26-49		50 or Older	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	9.2	9.9	13.9	13.7	10.4	10.4	5.9[a]	7.9
GENDER								
Male	6.7	7.7	10.6	10.1	7.0	8.0	4.7	6.3
Female	11.5	12.0	17.3	17.3	13.8	12.7	6.8[a]	9.3
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	9.2	9.8	14.3	14.4	10.7	10.8	5.8	7.2
White	9.5	10.3	14.6	14.6	11.3	11.8	6.0	7.4
Black or African American	8.4	8.1	12.4	11.7	9.4	7.7	4.6	6.7
American Indian or Alaska Native	8.9	*	11.9	*	11.9	*	*	*
Native Hawaiian or Other Pacific Islander	12.4	*	*	*	*	*	*	*
Asian	6.1	6.7	13.6	17.2	6.4	4.8	1.2	*
Two or More Races	12.6	8.7	21.8	*	10.3	10.2	*	*
Hispanic or Latino	9.0	10.8	12.1	10.6	8.5	8.0	7.3	*
EDUCATION								
< High School	11.3	12.8	15.0	14.5	13.3	12.7	7.9	12.1
High School Graduate	9.5	10.2	13.9	13.6	10.7	11.3	6.2	7.6
Some College	10.3	10.0	14.0	14.4	11.9	10.0	5.7	7.5
College Graduate	6.5	7.8	12.0	10.7	7.5	8.8	4.0	5.5
CURRENT EMPLOYMENT								
Full-Time	8.2	7.7	13.4	12.1	8.5	7.7	5.1	5.5
Part-Time	10.0	11.2	13.0	14.5	12.1	14.2	4.7	4.2
Unemployed	15.2	19.0	16.5	19.2	13.3	18.1	*	*
Other[1]	10.0[a]	12.5	15.4	14.0	18.5	19.3	6.3[a]	10.0

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on a subsample of respondents aged 18 or older. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

NOTE: Serious Psychological Distress (SPD), referred to as Serious Mental Illness (SMI) in prior NSDUH reports, is defined as having a score of 13 or higher on the K6 scale. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004 (subsample).

Table H.51 Had at Least One Major Depressive Episode (MDE) in Lifetime or Past Year among Persons Aged 12 to 17, and Receipt of Treatment in the Past Year for Depression among Persons Aged 12 to 17 with an MDE in Lifetime or Past Year, by Geographic, Socioeconomic, and Health Characteristics: Percentages, 2004

Geographic/Socioeconomic/Health Characteristic	Lifetime MDE[1]	Receipt of Treatment in Past Year among Persons with Lifetime MDE[2]	Past Year MDE[1]	Receipt of Treatment in Past Year among Persons with Past Year MDE[2]
TOTAL	14.0	35.3	9.0	40.3
GEOGRAPHIC REGION				
Northeast	14.2	38.9	9.8	43.8
Midwest	13.7	37.4	8.7	41.4
South	13.7	32.5	8.5	39.1
West	14.4	34.6	9.2	38.2
COUNTY TYPE				
Large Metro	13.8	34.5	8.6	39.8
Small Metro	14.4	36.4	9.5	41.1
Nonmetro	13.7	35.6	9.0	40.3
FAMILY INCOME				
Less Than $20,000	14.2	32.3	8.9	33.9
$20,000 - $49,999	14.5	36.8	9.2	42.4
$50,000 - $74,999	13.9	35.8	9.4	41.5
$75,000 or More	13.2	34.8	8.4	41.0
GOVERNMENT ASSISTANCE[3]				
Yes	15.1	37.6	9.1	42.1
No	13.7	34.7	8.9	39.9
HEALTH INSURANCE[4]				
Private	13.9	36.2	9.1	41.2
Medicaid/CHIP[5]	14.2	36.4	8.9	41.1
Other[6]	17.0	34.1	9.8	37.3
No Coverage	13.1	24.3	7.2	26.9
OVERALL HEALTH[7]				
Excellent	10.1	30.0	6.2	33.6
Very Good	14.4	34.2	9.4	39.2
Good	18.1	39.1	11.6	44.9
Fair/Poor	23.5	48.3	15.2	*

*Low precision; no estimate reported.

NOTE: 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).

[1] Respondents with unknown data for the respective Lifetime or Past Year MDE measure are excluded.
[2] Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication in the past year for depression. Respondents with unknown treatment data are excluded.
[3] Government Assistance is defined as one or more household family members having received Supplemental Security Income (SSI), cash assistance (Temporary Assistance for Needy Families, TANF), noncash assistance, or food stamps.
[4] Respondents could indicate multiple types of health insurance; thus, these response categories are not mutually exclusive.
[5] CHIP is the Children's Health Insurance Program. Individuals aged 19 or younger are eligible for this plan.
[6] Other Health Insurance is defined as having Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.
[7] Respondents with unknown health data are excluded.

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

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Table H.52 Substance Dependence or Abuse in the Past Year among Persons Aged 18 or Older, by Past Year Serious Psychological Distress: Numbers in Thousands, 2003 and 2004

Dependence/Abuse	Total		SERIOUS PSYCHOLOGICAL DISTRESS[1]			
			Yes		No	
	2003	2004	2003	2004	2003	2004
DEPENDENCE OR ABUSE[2]						
Illicit Drug[3]	5,548	5,894	1,694	1,977	3,854	3,918
Marijuana	3,243	3,148	927	1,024	2,316	2,123
Illicit Drug Other Than Marijuana[3]	2,969	3,351	1,035	1,216	1,933	2,136
Alcohol	16,334	16,989	3,334	3,561	13,000	13,428
Illicit Drug or Alcohol[3]	19,372	19,929	4,179	4,559	15,193	15,370
Both Illicit Drug and Alcohol[3]	2,509	2,954	848	978	1,661	1,976
DEPENDENCE[2]						
Illicit Drug[3]	3,680	3,987	1,298	1,492	2,382	2,495
Marijuana	2,018	1,847	649	664	1,368	1,184
Illicit Drug Other Than Marijuana[3]	1,956	2,429	775	1,000	1,181	1,429
Alcohol	7,051	7,672	1,941	2,367	5,110	5,306
Illicit Drug or Alcohol[3]	9,832	10,351	2,875	3,258	6,957	7,093
Both Illicit Drug and Alcohol[3]	899[a]	1,309	364[a]	601	535	708

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on a subsample of respondents aged 18 or older. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Serious Psychological Distress (SPD), referred to as Serious Mental Illness (SMI) in prior NSDUH reports, is defined as having a score of 13 or higher on the K6 scale. See Section B.4.4 of Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[2] Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[3] 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004 (subsample).

Table H.53 Substance Dependence or Abuse in the Past Year among Persons Aged 18 or Older, by Past Year Serious Psychological Distress: Percentages, 2003 and 2004

Dependence/Abuse	Total		SERIOUS PSYCHOLOGICAL DISTRESS[1]			
			Yes		No	
	2003	2004	2003	2004	2003	2004
DEPENDENCE OR ABUSE[2]						
Illicit Drug[3]	2.6	2.7	8.6	9.2	2.0	2.0
Marijuana	1.5	1.5	4.7	4.8	1.2	1.1
Illicit Drug Other Than Marijuana[3]	1.4	1.6	5.3	5.7	1.0	1.1
Alcohol	7.7	7.9	17.0	16.6	6.7	6.9
Illicit Drug or Alcohol[3]	9.1	9.3	21.3	21.3	7.9	7.9
Both Illicit Drug and Alcohol[3]	1.2	1.4	4.3	4.6	0.9	1.0
DEPENDENCE[2]						
Illicit Drug[3]	1.7	1.9	6.6	7.0	1.2	1.3
Marijuana	0.9	0.9	3.3	3.1	0.7	0.6
Illicit Drug Other Than Marijuana[3]	0.9	1.1	4.0	4.7	0.6	0.7
Alcohol	3.3	3.6	9.9	11.1	2.6	2.7
Illicit Drug or Alcohol[3]	4.6	4.8	14.7	15.2	3.6	3.7
Both Illicit Drug and Alcohol[3]	0.4[a]	0.6	1.9	2.8	0.3	0.4

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on a subsample of respondents aged 18 or older. See Section B.4.4 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Serious Psychological Distress (SPD), referred to as Serious Mental Illness (SMI) in prior NSDUH reports, is defined as having a score of 13 or higher on the K6 scale. See Section B.4.4 of Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

[2] Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[3] 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004 (subsample).

Table H.54 Had at Least One Major Depressive Episode (MDE) in Lifetime or Past Year among Persons Aged 12 or Older, and Receipt of Treatment in the Past Year for Depression among Persons Aged 12 or Older with an MDE in Lifetime or Past Year, by Gender and Age Group: Numbers in Thousands, 2004

Gender/Age	Lifetime MDE[1]	Receipt of Treatment in Past Year among Persons with Lifetime MDE[2]	Past Year MDE[1]	Receipt of Treatment in Past Year among Persons with Past Year MDE[2]
TOTAL	35,080	17,873	19,311	12,024
12-17	3,477	1,219	2,225	895
18-25	5,297	1,990	3,238	1,500
26 or Older	26,306	14,663	13,849	9,629
MALE	11,188	4,782	6,359	3,396
12-17	1,074	352	637	239
18-25	1,902	577	1,122	425
26 or Older	8,212	3,852	4,600	2,732
FEMALE	23,892	13,091	12,953	8,628
12-17	2,403	867	1,588	656
18-25	3,395	1,412	2,116	1,075
26 or Older	18,095	10,811	9,249	6,897

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on all respondents aged 12 to 17 and a subsample of respondents aged 18 or older. See Section B.4.5 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

NOTE: 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).

[1] Respondents with unknown data for the respective Lifetime or Past Year MDE measure are excluded.

[2] Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication in the past year for depression. Respondents with unknown treatment data are excluded.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004 (subsample).

Table H.55 Had at Least One Major Depressive Episode (MDE) in Lifetime or Past Year among Persons Aged 12 or Older, and Receipt of Treatment in the Past Year for Depression among Persons Aged 12 or Older with an MDE in Lifetime or Past Year, by Gender and Age Group: Percentages, 2004

Gender/Age	Lifetime MDE[1]	Receipt of Treatment in Past Year among Persons with Lifetime MDE[2]	Past Year MDE[1]	Receipt of Treatment in Past Year among Persons with Past Year MDE[2]
TOTAL	14.7	51.0	8.1	62.3
12-17	14.0	35.3	9.0	40.3
18-25	16.6	37.6	10.1	46.3
26 or Older	14.5	55.7	7.6	69.5
MALE	9.7	42.8	5.5	53.4
12-17	8.5	33.1	5.0	37.7
18-25	11.9	30.4	7.0	37.9
26 or Older	9.5	46.9	5.3	59.4
FEMALE	19.4	54.8	10.6	66.6
12-17	19.7	36.2	13.1	41.3
18-25	21.3	41.6	13.3	50.8
26 or Older	19.1	59.7	9.8	74.6

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on all respondents aged 12 to 17 and a subsample of respondents aged 18 or older. See Section B.4.5 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings.*

NOTE: 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).

[1] Respondents with unknown data for the respective Lifetime or Past Year MDE measure are excluded.

[2] Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication in the past year for depression. Respondents with unknown treatment data are excluded.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004 (subsample).

Table H.56 Had at Least One Major Depressive Episode (MDE) in Lifetime or Past Year among Persons Aged 18 or Older, and Receipt of Treatment in the Past Year for Depression among Persons Aged 18 or Older with an MDE in Lifetime or Past Year, by Demographic Characteristics: Percentages, 2004

Demographic Characteristic	Lifetime MDE[1]	Receipt of Treatment in Past Year among Persons with Lifetime MDE[2]	Past Year MDE[1]	Receipt of Treatment in Past Year among Persons with Past Year MDE[2]
TOTAL	14.8	52.7	8.0	65.1
GENDER				
Male	9.8	43.8	5.6	55.2
Female	19.4	56.9	10.3	70.1
HISPANIC ORIGIN AND RACE				
Not Hispanic or Latino	15.5	52.6	8.2	66.0
White	16.3	53.5	8.4	67.2
Black or African American	11.7	49.8	7.1	59.8
American Indian or Alaska Native	9.8	*	8.1	*
Native Hawaiian or Other Pacific Islander	*	*	*	*
Asian	9.4	*	5.0	*
Two or More Races	28.6	*	17.9	*
Hispanic or Latino	10.1	53.3	6.5	57.8
EDUCATION				
< High School	11.5	54.8	8.0	63.5
High School Graduate	13.3	49.8	7.6	58.0
Some College	18.7	53.4	10.5	66.4
College Graduate	15.1	54.0	6.1	75.2
CURRENT EMPLOYMENT				
Full-Time	14.8	47.5	7.6	58.7
Part-Time	17.3	51.1	8.8	65.1
Unemployed	19.1	48.2	11.3	*
Other[3]	13.0	66.4	8.0	79.4
MARITAL STATUS				
Married	12.1	53.6	5.8	73.2
Widowed	11.6	*	7.1	*
Divorced or Separated	23.1	56.3	13.4	65.3
Never Married	17.3	47.1	10.4	51.7

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on a subsample of respondents aged 18 or older. See Section B.4.5 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings*.

NOTE: 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).

[1] Respondents with unknown data for the respective Lifetime or Past Year MDE measure are excluded.

[2] Treatment is defined as seeing or talking to a medical doctor or other professional or using prescription medication in the past year for depression. Respondents with unknown treatment data are excluded.

[3] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004 (subsample).

Table H.57 Substance Use in the Past Year and Past Month among Persons Aged 12 or Older, by Past Year Major Depressive Episode (MDE): Percentages, 2004

Substance	Total[1]	PAST YEAR MAJOR DEPRESSIVE EPISODE[2]	
		Yes	No
PAST YEAR USE			
Illicit Drug[3]	15.0	28.8	13.8
Marijuana and Hashish	11.1	19.3	10.4
Cocaine	2.4	5.4	2.1
Crack	0.6	2.3	0.4
Heroin	0.2	0.6	0.1
Hallucinogens	1.7	3.8	1.5
LSD	0.3	0.7	0.2
PCP	0.1	0.1	0.1
Ecstasy	0.8	1.8	0.7
Inhalants	1.0	2.2	0.9
Nonmedical Use of Psychotherapeutics[4]	6.0	15.6	5.1
Pain Relievers	4.6	11.9	3.9
OxyContin®	0.5	1.3	0.4
Tranquilizers	2.0	6.4	1.6
Stimulants	1.3	3.5	1.1
Methamphetamine	0.6	1.8	0.5
Sedatives	0.3	1.2	0.2
Illicit Drug Other Than Marijuana[3]	8.1	19.1	7.2
PAST MONTH USE			
Daily Cigarette Use[5]	15.9	25.5	15.1
Heavy Alcohol Use[6]	7.1	9.2	6.9

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on all respondents aged 12 to 17 and a subsample of respondents aged 18 or older. Therefore, estimates in the Total column are not comparable to similar estimates in other detailed tables. See Section B.4.5 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings.*

[1] Estimates in the Total column represent persons aged 12 or older, including those with unknown past year MDE information.

[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).

[3] 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.

[4] Nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

[5] Past Month Daily Cigarette Use is defined as smoking on each of the past 30 days.

[6] 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004 (subsample).

Table H.58 Substance Dependence or Abuse in the Past Year among Persons Aged 12 Older, by Past Year Major Depressive Episode (MDE): Percentages, 2004

Dependence/Abuse	Total[1]	PAST YEAR MAJOR DEPRESSIVE EPISODE[2]	
		Yes	No
DEPENDENCE OR ABUSE[3]			
Illicit Drug[4]	3.3	9.6	2.7
Marijuana	2.1	4.7	1.8
Illicit Drug Other Than Marijuana[4]	1.6	6.5	1.2
Alcohol	7.9	16.8	7.1
Illicit Drug or Alcohol[4]	9.6	22.0	8.6
Both Illicit Drug and Alcohol[4]	1.5	4.4	1.2
DEPENDENCE[3]			
Illicit Drug[4]	2.2	7.4	1.7
Marijuana	1.2	2.9	1.1
Illicit Drug Other Than Marijuana[4]	1.1	5.4	0.8
Alcohol	3.5	11.0	2.8
Illicit Drug or Alcohol[4]	5.1	15.9	4.1
Both Illicit Drug and Alcohol[4]	0.6	2.4	0.4

*Low precision; no estimate reported.

NOTE: Estimates in this table are based on all respondents aged 12 to 17 and a subsample of respondents aged 18 or older. Therefore, estimates in the Total column are not comparable to similar estimates in other detailed tables. See Section B.4.5 in Appendix B of the *Results from the 2004 National Survey on Drug Use and Health: National Findings.*

[1] Estimates in the Total column represent persons aged 12 or older, including those with unknown past year MDE information.

[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).

[3] Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[4] 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.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2004 (subsample).

Table H.59 Specific Types of Mental Health Treatment/Counseling Received in the Past Year among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	Received Mental Health Treatment/Counseling[1,2]		TYPE OF MENTAL HEALTH TREATMENT/COUNSELING[3]					
			Inpatient		Outpatient[2]		Prescription Medication	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	13.2	12.8	0.8	0.9	7.1	7.1	10.9	10.5
AGE								
18-25	11.1	10.8	1.0	1.2	6.6	6.2	8.3	8.1
26-49	14.5	14.4	0.9	0.8	8.7	8.6	11.9	11.7
50 or Older	12.3	11.7	0.7	0.9	5.3	5.6	10.9	10.1
GENDER								
Male	8.5	8.8	0.8	0.9	4.8	5.0	6.6	6.9
Female	17.5	16.6	0.9	0.9	9.3	9.0	14.9[a]	13.9
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	13.9	13.6	0.8	0.8	7.5	7.5	11.6	11.2
White	15.2	14.9	0.7	0.6	8.3	8.2	12.9	12.5
Black or African American	8.5	8.5	1.7	1.7	4.4	4.6	6.5	6.1
American Indian or Alaska Native	12.6	12.6	2.9	1.0	6.5	6.1	10.1	9.2
Native Hawaiian or Other Pacific Islander	*	*	0.0	0.1	1.5	*	*	*
Asian	4.9	4.7	0.3	1.1	3.1	2.7	3.4	3.6
Two or More Races	17.5	15.8	1.0	0.9	10.5	10.2	13.3	11.8
Hispanic or Latino	7.8	7.4	1.2	1.5	4.1	4.0	6.2	5.4
EDUCATION								
< High School	10.5	11.3	1.5	1.8	5.1	5.3	8.9	8.9
High School Graduate	12.5	11.5	1.0	1.2	6.0	5.9	10.6	9.8
Some College	14.8	14.8	0.7	0.7	7.9	8.2	13.0	12.5
College Graduate	14.3	13.5	0.3	0.2	9.0	8.6	10.9	10.6
CURRENT EMPLOYMENT								
Full-Time	11.8[b]	10.6	0.3	0.4	6.6[a]	5.8	9.5[a]	8.5
Part-Time	14.5	14.8	0.6	0.7	8.4	9.2	11.8	11.6
Unemployed	13.0[b]	17.7	1.6	1.6	7.9	10.1	9.9[b]	15.2
Other[4]	15.2	15.5	1.9	1.8	7.4	8.3	13.6	13.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

[1] Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using 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 are excluded.
[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] Respondents could report receiving multiple types of mental health treatment/counseling; thus, these response categories are not mutually exclusive.
[4] Retired persons, disabled persons, homemakers, students, or other persons not in the labor force are included in the Other Employment category.

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

Table H.60 Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 12 to 17, by Age Group and Demographic Characteristics: Percentages, 2003 and 2004

Demographic Characteristic	Total		AGE GROUP					
			12-13		14-15		16-17	
	2003	2004	2003	2004	2003	2004	2003	2004
TOTAL	20.6[b]	22.5	20.5	22.3	21.6	23.3	19.8[a]	22.0
GENDER								
Male	19.0	20.1	20.3	22.1	19.6	21.4	17.0	16.8
Female	22.4[b]	25.0	20.8	22.4	23.7	25.3	22.5[b]	27.3
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	20.9[b]	22.7	20.9[a]	22.9	21.9	22.7	19.9[a]	22.3
White	20.9[b]	23.1	20.6[a]	23.0	21.7	23.7	20.5	22.5
Black or African American	21.0	23.6	21.6	24.2	22.5	22.8	18.8[a]	24.0
American Indian or Alaska Native	*	24.6	*	*	*	*	*	*
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*	*	*
Asian	17.2[b]	9.5	19.3	12.2	19.7[b]	6.3	13.1	10.7
Two or More Races	24.9	28.7	24.8	28.6	24.3	29.5	*	28.0
Hispanic or Latino	19.2[a]	21.8	18.6	19.1	20.2[a]	26.0	18.9	20.1

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling for youths is defined as having received treatment or counseling from any of 10 specific sources (e.g., private therapist, school counselor, special school program) for emotional or behavioral problems NOT caused by drug or alcohol use. 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. See Table 6.54 for a list of the 10 specific sources of treatment/counseling.

[a] Difference between estimate and 2004 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2004 estimate is statistically significant at the 0.01 level.

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