Results from the 2002 National Survey on Drug Use and Health: National Findings

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Highlights

This report presents, for the first time, information from the 2002 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.

Because of improvements to the survey in 2002, estimates from the 2002 NSDUH should not be compared with estimates from the 2001 and earlier NHSDAs to assess change over time in substance use. Therefore, the 2002 data constitute a new baseline for tracking trends in substance use and other measures. However, it is possible to develop trend estimates based on respondents' reports of past substance use in the 2002 NSDUH. The estimates are presented in terms of lifetime and first-time substance use.

Illicit Drug Use

- In 2002, an estimated 19.5 million Americans, or 8.3 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.
- Marijuana is the most commonly used illicit drug, with a rate of 6.2 percent. Of the 14.6 million past month marijuana users in 2002, about one third, or 4.8 million persons, used it on 20 or more days in the past month.
- In 2002, an estimated 2.0 million persons (0.9 percent) were current cocaine users, 567,000 of whom used crack. Hallucinogens were used by 1.2 million persons, including 676,000 users of Ecstasy. There were an estimated 166,000 current heroin users.
- An estimated 6.2 million persons, or 2.6 percent of the population aged 12 or older, were current users of psychotherapeutic drugs taken nonmedically. An estimated 4.4 million used pain relievers, 1.8 million used tranquilizers, 1.2 million used stimulants, and 0.4 million used sedatives.
- In 2002, approximately 1.9 million persons aged 12 or older had used OxyContin nonmedically at least once in their lifetime.
- Among youths aged 12 to 17, 11.6 percent were current illicit drug users. The rate of use was highest among young adults (18 to 25 years) at 20.2 percent. Among adults aged 26 or older, 5.8 percent reported current illicit drug use.
- Among pregnant women aged 15 to 44 years, 3.3 percent reported using illicit drugs in the month prior to their interview. This rate was significantly lower than the rate among women aged 15 to 44 who were not pregnant (10.3 percent).

- The rates of current illicit drug use were highest among American Indians/Alaska Natives (10.1 percent) and persons reporting two or more races (11.4 percent). Rates were 9.7 percent for blacks, 8.5 percent for whites, and 7.2 percent for Hispanics. Asians had the lowest rate at 3.5 percent.
- Among youths aged 12 to 17, the rate of current illicit drug use among American Indians/Alaska Natives (20.9 percent) was significantly higher than the rate among all youths (11.6 percent), and the rate among Asian youths (4.8 percent) was significantly lower compared with the overall rate for all youths.
- An estimated 17.4 percent of unemployed adults aged 18 or older were current illicit drug users in 2002 compared with 8.2 percent of those employed full time and 10.5 percent of those employed part time. However, most drug users were employed. Of the 16.6 million illicit drug users aged 18 or older in 2002, 12.4 million (74.6 percent) were employed either full or part time.
- In 2002, an estimated 11.0 million persons reported driving under the influence of an illicit drug during the past year. This corresponds to 4.7 percent of the population aged 12 or older. The rate was 10 percent or greater for each age from 17 to 25, with 21 year olds reporting the highest rate of any age (18.0 percent). Among adults aged 26 or older, the rate was 3.0 percent.

Alcohol Use

- An estimated 120 million Americans aged 12 or older reported being current drinkers of alcohol in the 2002 survey (51.0 percent). About 54 million (22.9 percent) participated in binge drinking at least once in the 30 days prior to the survey, and 15.9 million (6.7 percent) were heavy drinkers.
- The prevalence of current alcohol use increased with increasing age in 2002, from 2.0 percent at age 12 to 6.5 percent at age 13, 13.4 percent at age 14, 19.9 percent at age 15, 29.0 percent at age 16, and 36.2 percent at age 17. The rate reached a peak of 70.9 percent for persons 21 years old.
- About 10.7 million persons aged 12 to 20 reported drinking alcohol in the month prior to the survey interview in 2002 (28.8 percent of this age group). Of these, nearly 7.2 million (19.3 percent) were binge drinkers and 2.3 million (6.2 percent) were heavy drinkers.
- About 1 in 7 Americans aged 12 or older in 2002 (14.2 percent, or 33.5 million persons) drove under the influence of alcohol at least once in the 12 months prior to the interview.

Tobacco Use

• An estimated 71.5 million Americans (30.4 percent of the population aged 12 or older) reported current use (past month use) of a tobacco product in 2002. About 61.1 million (26.0 percent) smoked cigarettes, 12.8 million (5.4 percent) smoked cigars, 7.8 million (3.3 percent) used smokeless tobacco, and 1.8 million (0.8 percent) smoked tobacco in pipes.

- A higher proportion of males than females aged 12 or older smoked cigarettes in 2002 (28.7 vs. 23.4 percent). However, among youths aged 12 to 17, girls were slightly more likely than boys to smoke (13.6 vs. 12.3 percent).
- In 2002, 17.3 percent of pregnant women aged 15 to 44 smoked cigarettes in the past month compared with 31.1 percent of nonpregnant women of the same age group.

Trends in Lifetime Substance Use

- The percentage of youths aged 12 to 17 who had ever used marijuana declined slightly from 2001 to 2002 (21.9 to 20.6 percent). Among young adults aged 18 to 25, the rate increased slightly from 53.0 percent in 2001 to 53.8 percent in 2002.
- The percentage of youths aged 12 to 17 who had ever used cocaine increased slightly from 2001 to 2002 (2.3 to 2.7 percent). Among young adults aged 18 to 25, the rate increased slightly from 14.9 percent in 2001 to 15.4 percent in 2002.
- Lifetime nonmedical pain reliever prevalence among youths aged 12 to 17 increased from 2001 (9.6 percent) to 2002 (11.2 percent), continuing an increasing trend from 1989 (1.2 percent). Among young adults aged 18 to 25, the rate increased from 19.4 percent in 2001 to 22.1 percent in 2002. The young adult rate had been 6.8 percent in 1992.
- The rate of lifetime cigarette use among youths aged 12 to 17 declined from 37.3 percent in 2001 to 33.3 percent in 2002.
- The rate of lifetime daily cigarette use among youths aged 12 to 17 declined from 10.6 percent in 2001 to 8.2 percent in 2002. There also was a small decline in lifetime prevalence among young adults (37.7 to 37.1 percent) from 2001 to 2002.

Trends in Initiation of Substance Use (Incidence)

- There were an estimated 2.6 million new marijuana users in 2001. This number is similar to the numbers of new users each year since 1995, but above the number in 1990 (1.6 million).
- Pain reliever incidence increased from 1990, when there were 628,000 initiates, to 2000, when there were 2.7 million. In 2001, the number was 2.4 million, not significantly different from 2000.
- The number of new daily cigarette smokers decreased from 2.1 million in 1998 to 1.4 million in 2001. Among youths under 18, the number of new daily smokers decreased from 1.1 million per year between 1997 and 2000 to 757,000 in 2001. This corresponds to a decrease from about 3,000 to about 2,000 new youth smokers per day.

Youth Prevention-Related Measures

- Among youths indicating that "smoking marijuana once a month" was a "great risk," only 1.9 percent indicated that they had used marijuana in the past month. However, among youths who indicated "moderate, slight, or no risk," the prevalence rate was almost 6 times larger (11.3 percent).
- The percentages of youths reporting that it was fairly or very easy to obtain specific drugs were 55.0 percent for marijuana, 25.0 percent for cocaine, 19.4 percent for LSD, and 15.8 percent for heroin.
- Most youths (89.1 percent) reported that their parents would strongly disapprove of their trying marijuana once or twice. Among these youths, only 5.5 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, 30.2 percent reported past month use of marijuana.

Substance Dependence or Abuse

- An estimated 22.0 million Americans in 2002 were classified with substance dependence or abuse (9.4 percent of the total population aged 12 or older). Of these, 3.2 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 14.9 million were dependent on or abused alcohol but not illicit drugs.
- Among persons aged 12 or older in 2002, the rate of substance dependence or abuse was highest among American Indians/Alaska Natives (14.1 percent). The next highest rate was among persons reporting two or more races (13.0 percent). Asians had the lowest rate of dependence or abuse (4.2 percent). The rate was similar among blacks and whites (9.5 and 9.3 percent, respectively). Among Hispanics, the rate was 10.4 percent.
- In 2002, an estimated 19.7 percent of unemployed adults aged 18 or older were classified with dependence or abuse, while 10.6 percent of full-time employed adults and 10.5 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 19.8 million adults classified with dependence or abuse, 15.3 million (77.1 percent) were employed.

Treatment and Treatment Need for Substance Problems

- An estimated 3.5 million people aged 12 or older (1.5 percent of the population) received some kind of treatment for a problem related to the use of alcohol or illicit drugs in the 12 months prior to being interviewed in 2002. Of these, 2.2 million received treatment for alcohol during their most recent treatment. An estimated 974,000 persons received treatment for marijuana, 796,000 persons for cocaine, 360,000 for pain relievers, and 277,000 for heroin. Most people receiving treatment received it at a "specialty" substance abuse facility (2.3 million).
- In 2002, the estimated number of persons aged 12 or older needing treatment for an illicit drug problem was 7.7 million (3.3 percent of the total population). Of these persons, 1.4 million (18.2 percent) received treatment for drug abuse at a specialty substance abuse facility in the past 12 months. Of the 6.3 million people who needed drug treatment but did not receive treatment at a specialty facility in 2002, an estimated 362,000 (5.7 percent) reported that they felt they needed treatment for their drug problem. This included an estimated 88,000 (24.4 percent) who reported that they made an effort but were unable to get treatment and 274,000 (75.6 percent) who reported making no effort to get treatment.
- In 2002, the estimated number of persons aged 12 or older needing treatment for an alcohol problem was 18.6 million (7.9 percent of the total population). Of these, 8.3 percent (1.5 million) received alcohol treatment at a specialty substance abuse facility in the past 12 months. Of the 17.1 million people who needed but did not receive alcohol treatment, an estimated 761,000 (4.5 percent) reported that they felt they needed treatment for their alcohol problem. Of the 761,000 persons, 266,000 (35 percent) reported that they made an effort but were unable to get treatment, and 495,000 (65 percent) reported making no effort to get treatment.
- Among the 1.4 million persons who received specialty treatment for an illicit drug problem in the past year, 33.9 percent reported "own savings or earnings" as a source of payment for their most recent specialty treatment. An estimated 30.0 percent reported private health insurance, 26.1 percent reported Medicaid, and 23.3 percent reported public assistance other than Medicaid as a source of payment.
- Among the 1.5 million persons who received specialty treatment for an alcohol problem in the past year, 46.3 percent reported "own savings or earnings" as a source of payment for their most recent specialty treatment. An estimated 31.7 percent reported using private health insurance, 21.5 percent reported public assistance other than Medicaid, and 21.4 percent reported Medicaid.

Serious Mental Illness among Adults

- In 2002, there were an estimated 17.5 million adults aged 18 or older with serious mental illness (SMI). This represents 8.3 percent of all adults. Rates of SMI were highest for persons aged 18 to 25 (13.2 percent) and lowest for persons aged 50 or older (4.9 percent). The percentage of females with SMI was higher than the percentage of males (10.5 vs. 6.0 percent).
- Adults who used illicit drugs were more than twice as likely to have SMI as adults who did not use an illicit drug. In 2002, among adults who used an illicit drug in the past year, 17.1 percent had SMI in that year, while the rate was 6.9 percent among adults who did not use an illicit drug.
- SMI was highly correlated with substance dependence or abuse. Among adults with SMI in 2002, 23.2 percent (4.0 million) were dependent on or abused alcohol or illicit drugs, while the rate among adults without SMI was only 8.2 percent.
- Among adults with substance dependence or abuse, 20.4 percent had SMI. The rate of SMI was 7.0 percent among adults who were not dependent on or abusing a substance.

Treatment for Mental Health Problems

- In 2002, an estimated 27.3 million adults (13.0 percent) received mental health treatment in the 12 months prior to the interview.
- Among the 17.5 million adults with SMI in 2002, 8.4 million (47.9 percent) received treatment for a mental health problem in the 12 months prior to the interview.
- Among adults with SMI, 30.5 percent perceived an unmet need for mental health treatment in the 12 months prior to their interview. The most often reported reasons for not getting needed treatment were "could not afford the cost" (44.3 percent) and "did not know where to go for services" (20.5 percent).
- In 2002, an estimated 4.8 million youths aged 12 to 17 received treatment or counseling for emotional or behavior problems in the year prior to the interview. This represents 19.3 percent of this population.
- The reason cited most often by youths for their latest treatment session was "felt depressed" (49.5 percent of youths receiving treatment), followed by "breaking rules or acting out" (26.7 percent), "thought about killing self or tried to kill self" (19.5 percent), and "felt very afraid or tense" (19.5 percent).
- The rate of mental health treatment among youths who used illicit drugs in the past year (26.7 percent) was higher than the rate among youths who did not use illicit drugs (17.2 percent).

1. Introduction

This report presents the first information from the 2002 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 2002 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 included. State-level estimates from NSDUH, based on a complex small area estimation (SAE) method, will be presented in other reports to be released separately.

Because of improvements to the survey in 2002, estimates from the 2002 NSDUH should not be compared with estimates from the 2001 and earlier NHSDAs to assess change over time in substance use. Therefore, the 2002 data will constitute a new baseline for tracking trends in substance use and other measures.

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 place of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) and is planned and managed by SAMHSA's Office of Applied Studies (OAS). Data collection is conducted by RTI International, Research Triangle Park, North Carolina. 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. Persons excluded from the survey 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 sampling frame.

Since 1999, the NSDUH interview has been carried out using computer-assisted interviewing (CAI). The survey uses a combination of computer-assisted personal interviewing (CAPI) conducted by the interviewer and audio computer-assisted self-interviewing (ACASI). Use of ACASI is designed to provide the respondent with a highly private and confidential means of responding to questions and to increase the level of honest reporting of illicit drug use and other sensitive behaviors.

Consistent with the 1999 through 2001 surveys, the 2002 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

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

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, 136,349 addresses were screened for the 2002 survey, and 68,126 completed interviews were obtained. The survey was conducted from January through December 2002. Weighted response rates for household screening and for interviewing were 90.7 and 78.9 percent, respectively. See Appendix B for more information on NSDUH response rates.

1.2. Trend Measurement

Although the design of the 2002 NSDUH is similar to the design of the 1999 through 2001 surveys, there are important methodological differences in the 2002 survey that affect the 2002 estimates. Besides the name change, each NSDUH respondent is now given an incentive payment of \$30. These changes, both implemented in 2002, 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. Further, the 2002 data could have been affected by improved data collection quality control procedures that were introduced in the survey beginning in 2001. In addition, new population data from the 2000 decennial census recently became available for use in NSDUH sample weighting procedures, resulting in another discontinuity between the 2001 and 2002 estimates. Analyses of the effects of each of these factors on NSDUH estimates (see Appendix C) have shown that 2002 data should not be compared with 2001 and earlier NHSDA data to assess changes over time. Therefore, this report presents data only from the 2002 NSDUH.

Using only the 2002 data, however, limited trend assessment can be done using information collected in NSDUH on prior substance use. 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), as well as the rates of lifetime prevalence (the percentage of the population that has ever used each substance) for years prior to 2002. Trends in these measures for youths and young adults are discussed in Chapters 5 and 6. Additional discussion of trends, including a comparison with the Monitoring the Future (MTF) study, is included in the final discussion in Chapter 10.

The methodological changes made to NSDUH in 2002 improved the quality of the data provided by the survey. As is typically the case in ongoing surveys, adjustments in survey procedures must be made periodically in order to maintain data quality in the context of the changing environment in which surveys are conducted (e.g., a general decline in the U.S. population's willingness to participate in surveys). OAS will continue to explore and test improvements to the survey design, but no additional changes to the survey that could impact trend measurement will be implemented in the foreseeable future. Thus, subsequent reports of NSDUH data will provide detailed analyses of trends in current substance use and other

measures, with the 2002 estimates from this report providing the new baseline for measuring change.

1.3. Format of Report and Explanation of Tables

The results from the 2002 NSDUH are given in this report, which has separate chapters that discuss the national findings on eight topics: use of illicit drugs; use of alcohol; use of tobacco products; trends in lifetime use of substances; 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. Technical appendices describe the survey, provide technical details on the survey methodology, discuss the effects of survey protocol changes on trend measurement, offer key NSDUH definitions, discuss other sources of data, list the references cited in the report (as well as other relevant references), and present selected tabulations of estimates.

Tables and text 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"

Data are presented for racial/ethnic groups in several categorizations, based 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 race/ethnicity 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 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 also are made based on county type, which reflects different levels of urbanicity and metropolitan area inclusion of counties. For this purpose, counties are grouped based on "Rural-Urban Continuum Codes" 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 Office of Management and Budget (OMB). For New England, the New England County Metropolitan Areas (NECMA) are used for defining codes. Large metropolitan areas have a population of 1 million or more. Small metropolitan areas have a population of fewer than 1 million. Nonmetropolitan areas are areas outside MSAs. Small metropolitan areas are further classified as having either fewer than or greater than 250,000 population. Counties in nonmetropolitan areas are 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

This report provides a comprehensive summary of the 2002 NSDUH, including results, technical appendices, and selected data tables. A companion report, *Overview of Findings from the 2002 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 2002 will be available in early 2004.

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.DrugAbuseStatistics.SAMHSA.gov. 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.DrugAbuseStatistics.SAMHSA.gov). In addition, OAS makes public use data files available to researchers through the Substance Abuse and Mental Health Data Archive (SAMHDA, 2003). Currently, files are available from the 1979 to 2001 NHSDAs at http://www.icpsr.umich.edu/SAMHDA. The NSDUH 2002 public use file will be available by the end of 2003.

2. Illicit Drug Use

The National Survey on Drug Use and Health (NSDUH) obtains information on nine different categories of illicit drug use: marijuana, cocaine, heroin, hallucinogens, inhalants, and 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 and sometimes illegally "on the street." Methamphetamine is included under stimulants. Over-the-counter drugs and legitimate uses of prescription drugs are not included. 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. NSDUH reports combine the four prescription-type drug groups into a category referred to as "any psychotherapeutics."

Estimates of "any illicit drug use" reported from NSDUH reflect use of any of the nine substance categories listed above. Use of alcohol and tobacco products, while illegal for youths, are not included in these estimates, but are discussed in Chapters 3 and 4. Findings from the 2002 NSDUH on illicit drug use are summarized below.

- In 2002, an estimated 19.5 million Americans aged 12 or older were current illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 8.3 percent of the population aged 12 years old or older.
- Marijuana is the most commonly used illicit drug. In 2002, it was used by 75 percent of current illicit drug users. Approximately 55 percent of current illicit drug users used only marijuana, 20 percent used marijuana and another illicit drug, and the remaining 25 percent used an illicit drug but not marijuana in the past month. About 45 percent of current illicit drug users in 2002 (8.8 million Americans) used illicit drugs other than marijuana and hashish, with or without using marijuana as well (Figure 2.1).
- In 2002, an estimated 2.0 million persons (0.9 percent) were current cocaine users, 567,000 of whom used crack during the same time period (0.2 percent). Hallucinogens were used by 1.2 million persons (0.5 percent), including 676,000 users of Ecstasy (0.3 percent) (Figure 2.2). There were an estimated 166,000 current heroin users (0.1 percent).
- Of the 8.8 million current users of illicit drugs other than marijuana, 6.2 million were current users of psychotherapeutic drugs. This represents 2.6 percent of the population aged 12 or older. Of those who reported current use of any psychotherapeutics, 4.4 million used pain relievers, 1.8 million used tranquilizers, 1.2 million used stimulants, and 0.4 million used sedatives.

Figure 2.1 Types of Drugs Used by Past Month Illicit Drug Users Aged 12 or Older: 2002

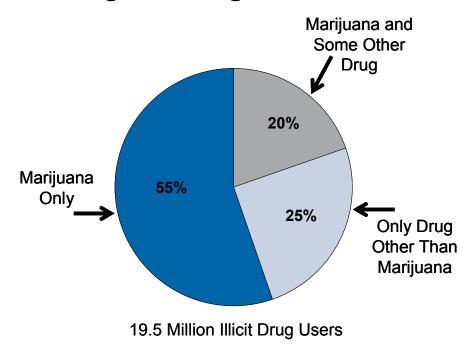
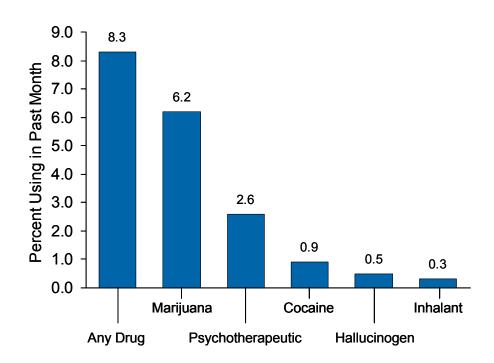


Figure 2.2 Past Month Use of Selected Illicit Drugs among Persons Aged 12 or Older: 2002



• In 2002, approximately 1.9 million persons aged 12 or older had used OxyContin nonmedically at least once in their lifetime. OxyContin is a controlled-release tablet form of the narcotic oxycodone that can have severe health consequences if the tablet is crushed and then ingested.

Age

- Rates of drug use showed substantial variation by age. For example, 4.2 percent of youths aged 12 or 13 reported current illicit drug use in 2002 (Figure 2.3). As in other years, illicit drug use in 2002 tended to increase with age among young persons. It peaked among 18 to 20 year olds (22.5 percent) and declined steadily after that point with increasing age.
- The types of drugs used also varied by age group. Among youths aged 12 to 17, 11.6 percent were current illicit drug users: 8.2 percent used marijuana, 4.0 percent used prescription-type drugs, 1.2 percent used inhalants, 1.0 percent used hallucinogens, and 0.6 percent used cocaine (Figure 2.4). Rates of use were highest for the young adult age group (18 to 25 years) at 20.2 percent, with 17.3 percent using marijuana, 5.4 percent using prescription-type drugs nonmedically, 2.0 percent using cocaine, and 1.9 percent using hallucinogens (Figure 2.5). Among adults aged 26 or older, 5.8 percent reported current illicit drug use: 4.0 percent used marijuana and 2.0 percent used prescription-type drugs. Less than 1 percent used cocaine (0.7 percent), hallucinogens (0.2 percent), and inhalants (0.1 percent) (Figure 2.6).
- Among youths, the types of drugs used also differed by age. Among 12 or 13 year olds, 1.7 percent used prescription-type drugs nonmedically, 1.4 percent used marijuana, and 1.4 percent used inhalants. Among 14 or 15 year olds, marijuana was the dominant drug used (7.6 percent), followed by prescription-type drugs used nonmedically (4.0 percent) and inhalants (1.6 percent). Marijuana also was the most commonly used drug among 16 or 17 year olds (15.7 percent), followed by prescription-type drugs used nonmedically (6.2 percent), hallucinogens (1.9 percent), and cocaine (1.3 percent). Only 0.6 percent of youths aged 16 or 17 used inhalants.
- Although most drug use rates in 2002 were higher among youths and young adults compared with older adults, the age distribution of users varied considerably by type of drug. Almost half (47 percent) of current illicit drug users were aged 12 to 25. However, in 2002, 71 percent of hallucinogen users, as well as 71 percent of inhalant users, were 12 to 25 year olds. Conversely, only 38 percent of cocaine users and 43 percent of nonmedical psychotherapeutics users were in that age grouping.

Gender

• As in prior years, men were more likely in 2002 to report current illicit drug use than women (10.3 vs. 6.4 percent). However, rates of nonmedical psychotherapeutic use were similar for males (2.7 percent) and females (2.6 percent), which was consistent with previous findings for these drugs.

Figure 2.3 Past Month Illicit Drug Use, by Age: 2002

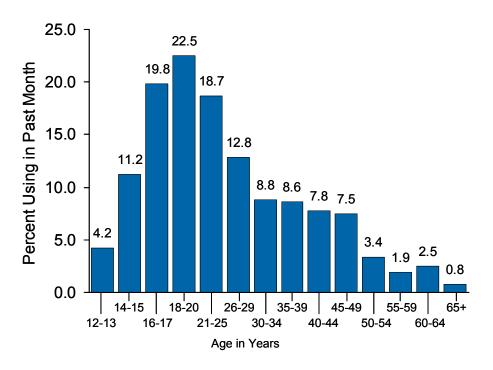


Figure 2.4 Past Month Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002

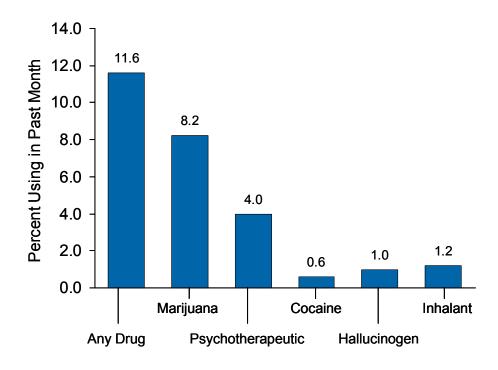


Figure 2.5 Past Month Use of Selected Illicit Drugs among Young Adults Aged 18 to 25: 2002

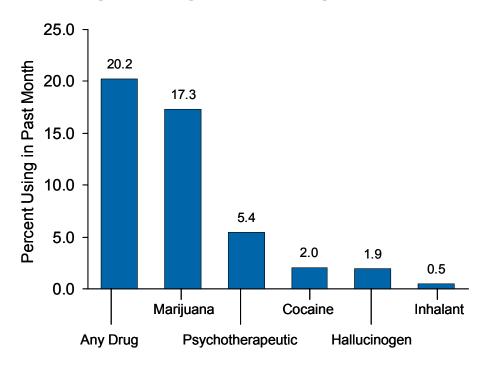
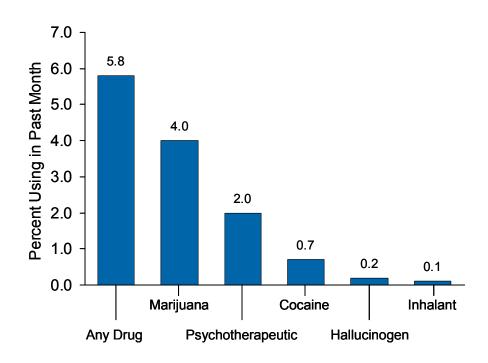
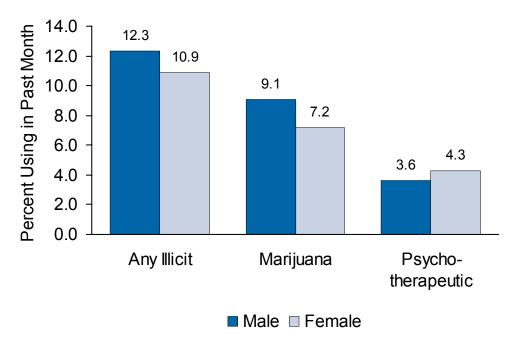


Figure 2.6 Past Month Use of Selected Illicit Drugs among Adults Aged 26 or Older: 2002



Among youths aged 12 to 17, the rate of current illicit drug use was higher for boys (12.3 percent) than for girls (10.9 percent) (Figure 2.7). Although boys aged 12 to 17 had a higher rate of marijuana use than girls (9.1 vs. 7.2 percent), girls were more likely to use psychotherapeutics nonmedically than boys (4.3 vs. 3.6 percent).

Figure 2.7 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Gender: 2002



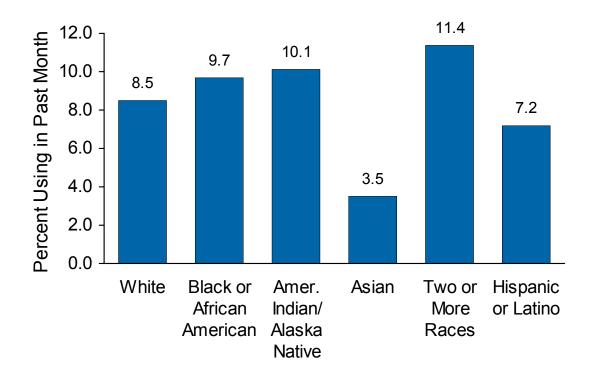
Pregnant Women

• Among pregnant women aged 15 to 44 years, 3.3 percent reported using illicit drugs in the month prior to their interview. This rate was significantly lower than the rate among women aged 15 to 44 who were not pregnant (10.3 percent).

Race/Ethnicity

- Rates of current illicit drug use varied significantly among the major racial/ethnic groups in 2002. The rate was highest among American Indians/Alaska Natives (10.1 percent) and persons reporting two or more races (11.4 percent). Rates were 8.5 percent for whites, 7.2 percent for Hispanics, and 9.7 percent for blacks (Figure 2.8). Asians had the lowest rate at 3.5 percent.
- There were variations in rates of past month illicit drug use among Hispanic subgroups. Rates were 10.0 percent for Puerto Ricans, 7.3 percent for Mexicans, 6.5 percent for Cubans, and 5.0 percent for Central or South Americans.

Figure 2.8 Past Month Illicit Drug Use among Persons Aged 12 or Older, by Race/Ethnicity: 2002

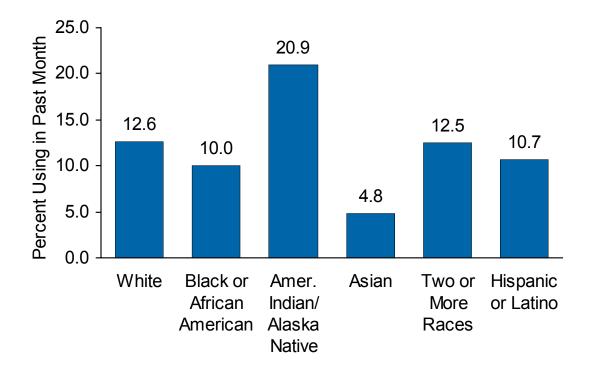


• Among youths aged 12 to 17, the rate of current illicit drug use among American Indians/Alaska Natives (20.9 percent) was significantly higher than the rate among all youths (11.6 percent), and the rate among Asian youths (4.8 percent) was significantly lower compared with the overall rate for all youths (Figure 2.9).

Education

As in other years, illicit drug use rates were correlated with educational status in 2002. Among adults aged 18 or older, the rate of current illicit drug use was lower among college graduates (5.8 percent) compared with those who did not graduate from high school (9.1 percent), high school graduates (8.0 percent), or those with some college (9.1 percent). This is despite the fact that 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 (50.5 vs. 37.1 percent).

Figure 2.9 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Race/Ethnicity: 2002



College Students

• In the college-aged population (i.e., those aged 18 to 22 years old), the rate of current illicit drug use was nearly the same among full-time undergraduate college students (20.7 percent) as for other persons aged 18 to 22 years, including part-time students, students in other grades, and nonstudents (22.4 percent).

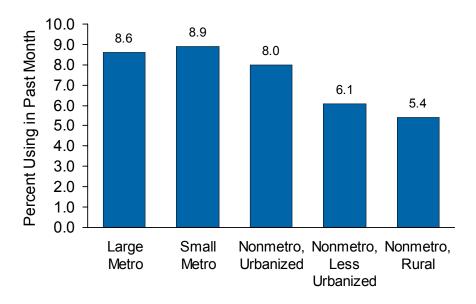
Employment

- Current employment status was highly correlated with rates of illicit drug use in 2002. An estimated 17.4 percent of unemployed adults aged 18 or older were current illicit drug users compared with 8.2 percent of those employed full time and 10.5 percent of those employed part time.
- 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 16.6 million illicit drug users aged 18 or older in 2002, 12.4 million (74.6 percent) were employed either full or part time.

Geographic Area

- Among persons aged 12 or older, the rate of current illicit drug use in 2002 was 9.7 percent in the West, 8.2 percent in the Northeast, 8.1 percent in the Midwest, and 7.6 percent in the South.
- The rate of illicit drug use in metropolitan areas was higher than the rate in nonmetropolitan areas. Rates were 8.6 percent in large metropolitan counties, 8.9 percent in small metropolitan counties, and 6.6 percent in nonmetropolitan counties as a group (Figure 2.10). Within nonmetropolitan areas, counties that were urbanized had a rate of 8.0 percent, while completely rural counties had a rate of 5.4 percent. This is not a statistically significant difference, but this finding is consistent with the pattern reported in previous surveys.

Figure 2.10 Past Month Illicit Drug Use among Persons Aged 12 or Older, by County Type: 2002



Criminal Justice Populations

- In 2002, among the estimated 1.8 million adults aged 18 or older on parole or other supervised release from prison during the past year, 29.1 percent were current illicit drug users compared with 7.7 percent among adults not on parole or supervised release.
- Among the estimated 4.8 million adults on probation at some time in the past year, 28.7 percent reported current illicit drug use in 2002. This compares with a rate of 7.4 percent among adults not on probation in 2002.

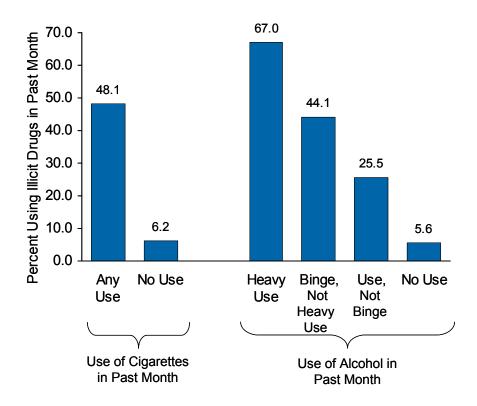
Frequency of Use

• In 2002, 12.2 percent of past year marijuana users used marijuana on 300 or more days in the past 12 months. This translates into 3.1 million persons using marijuana on a daily or almost daily basis over a 12-month period. Among past month users, about one third (32.6 percent, or 4.8 million persons) used marijuana on 20 or more days in the past month.

Association with Cigarette and Alcohol Use

• In 2002, the rate of current illicit drug use was approximately 8 times higher among youths who smoked cigarettes (48.1 percent) than it was among youths who did not smoke cigarettes (6.2 percent) (Figure 2.11).

Figure 2.11 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Cigarette and Alcohol Use: 2002



• Illicit drug use also was associated with the level of alcohol use. Among youths who were heavy drinkers, 67.0 percent also were current illicit drug users, whereas among nondrinkers, the rate was only 5.6 percent.

Driving Under the Influence of Illicit Drugs

• In 2002, an estimated 11.0 million persons reported driving under the influence of an illicit drug during the past year. This corresponds to 4.7 percent of the population aged 12 or older. The rate was 10 percent or greater for each age from 17 to 25, with 21 year olds reporting the highest rate of any age (18.0 percent). Among adults aged 26 or older, the rate was 3.0 percent.

How Marijuana Is Obtained

- NSDUH includes questions asking marijuana users how, from whom, and where they obtained the marijuana they used most recently. In 2002, most users (56.7 percent) got the drug for free or shared someone else's marijuana. Almost 40 percent of marijuana users bought it.
- Most marijuana users obtained the drug from a friend; 79.0 percent who bought their marijuana and 81.8 percent who obtained the drug for free had obtained it from a friend.
- More than half (55.9 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 (67.2 percent). The percentages of youth users who obtained marijuana inside a home, apartment, or dorm were 34.7 percent for buyers and 48.0 percent for those who obtained it free.
- Almost 9 percent of youths who bought their marijuana obtained it inside a school building, and 4.8 percent bought it outside on school property.

3. Alcohol Use

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

<u>Current use</u> - At least one drink in the past 30 days (includes binge and heavy use).

<u>Binge use</u> - Five or more drinks on the same occasion at least once in the past 30 days (includes heavy use).

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

A summary of the findings from the 2002 NSDUH alcohol questions is given below:

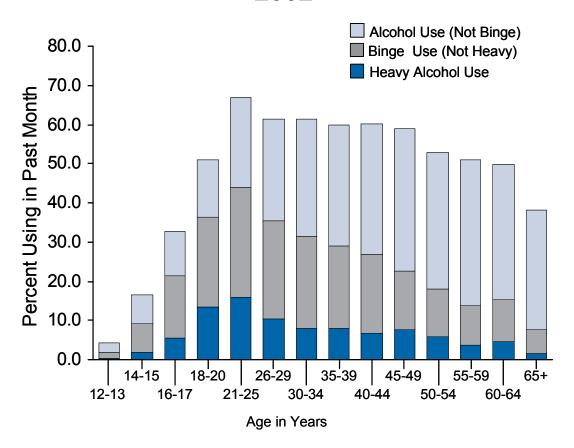
- About half of Americans aged 12 or older reported being current drinkers of alcohol in the 2002 survey (51.0 percent). This translates to an estimated 120 million people.
- More than one fifth (22.9 percent) of persons aged 12 or older participated in binge drinking at least once in the 30 days prior to the survey. This translates to about 54 million people.
- Heavy drinking was reported by 6.7 percent of the population aged 12 or older, or 15.9 million people.

Age

- The prevalence of current alcohol use increased with increasing age in 2002, from 2.0 percent at age 12 to 6.5 percent at age 13, 13.4 percent at age 14, 19.9 percent at age 15, 29.0 percent at age 16, and 36.2 percent at age 17. The rate reached a peak of 70.9 percent for persons 21 years old.
- Rates of binge alcohol use were 0.8 percent at age 12, 2.8 percent at age 13, 7.0 percent at age 14, 11.6 percent at age 15, 17.9 percent at age 16, and 25.0 percent at age 17. The rate peaked at age 21 (50.2 percent).

The highest prevalence of both binge and heavy drinking in 2002 was for young adults aged 18 to 25, with the peak rate of both measures occurring at age 21 (Figure 3.1). The rate of binge drinking was 40.9 percent for young adults and 50.2 percent at age 21. Heavy alcohol use was reported by 14.9 percent of persons aged 18 to 25 and by 20.1 percent of persons aged 21. Binge and heavy alcohol use rates decreased faster with increasing age than did rates of past month alcohol use. While 58.8 percent of the population aged 45 to 49 in 2002 were current drinkers, 22.5 percent of persons within this age range were binge drinkers and 7.7 percent drank heavily. Binge and heavy drinking were relatively rare among people aged 65 or older, with reported rates of 7.5 and 1.4 percent, respectively.

Figure 3.1 Past Month Alcohol Use, by Age: 2002

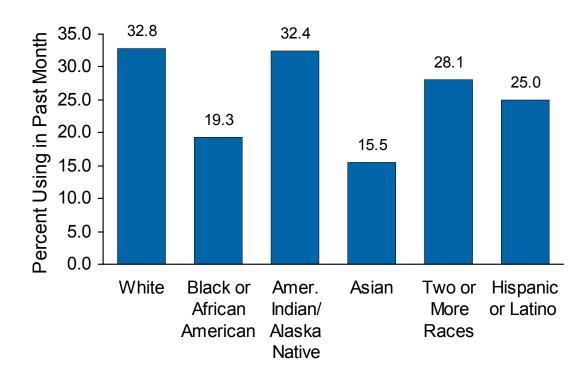


• Among youths aged 12 to 17, an estimated 17.6 percent used alcohol in the month prior to the survey interview. Of all youths, 10.7 percent were binge drinkers, and 2.5 percent were heavy drinkers.

Underage Alcohol Use

- About 10.7 million persons aged 12 to 20 reported drinking alcohol in the month prior to the survey interview in 2002 (28.8 percent of this age group). Of these, nearly 7.2 million (19.3 percent) were binge drinkers, and 2.3 million (6.2 percent) were heavy drinkers.
- More males than females aged 12 to 20 reported binge drinking in 2002 (21.8 vs. 16.7 percent).
- Among persons aged 12 to 20, past month alcohol use rates in 2002 ranged from 15.5 percent for Asians and 19.3 percent among blacks to 32.8 percent for whites (Figure 3.2). Binge drinking was reported by 22.7 percent of underage whites, 22.6 percent of underage American Indians or Alaska Natives, and 16.8 percent of underage Hispanics, but only by 8.6 percent of underage Asians and 9.8 percent of underage blacks.

Figure 3.2 Past Month Alcohol Use among Persons Aged 12 to 20, by Race/Ethnicity: 2002



- Across geographic divisions in 2002, underage current alcohol use rates ranged from 24.2 percent in the Pacific division and 26.4 percent in the East South Central division to 33.9 percent in New England.
- In 2002, underage current alcohol use rates were similar by population density. Rates were 27.2 percent in large metropolitan areas, 30.7 percent in small metropolitan areas, and 29.6 percent in nonmetropolitan areas. The rate in nonmetropolitan rural areas was 26.0 percent.

Gender

- Except among youths aged 12 to 17, males were more likely than females to report past month alcohol drinking. In 2002, 57.4 percent of males aged 12 or older were current drinkers compared with 44.9 percent of females.
- For the youngest age group (12 to 17), males and females had comparable rates of current alcohol use in 2002 (17.4 percent of males and 17.9 percent of females).

Pregnant Women

• Among pregnant women aged 15 to 44 in 2002, 9.1 percent used alcohol and 3.1 percent reported binge drinking in the month prior to the survey. These rates were significantly lower than the rates for nonpregnant women of that age (53.4 and 23.4 percent, respectively). Heavy alcohol use was relatively rare (0.7 percent) among pregnant women.

Race/Ethnicity

- Whites were more likely than any other racial/ethnic group to report current use of alcohol in 2002. An estimated 55.0 percent of whites reported past month use. The next highest rate was for persons reporting two or more races (49.9 percent). The lowest current drinking rate was observed for Asians (37.1 percent). The rates were 39.9 percent for blacks, 44.7 percent for American Indians/Alaska Natives, and 42.8 percent for Hispanics.
- The rate of binge alcohol use was lowest among Asians (12.4 percent). Rates for other racial/ethnic groups were 21.0 percent for blacks, 23.4 percent for whites, 24.8 percent for Hispanics, 25.2 percent for Native Hawaiians and other Pacific Islanders, and 27.9 percent for American Indians/Alaska Natives.
- Among youths aged 12 to 17 in 2002, blacks and Asians were least likely to report past month alcohol use. Only 7.4 percent of Asian youths and 10.9 percent of black youths were current drinkers, while rates were above 15 percent for other racial/ethnic groups.

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, 37.8 percent were current drinkers in 2002, while 67.4 percent of college graduates were current drinkers. However, binge drinking and heavy drinking were least prevalent among college graduates.

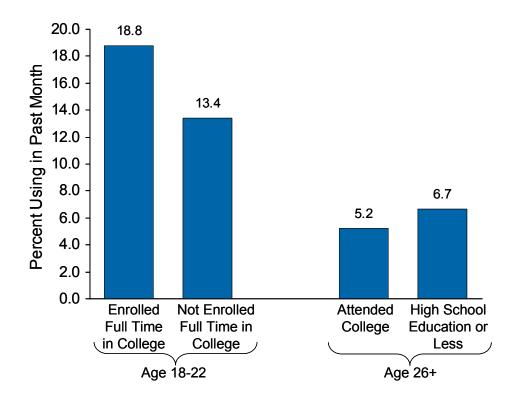
College Students

• 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 2002. Past month alcohol use was reported by 64.1 percent of full-time college students compared with 54.3 percent of persons 18 to 22 who were not currently enrolled full time. Binge and heavy use

rates for college students were 44.4 and 18.8 percent, respectively, compared with 38.9 and 13.4 percent, respectively, for other persons aged 18 to 22.

• Among persons aged 18 to 22, full-time college students were more likely to be heavy drinkers than others (18.8 and 13.4 percent, respectively). However, at later ages (26 or older), those who had attended college were less likely to drink heavily than those who had not attended college (5.2 and 6.7 percent, respectively) (Figure 3.3).

Figure 3.3 Heavy Alcohol Use, by College Attendance and Age: 2002



Employment

- Rates of current alcohol use were 61.8 percent for full-time employed adults aged 18 or older in 2002 compared with 57.9 percent of their unemployed peers. However, the patterns were different for binge and heavy alcohol use; rates were higher for unemployed persons (34.7 and 13.3 percent, respectively, for binge and heavy use) than for full-time employed persons (29.0 and 8.4 percent, respectively).
- Most binge and heavy alcohol users were employed. Among the 51.1 million adult binge drinkers in 2002, 40.8 million (80 percent) were employed either full or part time. Similarly, 12 million (79 percent) of the 15.2 million adult heavy drinkers were employed.

Geographic Area

- The rate of past month alcohol use for people aged 12 or older in 2002 was lowest in the East South Central division (36.7 percent) and highest in New England (57.2 percent).
- Among people aged 12 or older, the rate of alcohol use in 2002 in large metropolitan areas was 54.0 percent compared with 51.3 percent in small metropolitan areas and 42.9 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 6.3 percent in large metropolitan areas, 7.9 percent in small metropolitan areas, and 6.1 percent in nonmetropolitan areas.
- Among youths aged 12 to 17, the rate of past month binge alcohol use was slightly higher in nonmetropolitan areas (12.6 percent) than in large or small metropolitan areas (10.1 and 10.3 percent, respectively). In rural nonmetropolitan areas, 14.2 percent of youths reported binge drinking.

Association with Illicit Drug and Tobacco Use

- The level of alcohol use was strongly associated with illicit drug use in 2002. Among the 15.9 million heavy drinkers aged 12 or older, 32.6 percent were current illicit drug users. For binge drinkers who were not heavy drinkers, 16.6 percent reported past month illicit drug use. Other drinkers (i.e., past month alcohol use but not binge drinking) had a rate of 5.8 percent for current illicit drug use, and persons who did not use alcohol in the past month were least likely to use illicit drugs (3.6 percent).
- Drinking levels also were associated with tobacco use. Among heavy alcohol users, 61.3
 percent smoked cigarettes in the past month, while only 21.8 percent of non-binge current
 drinkers and 17.7 percent of nondrinkers 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

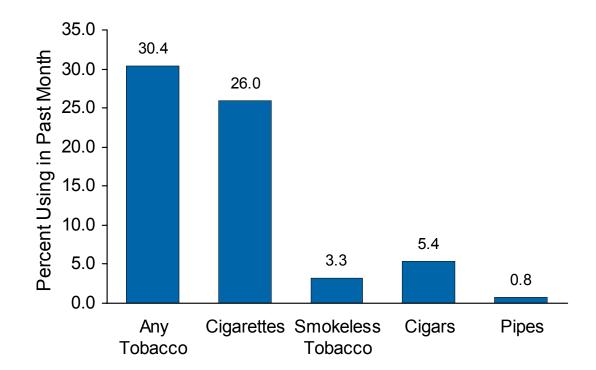
- About 1 in 7 Americans aged 12 or older in 2002 (14.2 percent, or 33.5 million persons) drove under the influence of alcohol at least once in the 12 months prior to the interview.
- Males were nearly twice as likely as females (18.8 vs. 9.9 percent, respectively) to have driven under the influence of alcohol.
- More than 1 in 4 (26.6 percent) young adults aged 18 to 25 reported driving under the influence of alcohol at least once in the prior year.

4. Tobacco Use

The National Survey on Drug Use and Health (NSDUH) includes a series of questions asking about the use of several tobacco products, including cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. For analysis purposes, data for chewing tobacco and snuff are combined and referred to as "smokeless tobacco." Cigarette use is defined as smoking "part or all of a cigarette." Findings from the 2002 NSDUH are summarized below.

- An estimated 71.5 million Americans reported current use (past month use) of a tobacco product in 2002, a prevalence rate of 30.4 percent for the population aged 12 or older.
- Among that same population, 61.1 million (26.0 percent of the total population aged 12 or older) smoked cigarettes, 12.8 million (5.4 percent) smoked cigars, 7.8 million (3.3 percent) used smokeless tobacco, and 1.8 million (0.8 percent) smoked tobacco in pipes (Figure 4.1).

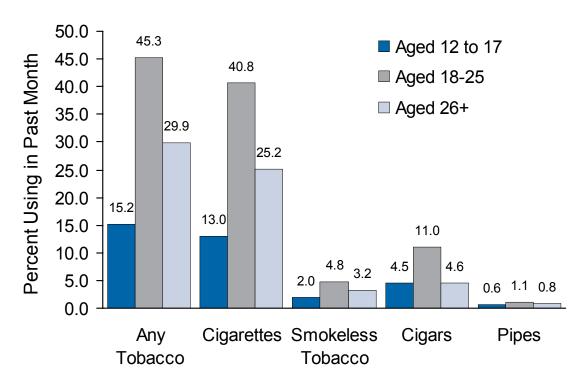
Figure 4.1 Past Month Tobacco Use among Persons Aged 12 or Older: 2002



Age

• Young adults aged 18 to 25 continued to report the highest rate (45.3 percent) of use of tobacco products. Past month rates of use for this age group were 40.8 percent for cigarettes, 11.0 percent for cigars, 4.8 percent for smokeless tobacco, and 1.1 percent for pipes (Figure 4.2).

Figure 4.2 Past Month Tobacco Use among Persons Aged 12 or Older, by Age Group: 2002



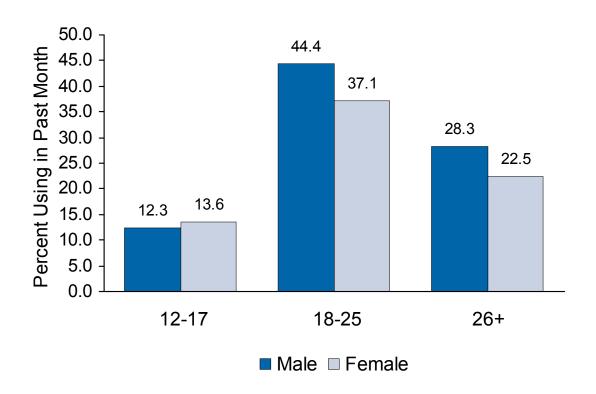
• Current cigarette smoking rates increased steadily by year of age up to age 21, from 1.7 percent at age 12 to 4.7 percent at age 13, 8.5 percent at age 14, 14.1 percent at age 15, 21.9 percent at age 16, and 28.1 percent at age 17. The rate peaked at 46.2 percent at age 21. After age 21, rates generally declined, reaching 19.9 percent for persons aged 60 to 64 years and 10.3 percent for persons aged 65 or older. By age group, the prevalence of cigarette use was 13.0 percent among 12 to 17 year olds, 40.8 percent among young adults aged 18 to 25 years, and 25.2 percent among adults aged 26 or older.

Gender

• As was found in prior surveys, males were more likely than females to report past month use of any tobacco product. In 2002, 37.0 percent of males aged 12 or older were current users of any tobacco product, a significantly higher proportion than among females (24.3 percent).

• A higher proportion of males than females aged 12 or older smoked cigarettes in 2002 (28.7 vs. 23.4 percent). However, among youths aged 12 to 17, girls were slightly more likely than boys to smoke (13.6 vs. 12.3 percent) (Figure 4.3).

Figure 4.3 Past Month Cigarette Use, by Age and Gender: 2002



- Males were much more likely than their female counterparts to report current use of smokeless tobacco (6.4 percent of males aged 12 or older vs. 0.4 percent of females).
- As seen for smokeless tobacco, males were more likely than females to report past month cigar use. Specifically, males aged 12 or older were more than 5 times as likely as females to report past month use of cigars (9.4 vs. 1.7 percent).

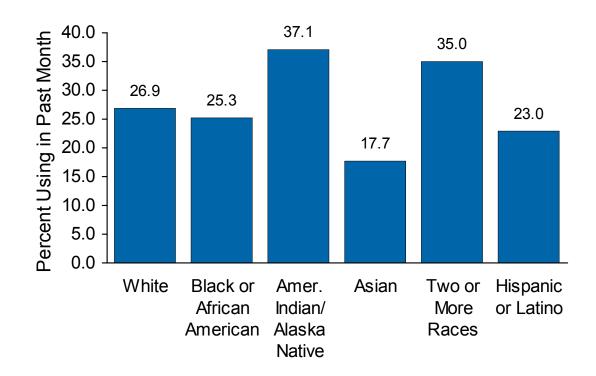
Pregnant Women

• In 2002, 17.3 percent of pregnant women aged 15 to 44 smoked cigarettes in the past month compared with 31.1 percent of nonpregnant women of the same age group.

Race/Ethnicity

- American Indians and Alaska Natives were more likely than any other racial/ethnic group
 to report the use of tobacco products in 2002. Among persons aged 12 or older, 44.3
 percent of American Indians/Alaska Natives reported using at least one tobacco product in
 the past month. The lowest current tobacco use rate in 2002 was observed for Asians (18.6
 percent).
- Current cigarette smoking rates among persons aged 12 or older were 37.1 percent among American Indians/Alaska Natives, 35.0 percent among persons reporting two or more races, 26.9 percent among whites, 25.3 percent among blacks, 23.0 percent for Hispanics, and 17.7 percent for Asians (Figure 4.4).

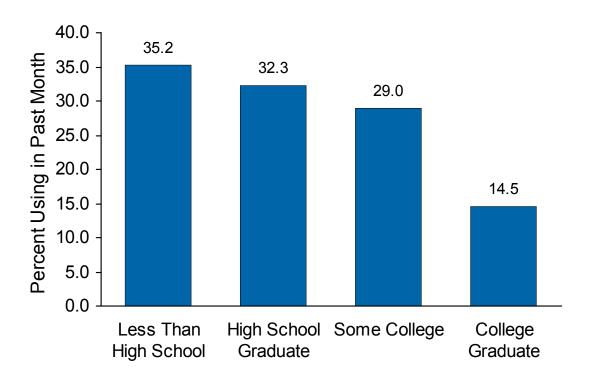
Figure 4.4 Past Month Cigarette Use among Persons Aged 12 or Older, by Race/Ethnicity: 2002



Education

• The prevalence of cigarette smoking decreased with increasing levels of education. Among adults aged 18 or older in 2002, college graduates were the least likely to report smoking cigarettes (14.5 percent) compared with 35.2 percent of adults who lacked a high school diploma (Figure 4.5).

Figure 4.5 Past Month Cigarette Use among Persons Aged 18 or Older, by Education: 2002



College Students

• Young adults aged 18 to 22 enrolled full time in college in 2002 were less likely to report current cigarette use than their peers not enrolled full time (this category includes part-time college students and persons not enrolled in college). Past month cigarette use was reported by 32.6 percent of full-time college students compared with 45.8 percent of their peers who were not enrolled full time.

Employment

- Rates of current cigarette smoking were 49.8 percent for unemployed adults aged 18 or older in 2002 compared with 27.2 percent of adults working part time and 29.6 percent of full-time employed adults.
- Rates of smokeless tobacco use by employment status in 2002 displayed a somewhat different pattern from the rates of cigarette use. The rates of past month smokeless tobacco use among persons aged 18 or older were 4.1 percent among unemployed persons, 2.2 percent among part-time workers, and 4.5 percent for those employed full time.

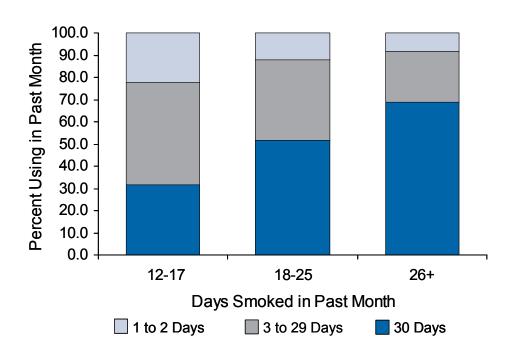
Geographic Area

- Cigarette use rates among persons aged 12 or older varied by region of the country. Past month cigarette use ranged from a low of 21.0 percent for persons living in the Pacific division to 28.7 percent of persons living in the East South Central part of the country.
- Rates of current cigarette use among persons aged 12 or older were higher in less densely populated areas. In large metropolitan areas, 24.6 percent smoked in the past month compared with 27.1 percent in small metropolitan areas and 27.9 percent in nonmetropolitan areas. The rate of smoking was 30.6 percent in completely rural nonmetropolitan areas. For youths aged 12 to 17 in large metropolitan areas, 11.0 percent smoked in the past month compared with 20.7 percent of youths in completely rural nonmetropolitan areas.

Frequency of Cigarette Use

• Of the 61.1 million past month cigarette smokers, 63.4 percent (38.7 million) reported smoking every day in the past 30 days. Among youths aged 12 to 17 who smoked in the past month, 31.8 percent (1 million) were daily smokers (Figure 4.6). The percentage of smokers who were daily smokers increased with age to 51.8 percent for 18- to 25-year-old smokers and to 68.8 percent for smokers aged 26 or older.

Figure 4.6 Frequency of Cigarette Use among Current Smokers, by Age: 2002

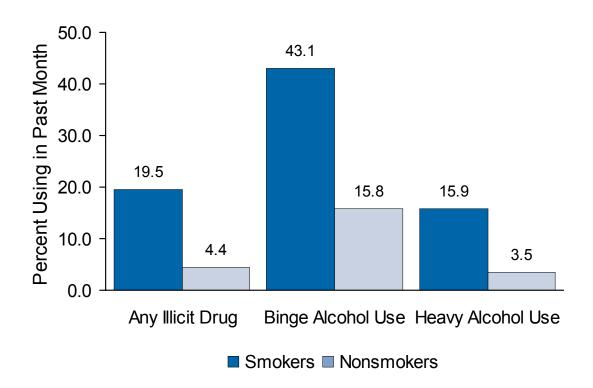


 Although 52.9 percent of all daily smokers aged 12 or older smoked a pack or more of cigarettes a day, 21.6 percent of daily smokers aged 12 to 17 reported doing so.

Association with Illicit Drug and Alcohol Use

• Current (past month) cigarette smokers were more likely to use other tobacco products, alcohol, and illicit drugs than current nonsmokers. Comparing current smokers with current nonsmokers, rates of binge alcohol use were 43.1 versus 15.8 percent, rates of heavy alcohol use were 15.9 versus 3.5 percent, and rates of current (past month) illicit drug use were 19.5 versus 4.4 percent (Figure 4.7). Rates of use of other tobacco products were 1.7 times higher for smokeless tobacco and 3.9 times higher for cigars among current smokers compared with current nonsmokers.

Figure 4.7 Past Month Any Illicit Drug, Binge Alcohol, and Heavy Alcohol Use among Smokers and Nonsmokers Aged 12 or Older: 2002



Usual Brand of Cigarettes Smoked

- There were notable racial/ethnic differences with regard to brand of cigarettes smoked most often in the past month. In 2002, almost half of white smokers aged 12 or older (43.6 percent) and more than half of Hispanic smokers (56.9 percent) reported smoking Marlboro cigarettes. Among black smokers, only 6.0 percent smoked Marlboro cigarettes, while 49.4 percent smoked Newport cigarettes.
- Three brands accounted for most of the youth cigarette smoking in 2002. Among current smokers who were 12 to 17 years of age, 49.8 percent reported Marlboro as their usual brand, 25.1 percent reported Newport, and 10.5 percent reported Camel. No other individual cigarette brand was reported by more than 2.2 percent of these youths.
- Racial/ethnic differences in usual cigarette brand used also were evident among youth smokers aged 12 to 17. Marlboro was the most frequently cited brand among white and Hispanic youth smokers (55.1 and 44.1 percent, respectively). Newport was the usual brand reported by 32.4 percent of Hispanic youth smokers. Among black youth smokers, Newport was the most frequently cited brand (73.4 percent).

5. Trends in Lifetime Prevalence of Substance Use

This chapter discusses trends in the lifetime prevalence of the use of various substances based on data from the 2002 National Survey on Drug Use and Health (NSDUH). These trends are based on estimates of the percentage of the population each year who had used a substance at least one time in their life. Estimates for youths aged 12 to 17 and young adults aged 18 to 25, by gender, from 1965 to 2002 have been produced. Selected findings are discussed.

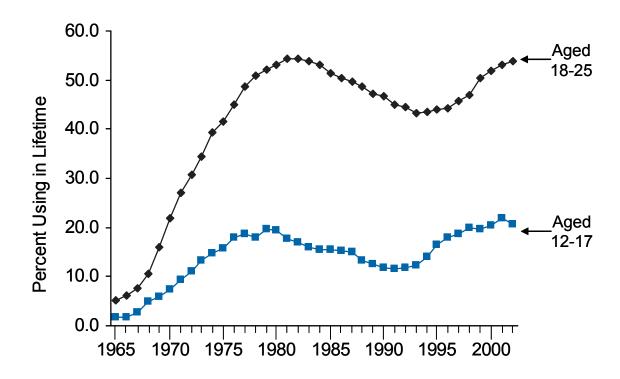
Because of the changes in NSDUH in 2002 and the effect of these changes on estimates of substance use prevalence, this report does not compare estimates from the 2002 survey to estimates from prior surveys. However, analysis of trends in substance use can be done using just the 2002 NSDUH data based on survey questions asking about prior use. NSDUH includes questions asking about age at first use of various substances, including month and year of first use for recent new users. Using this information along with the respondent's date of birth, the interview date, and editing and imputation when necessary, an exact date of first use is determined for each substance used by each respondent. This makes it possible to construct estimates of lifetime prevalence as well as incidence (number of new users) for years prior to 2002. Details of the methods used are provided in Section B.4 of Appendix B. Estimates of incidence are discussed Chapter 6.

Because the lifetime prevalence estimates reported are based on retrospective reports of age at first substance use by survey respondents interviewed during 2002, they may be subject to several sources of bias. These include bias due to differential mortality of users and nonusers of each substance, bias due to memory errors (recall decay and telescoping), and underreporting bias due to social acceptability and fear of disclosure. See Section B.4 of Appendix B for a discussion of these biases.

Marijuana

- The percentage of youths aged 12 to 17 who had ever used marijuana declined slightly from 2001 to 2002 (21.9 to 20.6 percent). Among young adults aged 18 to 25, the rate increased slightly from 53.0 percent in 2001 to 53.8 percent in 2002 (Figure 5.1).
- In 1965 and 1966, only 1.8 percent of youths had ever used marijuana. Beginning in 1967, use increased until it reached a peak at 19.6 percent in 1979. A period of decline followed until 1991, when the rate was 11.5 percent, after which the trend reversed, reaching a peak at 21.9 percent in 2001.
- The percentage of young adults aged 18 to 25 who had ever used marijuana was 5.1 percent in 1965, but increased steadily to 54.4 percent in 1982. Although the rate for young adults declined somewhat from 1982 to 1993, it did not drop below 43 percent and actually increased to 53.8 percent by 2002.

Figure 5.1 Lifetime Marijuana Use among Persons Aged 12 to 25, by Age Group: 1965-2002



Cocaine

- The percentage of youths aged 12 to 17 who had ever used cocaine increased slightly from 2001 to 2002 (2.3 to 2.7 percent). Among young adults aged 18 to 25, the rate increased slightly from 14.9 percent in 2001 to 15.4 percent in 2002.
- From 1965 to 1967, only 0.1 percent of youths had ever used cocaine, but rates rose throughout the 1970s and 1980s, reaching 2.2 percent in 1987. A period of decline followed in the early 1990s, after which the trend reversed, reaching a peak at 2.7 percent in 2002.
- The percentage of young adults aged 18 to 25 who had ever used cocaine was below 1 percent during the mid-1960s, but rose steadily throughout the 1970s and early 1980s, reaching 17.9 percent in 1984. By 1996, the rate had dropped to 10.1 percent, but climbed to 15.4 percent in 2002.

Heroin

• Since the mid-1990s, the prevalence of lifetime heroin use increased for both youths and young adults. From 1995 to 2002, the rate among youths aged 12 to 17 increased from 0.1 to 0.4 percent; among young adults aged 18 to 25, the rate rose from 0.8 to 1.6 percent.

Hallucinogens

• The prevalence of lifetime hallucinogen use among youths aged 12 to 17 was at its highest level in 2001 (6.1 percent) but declined to 5.7 percent in 2002. Among young adults aged 18 to 25, use increased from 14.3 percent in 1992 to 24.2 percent in 2002. The increase in hallucinogen use in the 1990s appears to have been driven by the use of Ecstasy (i.e., MDMA).

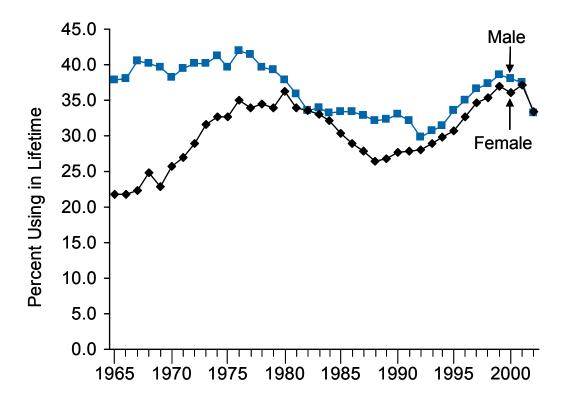
Psychotherapeutics

- Psychotherapeutics include the nonmedical use of any prescription-type pain reliever, tranquilizer, stimulant, or sedative; they also include methamphetamine. This drug category excludes over-the-counter substances.
- Lifetime nonmedical pain reliever prevalence among youths aged 12 to 17 increased from 2001 (9.6 percent) to 2002 (11.2 percent), continuing an increasing trend from 1989 (1.2 percent). Among young adults aged 18 to 25, the rate increased from 19.4 percent in 2001 to 22.1 percent in 2002. The young adult rate had been 6.8 percent in 1992.
- Lifetime nonmedical use of stimulants increased steadily from 1990 to 2002 for youths aged 12 to 17 (0.7 to 4.3 percent). For young adults aged 18 to 25, rates declined from 1981 to 1994 (from 10.9 to 5.9 percent), then increased to 10.8 percent in 2002. Rates increased between 2001 and 2002 for both youths (3.8 to 4.3 percent) and young adults (10.2 to 10.8 percent).

Cigarettes

- The rate of lifetime cigarette use among youths aged 12 to 17 has remained between 29 and 39 percent in every year since 1965. Although the rate increased during the 1990s from 30.3 percent in 1990 to 37.8 percent in 1999, there was a significant decline from 2001 to 2002 (from 37.3 to 33.3 percent).
- From 1965 to 1980, there was little change in the rate of lifetime cigarette use among boys aged 12 to 17. Rates were 37.9 percent in 1965 and 37.8 percent in 1980. However, during that period, the rate among adolescent girls increased from 21.7 to 36.2 percent. Since 1980, rates for girls have been nearly the same as the rates for boys (Figure 5.2).
- The rate of lifetime daily cigarette use among youths aged 12 to 17 declined from 10.6 percent in 2001 to 8.2 percent in 2002. There also was a small decline in lifetime prevalence among young adults (37.7 to 37.1 percent) from 2001 to 2002.
- Since 1965, the rate of lifetime cigarette use among young adults aged 18 to 25 has been between 65 and 72 percent.

Figure 5.2 Lifetime Cigarette Use among Youths Aged 12 to 17, by Gender: 1965-2002

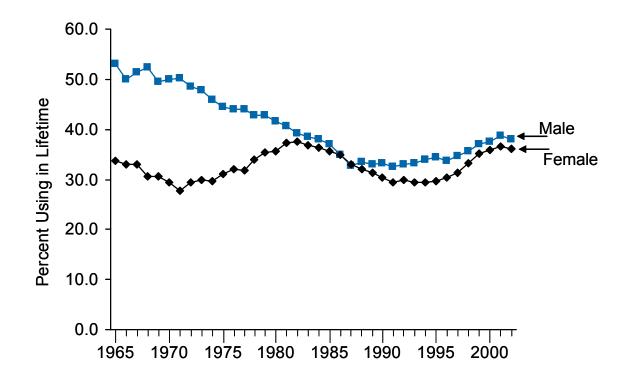


• Among young adults aged 18 to 25, trends in the rate of lifetime daily smoking have been different for males and females. During the 1960s, half of young adult males had smoked daily, and only a third of women aged 18 to 25 had smoked daily. From 1971 to 1987, the rate among men declined from 50.2 to 32.8 percent. In contrast, among women the rate increased from 27.8 percent in 1971 to 37.6 percent in 1982, then dropped to 32.9 percent in 1987, similar to the rate for men. From 1987 to 2001, rates increased somewhat for both men and women, but between 2001 and 2002 the rates dropped slightly (38.8 to 38.1 percent for men; 36.5 to 36.1 percent for women) (Figure 5.3).

Cigars

• Consistent with trends in cigar initiation (Chapter 6), the prevalence of lifetime cigar use increased significantly during the late 1990s. Among youths aged 12 to 17, the rate increased from 6.8 percent in 1995 to 16.6 percent in 2001, then held at 16.3 percent in 2002. Among young adults aged 18 to 25, the rate increased from 25.8 percent in 1995 to 44.2 percent in 2001, and then to 45.6 percent in 2002.

Figure 5.3 Lifetime Daily Cigarette Use among Young Adults Aged 18 to 25, by Gender: 1965-2002



6. Trends in Initiation of Substance Use

Estimates of substance use incidence, or initiation, concern the number of new users of illicit drugs, alcohol, or tobacco during a given year. These estimates supplement prevalence estimates as measures of the Nation's substance use problem. Where prevalence estimates describe the extent of use of substances over some period of time, incidence data describe emerging patterns of use, particularly among young people. In the past, increases and decreases in incidence usually have been followed by corresponding changes in the prevalence of use, particularly among youths.

The incidence estimates in this report are based on the 2002 National Survey on Drug Use and Health (NSDUH). As the 2002 NSDUH constitutes a new baseline year for the survey, these data should not be compared with previously published data from the National Household Survey on Drug Abuse (NHSDA).

The incidence estimates are based on NSDUH questions on age at first use, year and month of first use for recent initiates, the respondent's date of birth, and the interview date. Using this information along with editing and imputation when necessary, an exact date of first use is determined for each substance used by each respondent. By applying sample weights to incidents of first use, estimates of the number of new users of each substance are developed for each year. These estimates include the number of new users at any age (including those younger than age 12) and also are shown for two specific age groups—persons younger than 18 and adults aged 18 or older. In addition, the average age of new users in each year and age-specific rates of first use are estimated.

Although they are not discussed in this chapter, estimates of age-specific incidence rates also are developed. These rates are defined as the number of new users per 1,000 potential new users because they indicate the rate of new use among persons who have not yet used the substance (i.e., potential new users). More precisely, the rates are actually the number of new users per 1,000 person-years of exposure. This measure is widely used in describing the incidence of disease. The method used for computing these rates is described in Section B.4 in Appendix B.

Because the incidence estimates reported herein are based on retrospective reports of age at first substance use by survey respondents interviewed during 2002, they may be subject to several sources of bias. These include bias due to differential mortality of users and nonusers of each substance, bias due to memory errors (recall decay and telescoping), and underreporting bias due to social acceptability and fear of disclosure. See Section B.4 in Appendix B for a discussion of these biases. It is possible that some of these biases, particularly telescoping and underreporting because of fear of disclosure, may be affecting estimates for the most recent years more significantly than estimates for earlier years. To account for this bias in the interpretation of the trends, a more stringent standard for determining statistical significance involving estimates from the most recent years (1998 and later) is used in this chapter. Differences are reported to be statistically significant only if they differ at the α =.01 level. The usual standard in the rest of the report is the α =.05 level. This is an arbitrary standard that provides some protection against incorrect conclusions in the face of potential biases that can fluctuate and even change the

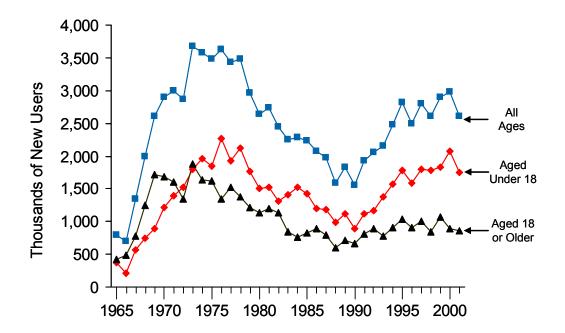
direction of estimates from year to year. A more thorough analysis of the problem will be conducted in the future.

Because the incidence estimates are based on retrospective reports of age at first use, the most recent year available for these estimates is 2001, based on the 2002 NSDUH. For two of the measures, first alcohol use and first cigarette use, initiation before age 12 is common. A 2-year lag in reporting for "all ages" estimates is applied for these measures because the NSDUH sample does not cover youths under age 12. The 2-year lag ensures that initiation at ages 10 and 11 is captured in the estimation.

Marijuana

- There were an estimated 2.6 million new marijuana users in 2001. This number is similar to the numbers of new users each year since 1995, but above the number in 1990 (1.6 million).
- In 1965, there were an estimated 0.8 million new users of marijuana. The annual number of marijuana initiates generally increased until about 1973. From 1973 to 1978, the annual number of marijuana initiates remained level at approximately 3.5 million per year. After that, the number of initiates declined to 1.6 million in 1990, then rose to 2.8 million in 1995. From 1995 to 2001, there was no consistent trend, with estimates varying between 2.5 and 3.0 million per year (Figure 6.1)

Figure 6.1 Annual Numbers of New Users of Marijuana: 1965-2001



- In 2001, about two thirds (67 percent) of new marijuana users were under age 18. This proportion has generally increased since the 1960s, when less than half of initiates were under 18. (Figure 6.1) The average age of marijuana initiates was around 19 in the late 1960s and 17.1 in 2001.
- Since 1975, about half of marijuana initiates each year were females (51 percent in 2001). Prior to 1975, females comprised fewer than half of new users, on average. Since 1965, the average age of female initiates has generally been slightly higher than the average age for male initiates.

Cocaine

- Incidence of cocaine use generally rose throughout the 1970s to a peak in 1980 (1.7 million new users) and subsequently declined until 1991 (0.7 million new users). Cocaine initiation steadily increased during the 1990s, reaching 1.2 million in 2001.
- Age-specific incidence rates generally have mirrored the overall incidence trends, with greater initiation among adults than among youths under 18. Approximately 70 percent of cocaine initiates in 2001 were age 18 or older.
- Since 1975, males have generally comprised the majority of cocaine initiates. In 2001, there were 0.7 million new male users and 0.5 million new female users.
- The average age of cocaine initiates rose from 18.6 years in 1968 to 23.8 years in 1990 and subsequently declined to approximately 21 years from 1995 to 2001.

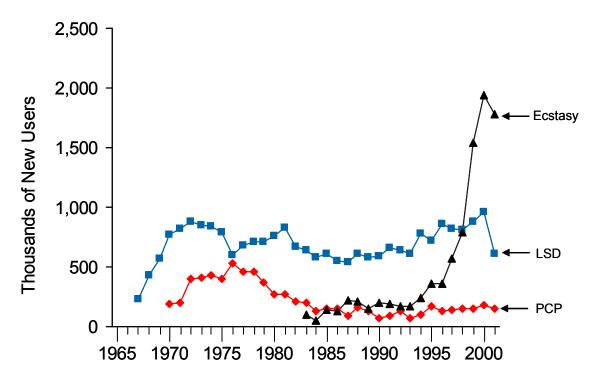
Heroin

• During the latter half of the 1990s, the annual number of heroin initiates rose to a level not reached since the late 1970s. In 1974, there were an estimated 246,000 heroin initiates. Between 1988 and 1994, the annual number of new users ranged from 28,000 to 80,000. Between 1995 and 2001, the number of new heroin users was consistently greater than 100,000.

Hallucinogens

- The incidence of hallucinogen use has exhibited two notable periods of increase. Between 1966 and 1970, the annual number of initiates rose almost sixfold, from 168,000 to 956,000. This increase was driven primarily by use of LSD. The second period of increase in first-time hallucinogen began in 1992 when there were approximately 706,000 new users. By 2000, the number of initiates rose to 1.7 million, which is similar to the number for 2001 (1.6 million). The hallucinogen increase in the 1990s appears to have been driven by increases in use of Ecstasy (i.e., MDMA) (Figure 6.2).
- Initiation of Ecstasy use has been rising since 1993, when there were 168,000 new users. There were 1.9 million initiates in 2000 and 1.8 million in 2001 (not a statistically significant decline).

Figure 6.2 Annual Numbers of New Users of Ecstasy, LSD, and PCP: 1965-2001



• LSD incidence dropped from 958,000 new users in 2000 to 606,000 in 2001.

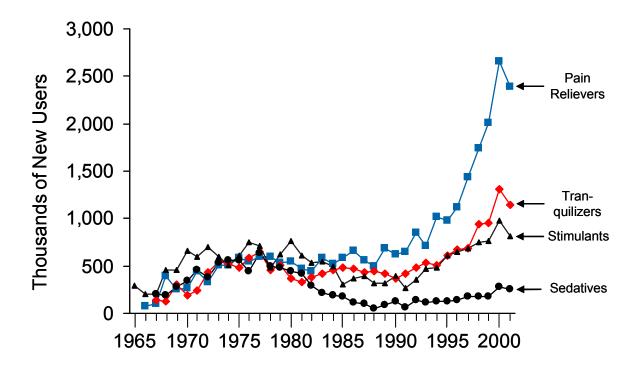
Inhalants

- The number of new inhalant users increased from 627,000 new users in 1994 to 1.2 million in 2000. During this period, more males initiated inhalant use than females. The number of new inhalant users in 2001 was similar to the number in 2000 (1.1 million).
- Inhalant initiates in 2001, as well as in prior years, were predominantly under age 18 (71 percent in 2001).

Psychotherapeutics

- This category includes nonmedical use of any prescription-type pain reliever, tranquilizer, stimulant, or sedative; it also includes methamphetamine. This category does not include over-the-counter substances.
- Pain reliever incidence increased from 1990, when there were 628,000 initiates, to 2000, when there were 2.7 million (Figure 6.3). In 2001, the number was 2.4 million, not significantly different from 2000. About half (52 percent) of the new users in 2001 were females.

Figure 6.3 Annual Numbers of New Nonmedical Users of Psychotherapeutics: 1965-2001



- First use of stimulants increased during the 1990s from 270,000 in 1991 to 983,000 in 2000 and 808,000 in 2001.
- Incidence of methamphetamine use rose between 1991 (210,000 new users) and 1998 (454,000 new users). Since then, there have been no statistically significant changes. There were an estimated 326,000 methamphetamine initiates in 2001.
- Initiation of tranquilizer use increased steadily during the 1990s, from 373,000 initiates in 1990 to 1.3 million in 2000 and 1.1 million in 2001.
- The number of sedative initiates has remained below 300,000 per year after 1981. During the 1970s, the estimates had risen above 500,000 per year from 1973 to 1975 and peaked at 638,000 in 1977.

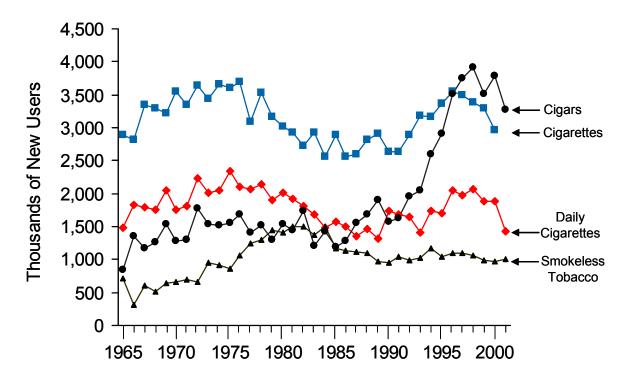
Alcohol

• Alcohol incidence increased steadily during the 1990s, from 3.3 million new users in 1990 to 5.6 million in 2000. Youths under 18 accounted for much of the increase, the number of adolescent initiates nearly doubling from 2.2 million in 1990 to 4.1 million in 2000. During this period, the increase was equally distributed among boys (1.1 million to 2.1 million) and girls (1.1 million to 2.0 million).

Tobacco

• Cigarette initiation increased from 2.6 million initiates in 1990 to 3.6 million in 1996, then decreased to 3.0 million in 2000. Initiation of cigarette use among youths under 18 significantly decreased from 2.8 million new users in 1996 to 2.2 million in 2000 (Figure 6.4).

Figure 6.4 Annual Numbers of New Users of Tobacco: 1965-2001



- The number of new daily smokers decreased from 2.1 million in 1998 to 1.4 million in 2001. Among youths under 18, the number of new daily smokers decreased from 1.1 million per year between 1997 and 2000 to 757,000 in 2001. This corresponds to a decrease from about 3,000 to about 2,000 new youth smokers per day.
- Approximately three quarters (75 percent) of persons who tried their first cigarette in 2000 were under age 18. Among persons who first began daily smoking in 2001, about half (53 percent) were under age 18. Of the approximately 4,000 new regular smokers per day in 2001, approximately 2,000 per day were under age 18.
- Initiation of cigar smoking more than doubled during the 1990s, from 1.6 million new users in 1990 to 3.9 million in 1998. In 2001, the number of new users dropped to 3.3 million. Since 1990, youths under 18 have constituted an increasingly greater proportion of the number of new cigar smokers, from 21 percent in 1991 to 48 percent in 2001.

7. Youth Prevention-Related Measures

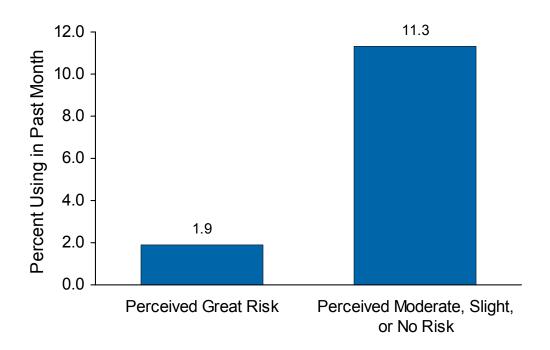
This chapter presents results from the 2002 National Survey on Drug Use and Health (NSDUH) for various measures related to the prevention of substance use among youths aged 12 to 17. These measures include perceptions of risk, availability of substances (cigarettes, alcohol, and illicit drugs), perceived parental disapproval of substance use, attitudes toward school and religion, participation in youth activities, involvement in delinquent behavior, and exposure to substance abuse prevention messages and programs.

NSDUH includes an extensive set of questions about risk and protective factors directed at youths aged 12 to 17. Risk factors include those individual characteristics or social environments associated with an increased likelihood of substance use, while protective factors are related to a decreased likelihood of substance use. These factors derive from circumstances, influences, and perceptions at many levels, such as the individual, peer, family, school, and community levels (Hawkins, Catalano, & Miller, 1992). One goal of research on preventing substance use has been to identify both risk factors and protective factors, and, subsequently, design programs that might decrease substance use.

Perceptions of Risk

- Youths were asked how much they thought people risk harming themselves physically and in other ways when they use various substances. Response choices in the survey were "great risk," "moderate risk," "slight risk," or "no risk." Only 32.4 percent of youths indicated that smoking marijuana once a month was a great risk. A higher percentage of youths perceived a great risk in using cocaine once a month (50.5 percent). Smoking one or more packs of cigarettes per day was cited as a great risk by 63.1 percent of youths. About three fifths of all youths (62.2 percent) thought that having four or five drinks of an alcoholic beverage nearly every day was a great risk.
- Youths of different ages reported different patterns of perceived risk from substance use. For alcohol and cigarettes, the percentages indicating great risk were similar for youths aged 12 or 13 and those aged 16 or 17. For example, 61.8 percent of 12 or 13 year olds and 65.1 percent of 16 or 17 year olds believed that smoking one or more packs of cigarettes per day was a great risk. The percentage of youths who perceived smoking marijuana once a month as a great risk decreased with age. Specifically, 42.0 percent of youths aged 12 or 13 and 24.1 percent of youths aged 16 or 17 perceived smoking marijuana once a month as a great risk. In contrast, the percentage of youths who perceived using cocaine once a month as a great risk increased with age. Specifically, 42.8 percent of youths aged 12 or 13 and 59.2 percent of those aged 16 or 17 perceived a great risk of using cocaine once a month.
- Among youths indicating that "smoking marijuana once a month" was a "great risk," only 1.9 percent indicated that they had used marijuana in the past month. However, among youths who indicated "moderate, slight, or no risk," the prevalence rate was 11.3 percent—almost 6 times larger (Figure 7.1).

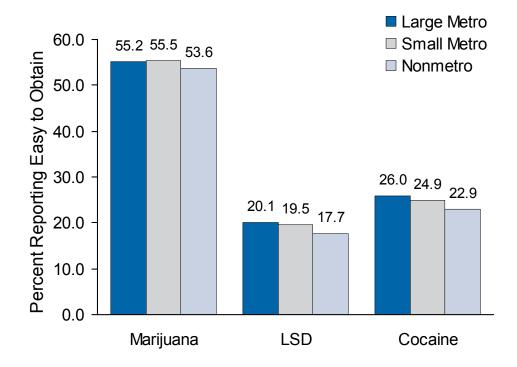
Figure 7.1 Past Month Marijuana Use among Youths Aged 12 to 17, by Perceived Risk of Smoking Marijuana Once a Month: 2002



Availability

- Approximately one in six youths (16.7 percent) reported that they had been approached by someone selling drugs in the past month. Those who had been approached reported a much higher rate of past month use of an illicit drug than those who had not been approached (36.2 and 6.7 percent, respectively).
- Slightly more than half of youths aged 12 to 17 indicated that it would be fairly or very easy to obtain marijuana if they wanted some (55.0 percent). Yet the ease of obtaining marijuana varied greatly by age. Only 26.0 percent of 12 or 13 year olds indicated that it would be fairly or very easy to obtain marijuana, but 79.0 percent of those 16 or 17 years of age indicated that it would be fairly or very easy to obtain this substance.
- The percentages of youths reporting that it was fairly or very easy to obtain specific drugs were 25.0 percent for cocaine, 19.4 percent for LSD, and 15.8 percent for heroin.
- The percentage of youths who reported that it would be fairly or very easy to obtain marijuana was similar for youths who lived in large metropolitan areas (55.2 percent), small metropolitan areas (55.5 percent), and nonmetropolitan areas (53.6 percent) (Figure 7.2). There were some statistically significant differences across metropolitan and nonmetropolitan areas in the percentages of youths reporting that it would be easy to obtain cocaine, heroin, and LSD; however, these differences were typically quite small.

Figure 7.2 Perceived Availability of Selected Drugs among Youths Aged 12 to 17, by County Type: 2002



Parental Disapproval of Substance Use

- Youths who perceived that their parents would "strongly disapprove" of their use of illicit substances were much less likely to use those substances than youths who perceived that their parents would only "somewhat disapprove" or "neither approve nor disapprove." For example, among youths who perceived that their parents would strongly disapprove of smoking one or more packs of cigarettes a day (89.5 percent of youths), only 9.4 percent had used cigarettes in the past month compared with 44.0 percent of youths who perceived that their parents would not strongly disapprove.
- Most youths (89.1 percent) reported that their parents would strongly disapprove of their trying marijuana once or twice. Among these youths, only 5.5 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, 30.2 percent reported past month use of marijuana.

Attitudes about School

Youths were asked whether they liked or kind of liked school, whether assigned schoolwork was meaningful and important, whether their courses at school during the past year were very or somewhat interesting, whether the things learned in school during the past year would be important later in life, and whether teachers always or sometimes in the past year let them know that they were doing a good job with schoolwork. Youths who had these types of positive attitudes about their school were less likely to use substances than other students. For example, 78.8 percent of youths reported that they "liked or kind of liked going to school." Among those youths, 9.3 percent had used an illicit drug in the past month; however, among youths who either "didn't like it very much" or "hated it," 20.8 percent had used an illicit drug in the past month.

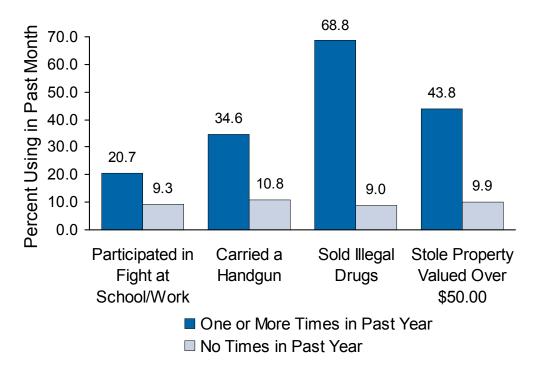
Delinquent Behavior

- Approximately one fifth (20.6 percent) of youths aged 12 to 17 reported having gotten into a serious fight at school or work one or more times during the past year. Taking part in a group-against-group fight was reported by 15.9 percent of youths. Other delinquent activities included carrying a handgun (3.3 percent), selling illegal drugs (4.4 percent), stealing (or trying to steal) something worth more than \$50 (4.9 percent), and attacking others with the intent to seriously hurt them (7.8 percent).
- Youths who self-reported delinquent behavior during the past year were more likely to use illicit drugs in the past month than other youths. Specifically, youths reported the following levels of using an illicit drug in the past month depending on whether or not they had engaged in the delinquent behavior: getting into a serious fight at school or work (20.7 vs. 9.3 percent); carrying a handgun (34.6 vs. 10.8 percent); selling illegal drugs (68.8 vs. 9.0 percent); and stealing or trying to steal something worth \$50 or more (43.8 vs. 9.9 percent) (Figure 7.3).

Participation in Religious and Other Activities

- Among youths who attended religious services 25 times or more in the past year (33.0 percent of youths), 7.1 percent had used an illicit drug in the past month. Among youths attending less often or not at all, 13.9 percent reported past month use. Among youths who agreed or strongly agreed that religious beliefs are a very important part of their life (78.2 percent of all youths), 9.2 percent had used an illicit drug in the past month. In contrast, among youths who "disagreed or strongly disagreed" with the statement, 20.5 percent had used an illicit drug.
- Among youths who participated in two or more youth activities, such as band, sports, student government, or dance lessons (84.6 percent of youths), only 10.7 percent had used an illicit drug in the past month. On the other hand, among those youths indicating one or no youth activities in the past year, 17.3 percent had used an illicit drug in the past month.

Figure 7.3 Past Month Illicit Drug Use among Youths Aged 12 to 17, by Participation in Delinquent Behaviors: 2002



Exposure to Prevention Messages and Programs

- In 2002, a majority (83.2 percent) of youths aged 12 to 17 reported having seen or heard alcohol or drug prevention messages outside of school in the past year. Youths who had seen or heard these messages indicated a slightly lower past month use of an illicit drug (11.3 percent) than youths who had not seen or heard these types of messages (13.2 percent).
- Among youths aged 12 to 17 who were enrolled in school during the past 12 months, 78.8 percent reported having seen or heard drug or alcohol prevention messages in school during that period. Of those indicating they had seen or heard these messages, the rate of past month illicit drug use was 10.9 percent compared with 14.6 percent for the remaining youths.
- Over half of all youths aged 12 to 17 (58.1 percent) indicated that they had talked with at least one parent in the past year about the dangers of tobacco, alcohol, or drug use. The prevalence rate for past month use of an illicit drug was 11.3 percent among this group and 12.1 percent among those who had not had this parental discussion.

• Youths were asked if they had participated in various special programs dealing with substance use and other related problems in the past year. These programs and the percentage of youths participating were problem-solving, communication skills, or self-esteem groups (23.5 percent); violence prevention programs (17.1 percent); alcohol, tobacco, or drug prevention programs outside of school (12.7 percent); pregnancy or sexually transmitted disease (STD) prevention programs (13.9 percent); and programs for dealing with alcohol or drug use (5.5 percent).

8. Substance Dependence, Abuse, and Treatment

The National Survey on Drug Use and Health (NSDUH) includes a series of questions to assess dependence on and abuse of substances, including alcohol and illicit drugs, which include nonmedical use of prescription-type drugs. These questions are designed to measure dependence and abuse based on criteria specified in the *Diagnostic and Statistical Manual of Mental Di*sorders, 4th edition (DSM-IV) (American Psychiatric Association [APA], 1994). The questions on dependence ask about health, emotional problems, attempts to cut down on use, tolerance, withdrawal, and other symptoms associated with substances used. 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 substances used. Dependence reflects a more severe substance problem than abuse, and persons are classified with abuse of a particular substance only if they are not dependent on that substance.

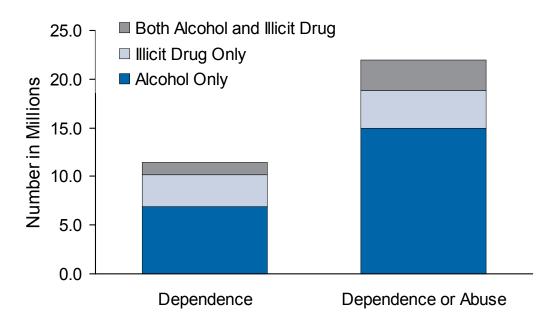
This chapter provides estimates of the prevalence and patterns of substance dependence and abuse in the Nation from the 2002 NSDUH. It also provides estimates of the prevalence and patterns of the receipt of treatment for problems related to substance use. The third section of this chapter discusses the need for and receipt of "specialty" treatment for problems associated with substance use.

8.1 Substance Dependence and Abuse

- An estimated 22.0 million Americans aged 12 or older in 2002 were classified with substance dependence or abuse (9.4 percent of the total population). Of these, 3.2 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 14.9 million were dependent on or abused alcohol but not illicit drugs (Figure 8.1).
- Of the 22.0 million persons with substance dependence or abuse in 2002, about half (11.5 million) were substance dependent. Of these, 1.3 million were classified with dependence on both alcohol and illicit drugs, 6.9 million were classified with dependence on alcohol but not illicit drugs, and 3.3 million were classified with dependence on illicit drugs but not alcohol.
- Of the 7.1 million Americans classified with dependence on or abuse of illicit drugs, 4.3 million were dependent on or abused marijuana. This represents 1.8 percent of the total population aged 12 or older and 60.3 percent of all those classified with illicit drug dependence or abuse.

• Among past year users of heroin in 2002, 53.0 percent (0.2 million) were classified with dependence on or abuse of heroin. Among past year users of cocaine, 25.2 percent (1.5 million) were classified with dependence on or abuse of cocaine. Among past year users of marijuana, 16.7 percent (4.3 million) were classified with dependence on or abuse of marijuana. Among past year users of pain relievers, 13.7 percent (1.5 million) were classified with dependence on or abuse of pain relievers (Figure 8.2).

Figure 8.1 Past Year Substance Dependence or Abuse among Persons Aged 12 or Older: 2002

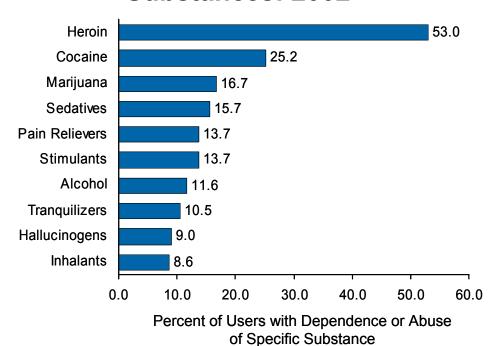


• There were 18.1 million persons classified with dependence on or abuse of alcohol (7.7 percent of the total population aged 12 or older). Among past year users of alcohol, 11.6 percent were classified with alcohol dependence or abuse.

Age at First Use

- Adults who first used drugs 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, 13.0 percent were classified with illicit drug dependence or abuse compared with only 2.8 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 demographic subgroups.
- A similar pattern was observed for age at first use of alcohol and dependence on or abuse of alcohol among adults. 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 3.7 percent of adults who had first used alcohol at age 18 or older.

Figure 8.2 Dependence or Abuse of Specific Substances among Past Year Users of Substances: 2002



Age

- Rates of substance dependence or abuse showed substantial variation by age. The rate for dependence or abuse was 1.0 percent at age 12, and rates generally increased for each successive year of age until the highest rate (26.8 percent) was reached at age 21 (Figure 8.3). After age 21, the rates generally declined with age.
- The rate of substance dependence or abuse was 8.9 percent for youths aged 12 to 17; it was 21.7 percent for persons aged 18 to 25 and 7.3 percent for persons aged 26 or older. Illicit drugs accounted for 62 percent of youths with substance dependence or abuse, 38 percent of persons aged 18 to 25, and 24 percent of persons aged 26 or older (Figure 8.4).

Gender

- Among persons aged 12 or older, males (12.8 percent) were twice as likely as females (6.1 percent) to be classified with substance dependence or abuse.
- Among youths aged 12 to 17, the rate of substance dependence or abuse among females (8.6 percent) was not significantly different from the rate among males (9.3 percent).

Figure 8.3 Past Year Illicit Drug or Alcohol Dependence or Abuse, by Age: 2002

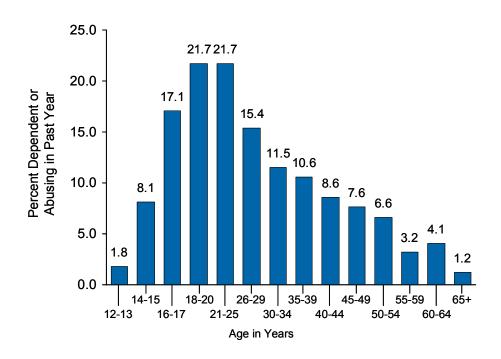
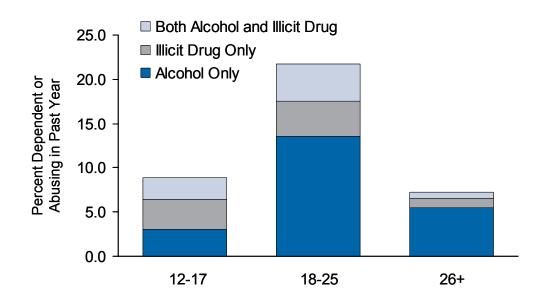


Figure 8.4 Past Year Illicit Drug or Alcohol Dependence or Abuse, by Age and Substance: 2002



Race/Ethnicity

• Among persons aged 12 or older in 2002, the rate of substance dependence or abuse was highest among American Indians/Alaska Natives (14.1 percent). The next highest rate was among persons reporting two or more races (13.0 percent). Asians had the lowest rate of dependence or abuse (4.2 percent). The rate was similar among blacks and whites (9.5 and 9.3 percent, respectively). Among Hispanics, the rate was 10.4 percent.

Education/Employment

- Rates of substance dependence or abuse varied with level of education. Among adults aged 18 or older in 2002, those who were college graduates had the lowest rate of dependence or abuse (7.1 percent), while those with some college, high school graduates, and those who were not high school graduates had significantly higher rates (10.9, 9.4, and 10.6 percent, respectively).
- Rates of substance dependence or abuse varied with current employment status. In 2002, an estimated 19.7 percent of unemployed adults aged 18 or older were classified with dependence or abuse, while 10.6 percent of full-time employed adults and 10.5 percent of part-time employed adults were classified as such.
- Most adults with substance dependence or abuse were employed either full or part time. Of the 19.8 million adults classified with dependence or abuse, 15.3 million (77.1 percent) were employed.

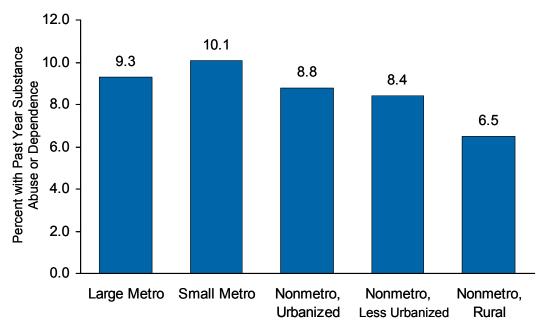
Criminal Justice Populations

- 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 (36.2 percent) than those who were not on parole or a supervised release during the past year (9.2 percent).
- Being on probation also was associated with substance dependence or abuse. The rate of illicit drug dependence or abuse was 37.1 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 geographic region in 2002. The rate was highest for persons from the Midwest (10.2 percent). The rate was 9.6 percent for the West region, 9.0 percent for the South, and 8.7 percent for the Northeast.
- Among persons aged 12 or older, the rate for substance dependence or abuse was 9.3 percent in large metropolitan counties, 10.1 percent in small metropolitan counties, and 8.3 percent in nonmetropolitan counties. The rate was lower (6.5 percent) in completely rural counties than in large metropolitan or small metropolitan counties (Figure 8.5).

Figure 8.5 Past Year Illicit Drug or Alcohol Dependence or Abuse among Persons Aged 12 or Older, by County Type: 2002

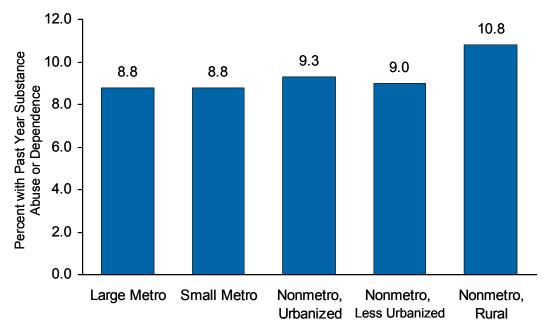


• Among youths aged 12 to 17, the rate of substance dependence or abuse was similar in metropolitan and nonmetropolitan counties (Figure 8.6). In contrast to the pattern for all ages, the rate in completely rural counties was highest (10.8 percent), but this rate was not statistically different from the rates for other county types. However, the rate of alcohol dependence or abuse among youths was significantly higher in completely rural counties (9.3 percent) than in large metropolitan counties (5.8 percent) and small metropolitan counties (5.5 percent). The rates of illicit drug dependence or abuse were 5.6 percent in both completely rural counties and large metropolitan counties and 5.8 percent in small metropolitan counties.

8.2 Treatment for a Substance Use Problem

Estimates described in this section refer to treatment received to reduce or stop 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 in a hospital, at a rehabilitation facility (outpatient or inpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. The definition of treatment in this section is different from the definition of treatment described in Section 8.3 (specialty treatment), which excludes treatment at an emergency room, private doctor's office, self-help group, prison or jail, or at a hospital as an outpatient.

Figure 8.6 Past Year Illicit Drug or Alcohol Dependence or Abuse among Youths Aged 12 to 17, by County Type: 2002



• An estimated 3.5 million people aged 12 or older (1.5 percent of the population) received some kind of treatment for a problem related to the use of alcohol or illicit drugs in the 12 months prior to being interviewed in 2002. Of these, 1.3 million received treatment for both alcohol and illicit drugs, 0.7 million received treatment for illicit drugs but not alcohol, and 1.1 million received treatment for alcohol but not illicit drugs. (Estimates by substance do not add to the total because the total includes persons who reported receiving treatment but did not report which substance the treatment was for.)

Age, Gender, and Race/Ethnicity

- Among persons aged 12 or older in 2002, males were more likely than females to receive treatment for an alcohol or illicit drug problem in the past year (2.1 vs. 0.9 percent, respectively). Among youths aged 12 to 17, males also were more likely to receive treatment than females (1.7 vs. 1.2 percent, respectively).
- Among persons aged 12 or older in 2002, the rates of alcohol or illicit drug treatment during the 12 months prior to the interview were highest among American Indians/Alaska Natives (4.8 percent), blacks (2.2 percent), and persons reporting two or more races (2.1 percent). The lowest rate of treatment was among Asians (0.2 percent).

County Type

• The rates for any illicit drug treatment among persons aged 12 or older in 2002 were 1.0 percent in small metropolitan areas, 0.9 in large metropolitan counties, and 0.6 percent in all nonmetropolitan counties. The rate was 0.4 percent in completely rural counties.

Location and Substance

- Among the 3.5 million persons aged 12 or older who received treatment for alcohol or illicit drugs in the past year, more than half (2.0 million) received treatment at a self-help group (Figure 8.7). There were 1.5 million people who received treatment at a rehabilitation facility as an outpatient, 1.1 million who received treatment at a rehabilitation facility as an inpatient, 1.0 million at a mental health center as an outpatient, 859,000 at a hospital as an inpatient, 523,000 at a private doctor's office, 469,000 at an emergency room, and 259,000 at a prison or jail. (Note that the estimates of treatment by location include persons reporting more than one location.)
- More than half (2.2 million) of the 3.5 million persons who received treatment for a substance in the past year received treatment for alcohol during their most recent treatment (Figure 8.8). An estimated 974,000 persons received treatment for marijuana, 796,000 persons received treatment for cocaine, 360,000 for pain relievers, and 277,000 for heroin. (Note that the estimates of treatment by substance include persons reporting more than one substance.)

Figure 8.7 Locations Where Past Year Substance Treatment Was Received among Persons Aged 12 or Older: 2002

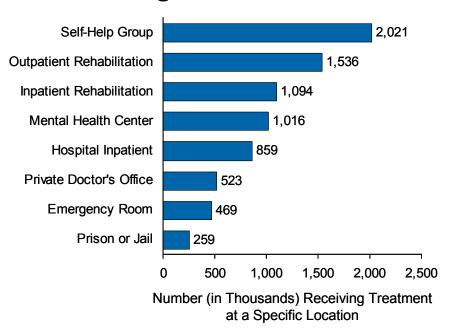
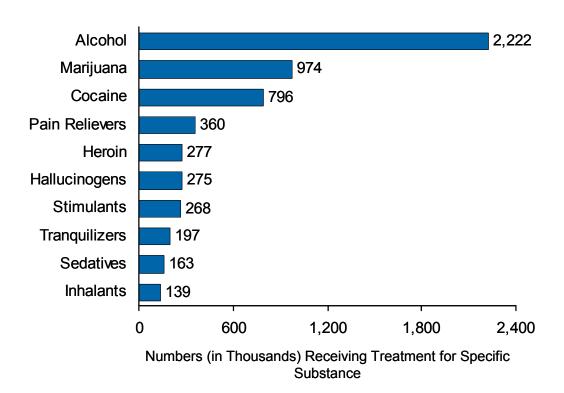


Figure 8.8 Substances for Which Persons Aged 12 or Older Received Treatment in the Past Year: 2002



8.3 Needing and Receiving Specialty Treatment

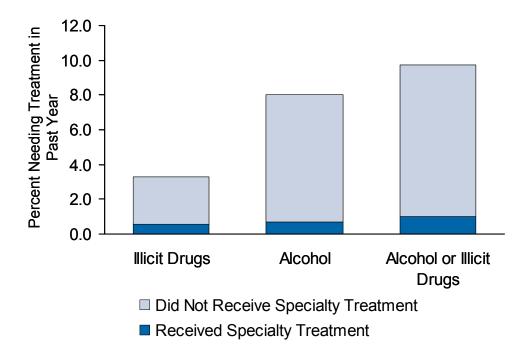
This section discusses the need for and receipt of treatment for a substance use problem at a "specialty" treatment facility. It includes estimates of the number of persons needing and receiving treatment, as well as those needing but not receiving treatment. These estimates are specified separately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

An individual needing treatment for an illicit drug problem is defined as receiving treatment for his or her drug problem only if he or she reported receiving specialty treatment for drugs in the past year. Thus, an individual who needed treatment for illicit drugs but only received specialty treatment for alcohol in the past year was not counted as receiving treatment for drugs. Similarly, an individual who needed treatment for an alcohol problem who only

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

• In 2002, the estimated number of persons aged 12 or older needing treatment for an alcohol or illicit drug problem was 22.8 million (9.7 percent of the total population). Of these, 2.3 million persons (1.0 percent of the total population aged 12 or older; 10.3 percent of those who needed treatment) received treatment at a specialty substance abuse facility in the past 12 months and 20.5 million persons (8.7 percent of the total population) did not receive treatment at a specialty substance abuse facility (Figure 8.9).

Figure 8.9 Past Year Need for and Receipt of Specialty Treatment for Any Illicit Drug or Alcohol Use among Persons Aged 12 or Older: 2002



• Of the 2.3 million people aged 12 or older (1.0 percent of the population) who received some kind of specialty substance treatment, 709,000 persons received treatment for both alcohol and illicit drugs, 840,000 persons received treatment for alcohol only, and 703,000 persons received treatment for illicit drugs only. (Estimates by substance do not add to the total because the total includes persons who reported receiving specialty treatment but did not report which substance the treatment was for.)

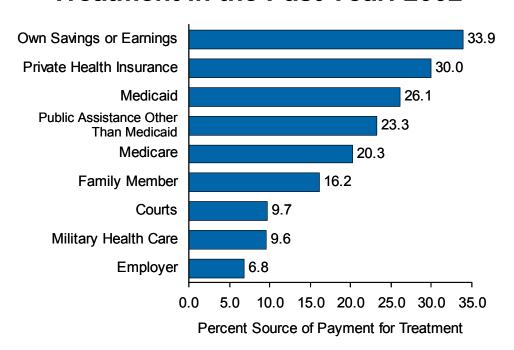
- More than half of the 2.3 million persons aged 12 or older who received specialty substance treatment in the past year also received treatment at a self-help group (1.5 million persons). An estimated 458,000 had received treatment at an emergency room, 401,000 at a doctor's office, and 198,000 at a prison or jail.
- Of the 20.5 million people who needed but did not receive treatment in 2002, an estimated 1.2 million (5.8 percent) reported that they felt they needed treatment for their alcohol or drug problem. Of the 1.2 million persons who felt they needed treatment, 446,000 (37.5 percent) reported that they made an effort but were unable to get treatment and 744,000 (62.5 percent) reported making no effort to get treatment.
- 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 problem in 2002. Of this group, only 186,000 youths received treatment (8.2 percent of youths who needed treatment), leaving an estimated 2.1 million youths who needed but did not receive treatment for a substance abuse problem.

Illicit Drug Treatment and Treatment Need

- In 2002, the estimated number of persons aged 12 or older needing treatment for an illicit drug problem was 7.7 million (3.3 percent of the total population). Of these persons, 1.4 million (18.2 percent) received treatment for drug abuse at a specialty substance abuse facility in the past 12 months (Figure 8.9).
- The estimated number of persons needing treatment for an illicit drug problem who did not receive treatment was 6.3 million people in 2002, or 2.7 percent of the total population aged 12 or older (Figure 8.9).
- Persons classified with dependence on or abuse of cocaine were more likely to receive specialty treatment for illicit drugs (24.3 percent) in the past year than persons classified with dependence on or abuse of any other illicit drug. The rate of specialty treatment for illicit drugs was 11.0 percent among persons with dependence on or abuse of illicit drugs. The rate was 18.2 percent for persons with dependence on or abuse of pain relievers, 13.3 percent for those with dependence on or abuse of hallucinogens, 7.6 percent for persons with dependence on or abuse of marijuana or hashish, and 4.1 percent for persons with dependence on or abuse of inhalants.
- Of the 6.3 million people aged 12 or older who needed drug treatment but did not receive treatment at a specialty facility in 2002, an estimated 362,000 (5.7 percent) reported that they felt they needed treatment for their drug problem. This included an estimated 88,000 (24.4 percent) who reported that they made an effort but were unable to get treatment and 274,000 (75.6 percent) who reported making no effort to get treatment.
- For youths aged 12 to 17, an estimated 1.4 million persons (5.7 percent) needed treatment for an illicit drug abuse problem in 2002. Of this group, only 0.1 million people received treatment (10.0 percent of youths aged 12 to 17 who needed treatment), leaving an estimated 1.3 million youths who needed but did not receive treatment.

• Among the 1.4 million persons who received specialty treatment for an illicit drug problem in the past year, 33.9 percent reported "own savings or earnings" as a source of payment for their most recent specialty treatment (Figure 8.10). An estimated 30.0 percent reported private health insurance, 26.1 percent reported Medicaid, and 23.3 percent reported public assistance other than Medicaid as a source of payment. An estimated 20.3 percent reported Medicare, and 16.2 percent reported family members. (Note that the estimates of treatment by source of payment include persons reporting more than one source.)

Figure 8.10 Source of Payment for Most Recent Specialty Treatment among Persons Aged 12 or Older Who Received Specialty Illicit Drug Treatment in the Past Year: 2002

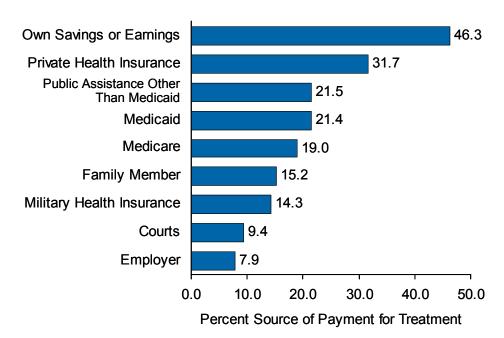


Alcohol Treatment and Treatment Need

- In 2002, the estimated number of persons aged 12 or older needing treatment for an alcohol problem was 18.6 million (7.9 percent of the total population). Of these, 8.3 percent (1.5 million) received alcohol treatment at a specialty substance abuse facility in the past 12 months (Figure 8.9).
- The estimated number of persons needing treatment for alcohol but who did not receive treatment was 17.1 million people in 2002, or 7.3 percent of the total population aged 12 or older (Figure 8.9).

- Of the 17.1 million people who needed but did not receive alcohol treatment for their alcohol problem in 2002, an estimated 761,000 (4.5 percent) reported that they felt they needed treatment for their alcohol problem. Of the 761,000 persons, 266,000 (35 percent) reported that they made an effort but were unable to get treatment and 495,000 (65 percent) reported making no effort to get treatment.
- There were 1.5 million youths aged 12 to 17 (6.0 percent) who needed treatment for an alcohol problem in 2002. Of this group, only 0.1 million received treatment (8.1 percent of youths aged 12 to 17 who needed treatment), leaving an estimated 1.4 million youths who needed but did not receive treatment.
- Among the 1.5 million persons who received specialty treatment for an alcohol problem in the past year, 46.3 percent reported "own savings or earnings" as a source of payment for their most recent specialty treatment (Figure 8.11). An estimated 31.7 percent reported using private health insurance, 21.5 percent reported public assistance other than Medicaid, and 21.4 percent reported Medicaid. An estimated 19.0 percent reported using Medicare, and 15.2 percent reported family members. (Note that the estimates of treatment by source of payment include persons reporting more than one source of payment.)

Figure 8.11 Source of Payment for Most Recent Specialty Alcohol Treatment among Persons Aged 12 or Older Who Received Specialty Alcohol Treatment in the Past Year: 2002



9. Prevalence and Treatment of Mental Health Problems

This chapter presents national estimates of the prevalence and characteristics of persons aged 18 or older with serious mental illness (SMI) and of persons aged 12 or older who received treatment for mental health problems. The 2002 National Survey on Drug Use and Health (NSDUH) includes a series of questions designed to assess SMI among adults aged 18 or older. The survey also includes questions on mental health treatment and counseling. Separate questions are asked for adults and for youths aged 12 to 17, and different definitions are applied. Both the youth and the adult questions specifically exclude treatment for problems with substance use, which is covered elsewhere in the interview. Because the survey represents the civilian, noninstitutionalized population, persons who reside in long-term psychiatric or other institutions at the time of interview are excluded from the sample and from the estimates presented in this chapter.

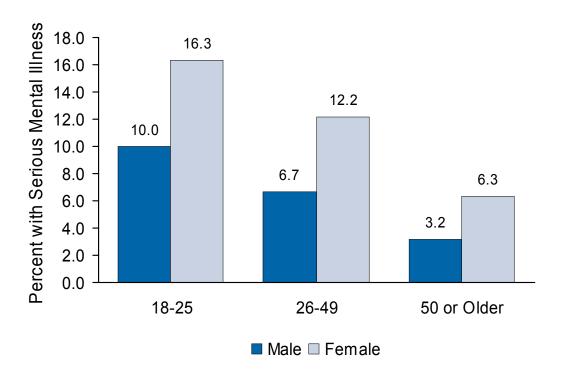
9.1 Serious Mental Illness

This section presents national estimates of the prevalence and characteristics of adults who had SMI in 2002. SMI is defined for this report as having at some time during the past year a diagnosable mental, behavioral, or emotional disorder that met the criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) (American Psychiatric Association [APA], 1994) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. A scale consisting of six NSDUH questions is used to measure SMI. These questions ask 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. Use of this scale to estimate SMI is supported by methodological research that determined the scale to be a good predictor of SMI, based on clinical assessments done on survey respondents (Kessler et al., 2003). The six questions and further discussion of this scale are given in Section B.5 of Appendix B.

Prevalence of Serious Mental Illness

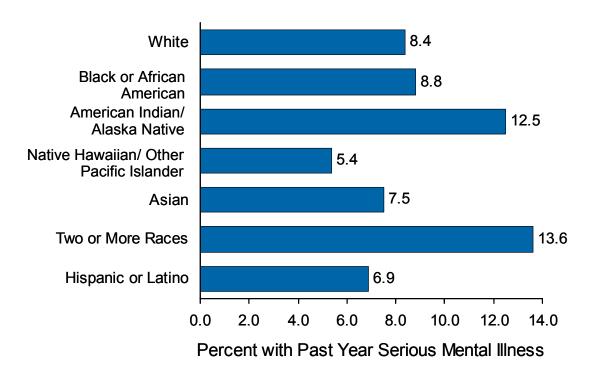
- In 2002, there were an estimated 17.5 million adults aged 18 or older with SMI. This represents 8.3 percent of all adults.
- Rates of SMI were highest for persons aged 18 to 25 (13.2 percent) and lowest for persons aged 50 or older (4.9 percent).
- Among adults, the percentage of females with SMI was higher than the percentage of males (10.5 vs. 6.0 percent). Rates were higher for women than men in all age groups (Figure 9.1).

Figure 9.1 Rates of Serious Mental Illness among Adults Aged 18 or Older, by Age and Gender: 2002



- Among adults aged 18 or older in 2002, the rate of SMI was highest among persons reporting two or more races (13.6 percent) and American Indian/Alaska Natives (12.5 percent) and lowest among Native Hawaiian or other Pacific Islanders (5.4 percent) (Figure 9.2).
- In 2002, persons who did not complete high school and those with some college had the highest rates of SMI (9.6 and 9.5 percent, respectively). The rate was 8.6 percent among high school graduates. Persons who completed college had the lowest rate of SMI (5.8 percent).
- Rates of SMI in 2002 were highest among unemployed persons (14.2 percent) and lowest among persons employed full time (7.3 percent). The rate among persons employed part time was 9.7 percent. However, among persons aged 26 to 49, the highest rate of SMI was among persons not in the labor force (15.5 percent). Overall, most (63.6 percent) of the adults with SMI were employed.
- Rates of SMI did not vary greatly by geographic region. The rate in 2002 was 8.5 percent in the Northeast and Midwest, 8.4 percent in the South, and 7.8 percent in the West.
- The rate of SMI among adults was higher in nonmetropolitan areas (9.4 percent) than in large metropolitan areas (7.6 percent) or small metropolitan areas (8.8 percent).

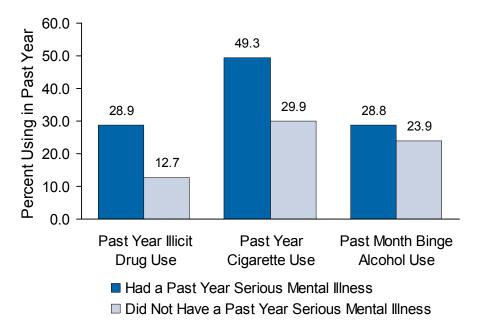
Figure 9.2 Past Year Serious Mental Illness among Adults Aged 18 or Older, by Race/Ethnicity: 2002



Serious Mental Illness and Substance Use

- Adults who used illicit drugs were more than twice as likely to have SMI as adults who did not use an illicit drug. In 2002, among adults who used an illicit drug in the past year, 17.1 percent had SMI in that year, while the rate was 6.9 percent among adults who did not use an illicit drug. This pattern of higher rates of SMI among illicit drug users was observed within most demographic subgroups.
- Adults with SMI were more than twice as likely as those without SMI to use an illicit drug in the past year. Among persons with SMI, 28.9 percent used an illicit drug in the past year, while the rate was 12.7 percent among those without SMI. Similarly, among adults with SMI, the rate of past year cigarette use was 49.3 percent, while the rate was only 29.9 percent among adults without SMI (Figure 9.3).
- Among adults who were not in the labor force, those with SMI were approximately 3 times as likely to have used illicit drugs in the past year (21.2 percent) as those without SMI (6.9 percent).

Figure 9.3 Substance Use among Adults Aged 18 or Older, by Serious Mental Illness: 2002

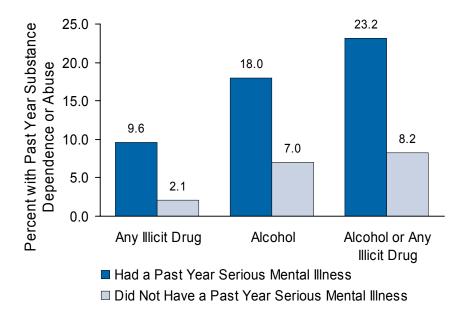


• SMI was not strongly correlated with alcohol use. The rate of past year alcohol use among adults with SMI was almost the same as the rate among adults without SMI (71.1 vs. 69.7 percent, respectively, in 2002). However, SMI was correlated with binge alcohol use, defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days. Among adults with SMI, 28.8 percent were binge drinkers, while 23.9 percent of adults without SMI were binge drinkers (Figure 9.3).

Co-Occurrence of Serious Mental Illness with Substance Dependence/Abuse

- SMI was highly correlated with substance dependence or abuse. Among adults with SMI in 2002, 23.2 percent were dependent on or abused alcohol or illicit drugs, while the rate among adults without SMI was only 8.2 percent. Adults with SMI were more likely than those without SMI to be dependent on or abuse illicit drugs (9.6 vs. 2.1 percent) and more likely to be dependent on or abuse alcohol (18.0 vs. 7.0 percent) (Figure 9.4).
- In 2002, an estimated 4.0 million adults met the criteria for both SMI and substance dependence or abuse in the past year. Of these, an estimated 0.8 million with SMI also were dependent on or abused both alcohol and illicit drugs, 0.9 million with SMI also were dependent on or abused an illicit drug only, and 2.4 million with SMI were dependent on or abused alcohol only.
- Among adults with substance dependence or abuse, 20.4 percent had SMI. The rate of SMI was 7.0 percent among adults who were not dependent on or abusing a substance.

Figure 9.4 Past Year Substance Dependence or Abuse among Adults Aged 18 or Older, by Serious Mental Illness: 2002



• Among persons with SMI in different gender and age categories, men aged 18 to 25 with SMI had the highest rate of illicit drug dependence or abuse (22.0 percent), as well as the highest rate of alcohol dependence or abuse (34.8 percent).

Serious Mental Illness among Adults on Probation or Parole

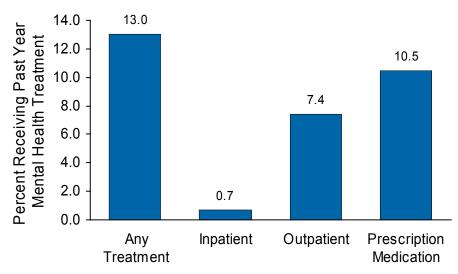
- The rate of SMI was higher among adults who were on probation during the past year than among those who were not on probation (16.3 vs. 8.1 percent).
- The rate of SMI was higher for adults who were on parole or supervised release (20.8 percent) than among those not on parole or supervised release (8.2 percent).

9.2 Mental Health Treatment and Unmet Need for Treatment among Adults

This section presents national estimates of the prevalence and characteristics of adults aged 18 or older who received mental health treatment in 2002. Estimates are presented for the total adult population and separately for the adult population with SMI. Treatment is defined as the receipt of 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; it also includes the use of prescription medication for treatment of a mental or emotional condition. Treatment for only a substance abuse problem is not included. Unmet need is defined as a perceived need for mental health treatment at any time in the 12 months prior to the interview that was not received.

- In 2002, an estimated 27.3 million adults received mental health treatment in the 12 months prior to the interview. This estimate represents 13.0 percent of the population 18 years old or older (Figure 9.5).
- The most prevalent type of treatment in the adult population in 2002 was prescription medication (10.5 percent), followed by outpatient treatment (7.4 percent).
- In 2002, an estimated 1.5 million adults (0.7 percent) were hospitalized for mental health problems at some time within the past 12 months.
- Rates of mental health treatment among adults varied by age, with the highest rate among adults aged 26 to 49 (14.6 percent). Rates were 10.6 percent for persons aged 18 to 25 years and 12.0 percent among those aged 50 or older.
- In 2002, female adults were more likely than males to receive treatment (17.0 vs. 8.7 percent). There was no gender difference in the rates of inpatient treatment (0.7 percent for males and 0.7 percent for females).
- Among racial/ethnic groups, the rates of mental health treatment for adults in 2002 were highest for American Indian/Alaska Natives (17.8 percent) and those reporting two or more races (16.6 percent); the rates were next highest for whites (14.7 percent) and lower for all other groups (8.5 percent for blacks, 8.5 percent for Asians, 8.2 for Hispanics, and 3.9 percent for Native Hawaiians or other Pacific Islanders).
- The overall rate of mental health treatment was lowest for adults with less than a high school education and high school graduates (11.7 percent for both groups) and highest for those with some college and college graduates (14.3 and 14.4 percent, respectively). There also were variations by type of treatment. Adults who had not completed high school were more likely than adults with some college or college graduates to have received inpatient mental health treatment in 2002 (1.6 vs. 0.4 percent). This pattern was reversed for outpatient treatment (9.6 percent of college graduates vs. 5.5 percent of persons who had not completed high school were less likely (9.4 percent) than those with some college (11.6 percent) to have received prescription medication.
- Among current employment status categories, adults who were employed full time had the lowest rates of mental health treatment, at 11.3 percent, compared with 14.2 percent for part-time employees and unemployed persons and 15.8 percent for adults who were not in the labor force. Adults not in the labor force were more likely than full-time employed persons to have received inpatient mental health treatment (1.3 vs. 0.3 percent), to have received outpatient treatment (8.4 vs. 6.5 percent), and to have taken prescription medication (13.7 vs. 8.6 percent).
- There was little variation in rates of treatment by region or type of county. Rates were 13.8 percent in the Northeast, 13.0 percent in the Midwest, 12.3 percent in the South, and 13.4 percent in the West. By county type, rates were 12.3 percent in large metropolitan areas, 14.1 percent in small metropolitan areas, and 13.1 percent in nonmetropolitan areas. In completely rural areas, the rate was 9.6 percent.

Figure 9.5 Past Year Mental Health Treatment among Adults Aged 18 or Older, by Type of Treatment: 2002



Type of Mental Health Treatment

- In 2002, adults with an annual family income of less than \$20,000 were more likely to have received treatment for mental health problems (15.4 percent) than were those with incomes of \$20,000 to \$49,999 (12.2 percent), those with incomes of \$50,000 to \$74,999 (12.9 percent), and those with incomes of \$75,000 or more (12.4 percent).
- Adults in families receiving government assistance were more likely to receive mental health treatment in 2002 (18.8 percent) than adults in unassisted families (12.2 percent). Adults in assisted families also were more likely than those in unassisted families to receive outpatient treatment or prescription medication and more likely to have received inpatient mental health treatment.
- In 2002, 5.4 percent of the adult population (11.3 million people) perceived an unmet need for mental health treatment in the 12 months prior to their interview. Among those who did not receive treatment, 3.3 percent perceived an unmet need, while the rate of perceived unmet need was 19.3 percent among those who did receive treatment. Unmet need among those who received treatment may be interpreted as delayed or insufficient treatment in the 12 months prior to the interview.
- Among adults who perceived an unmet need for mental health treatment in the past year, the five most often reported reasons were "could not afford the cost" (38.2 percent), "did not know where to go for services" (17.9 percent), "concerned about confidentiality" (11.8 percent), "health insurance does not pay enough for mental health treatment/counseling" (11.2 percent), and "might cause neighbors/community to have negative opinion" (11.2 percent).

Treatment and Unmet Need for Treatment among Adults with Serious Mental Illness

- Among the 17.5 million adults with SMI in 2002, 8.4 million (47.9 percent) received treatment for a mental health problem in the 12 months prior to the interview.
- The likelihood of receiving treatment among adults with SMI varied by age. More than half of adults aged 26 to 49 with SMI received treatment (54.4 percent), while 46.4 percent of those aged 50 or older and 34.2 percent of those aged 18 to 25 received treatment.
- Females with SMI were more likely than males with SMI to have received mental health treatment in the past year (52.3 vs. 39.5 percent).
- Rates of treatment for a mental health problem among persons with SMI did not vary greatly by geographic region. Rates by region were 50.7 percent in the Northeast, 47.5 percent in the Midwest and South, and 46.3 percent in the West.
- By county type, rates of treatment for a mental health problem among persons with SMI were highest for small metropolitan areas (52.0 percent); they were similar for large metropolitan areas (46.1 percent) and nonmetropolitan areas (45.7 percent).
- Among adults with SMI, 30.5 percent perceived an unmet need for mental health treatment in the 12 months prior to their interview. The same pattern of perceived unmet need was seen in the SMI population as in the overall population; that is, the rate of perceived unmet need among persons with SMI was higher among those who did receive treatment (37.8 percent) than among those who did not receive any treatment (23.8 percent).
- Adults with SMI who perceived an unmet need for mental health treatment in the past 12 months reported the same five most common reasons for not getting needed treatment that were reported by all adults with any unmet need: "could not afford the cost" (44.3 percent), "did not know where to go for services" (20.5 percent), "concerned about confidentiality" (13.4 percent), "health insurance does not pay enough for mental health treatment/counseling" (12.8 percent), and "might cause neighbors/community to have negative opinion" (12.3 percent).

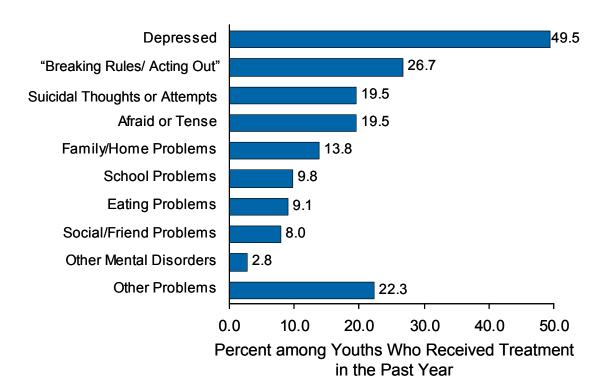
9.3 Mental Health Treatment among Youths

This section presents national estimates of the receipt of mental health treatment or counseling among youths aged 12 to 17. Data on reasons for last treatment visit and sources or locations of past year treatment also are discussed. Mental health treatment for youths 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 abuse problem is not included.

• In 2002, an estimated 4.8 million youths aged 12 to 17 received treatment or counseling for emotional or behavior problems in the year prior to the interview. This represents 19.3 percent of this population.

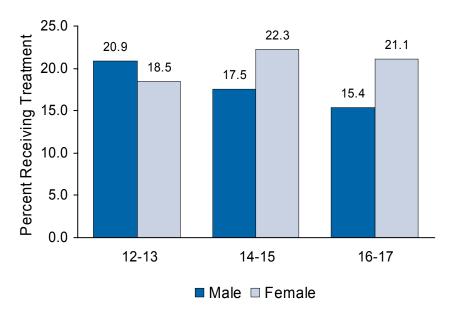
- Among the 4.8 million youths receiving mental health treatment in 2002, the most commonly reported sources were private therapists, psychologists, psychiatrists, social workers, or counselors (47.6 percent), followed by school counselors, school psychologists, or teachers (44.6 percent).
- Youths aged 12 or 13 were more likely to receive treatment from school counselors or school psychologists or by having regular meetings with a teacher, and youths aged 16 or 17 were more likely to receive treatment from private therapists, psychologists, psychiatrists, social workers, or counselors. In 2002, 422,000 youths, or 8.9 percent of those receiving treatment, were hospitalized for mental health treatment. Among youths receiving treatment, the rate of hospitalization was highest for youths aged 16 or 17 (11.7 percent).
- The reason cited most often for receiving mental health treatment was "felt depressed" (49.5 percent of youths receiving treatment), followed by "breaking rules or acting out" (26.7 percent), "thought about killing self or tried to kill self" (19.5 percent), and "felt very afraid or tense" (19.5 percent) (Figure 9.6).

Figure 9.6 Reasons for Mental Health Treatment in the Past Year among Youths Aged 12 to 17: 2002



- There was little variation by age group in the overall rates of treatment among youths (19.8 percent of those aged 12 or 13, 19.9 percent of those aged 14 or 15, and 18.2 percent of those aged 16 or 17).
- Females aged 12 to 17 were slightly more likely than males to have received mental health treatment or counseling in 2002 (20.7 vs. 18.0 percent).
- Among youths aged 12 or 13, boys were slightly more likely than girls to have received mental health treatment or counseling (20.9 vs. 18.5 percent). However, among youths aged 14 or 15 and 16 or 17, girls had significantly higher rates of treatment than boys (Figure 9.7).
- Asian youths were less likely than all other racial/ethnic groups to have received mental health services in 2002 (13.4 vs. 20.7 percent of youths reporting two or more races, 20.1 percent of whites, 19.3 percent of blacks, and 17.5 percent of Hispanics).
- Youths in families with incomes of less than \$20,000 were slightly more likely to have received mental health treatment in 2002 (21.8 percent) than those in families with higher incomes. Treatment rates in other income groups were 19.1 percent of those with incomes of \$20,000 to \$49,999, 18.1 percent of those with incomes of \$50,000 to \$74,999, and 18.9 percent of those with incomes of \$75,000 or more.
- Youths in families receiving government assistance were more likely than those in unassisted families to have received mental health treatment in 2002 (23.5 vs. 18.5 percent).

Figure 9.7 Past Year Mental Health Treatment among Youths Aged 12 to 17, by Age and Gender: 2002



- In 2002, youths in the West had somewhat lower rates of mental health treatment (18.0 percent) than those in other regions (18.9 percent of those living in the South, 19.6 percent of those in the Midwest, and 21.4 percent of those in the Northeast). By county type, youths had the following rates of treatment: those living in nonmetropolitan areas, 17.9 percent; those in small metropolitan areas, 19.5 percent; and those in large metropolitan areas, 19.8 percent.
- The rate of mental health treatment among youths who used illicit drugs in the past year (26.7 percent) was higher than the rate among youths who did not use illicit drugs (17.2 percent).

10. Discussion

This report presents findings from the 2002 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 estimates are not comparable with estimates from 2001 and earlier surveys. The primary focus of the report is on the numbers of persons and rates for a variety of measures related to substance use and mental health in 2002, including comparisons across sociodemographic and geographic subgroups of the U.S. population. Some of the most important findings for 2002 are presented in the Highlights section of this report.

The prevalence estimates from the 2002 NSDUH are uniformly higher than the corresponding estimates from the 2001 NHSDA. Analyses to date of the effects of the methodological changes in 2002 (see Appendix C) indicate that the higher prevalences in 2002 mostly reflect an increase in the reporting of these behaviors by survey respondents due to the \$30 incentive payment and other survey improvements, not actual increases in the prevalence of these behaviors and problems. The results of these analyses were presented to a panel of survey methodology experts, who concluded that 2002 estimates should not be compared with 2001 and earlier estimates. The panel also concluded that it would not be possible to develop a method of "adjusting" pre-2002 data to make them comparable for trend assessment.

Although traditional comparisons of estimates across years cannot be used to examine recent trends, it is possible to study trends by constructing "retrospective" estimates of lifetime prevalence and incidence produced from the 2002 NSDUH data alone (see Chapters 5 and 6). These trends can be compared with the results from Monitoring the Future (MTF), a study sponsored by the National Institute on Drug Abuse (NIDA). Figure 10.1 shows the trends in lifetime marijuana use based on the 2002 NSDUH retrospective estimates for youths aged 16 to 20, as well as trends in lifetime marijuana use and past month marijuana use among the MTF 12th graders. The two data sources produce similar trends in lifetime prevalence, and the MTF trend in past month use also is similar to the trend for lifetime use. These trends also are consistent with trends for youths aged 12 to 17 and young adults aged 18 to 25 discussed in Chapter 5. They show very low rates of illicit drug use in the mid-1960s. In 1965, only 1.8 percent of youths had ever used marijuana. There were dramatic increases in use during the late 1960s and 1970s, and by 1979, 19.6 percent of youths had ever used marijuana. After that, use declined until 1991, when 11.5 percent of youths had ever used marijuana. The trend reversed during the 1990s, reaching 21.9 percent in 2001 before dropping slightly in 2002 to 20.6 percent.

Retrospective estimates based on 2002 NSDUH data are presented in Table 10.1 for selected substances along with related estimates from the 2002 MTF for youths and young adults. The NSDUH data show decreases from 2001 to 2002 in lifetime use of marijuana, LSD, and cigarettes among youths, but an increase for cocaine among youths. For young adults aged 18 to 25 during this time period, there was a slight increase in lifetime cocaine and Ecstasy use and a decrease in lifetime LSD use. These NSDUH results are generally consistent with MTF trends, with a few exceptions. MTF shows no change in lifetime cocaine use among youths, and it shows decreases in youth Ecstasy and alcohol use not found in the NSDUH estimates.

Estimates of incidence, or first-time use, also suggest that illicit drug use prevalence had been very low during the early 1960s, but began to increase during the mid-1960s as substantial numbers of young people initiated the use of marijuana. As discussed in Chapter 6, annual marijuana incidence increased from about 0.8 million new users in 1965 until it reached a peak of 3.5 million initiates per year during 1973 to 1978, just before the prevalence rates peaked. Interestingly, the annual number of marijuana initiates reached a low point in 1990 (1.6 million), then increased, 2 years before the increase in youth prevalence occurred. This finding demonstrates the value of analyzing the incidence data and using it to forecast future trends in prevalence. Assuming this relationship between incidence and prevalence continues to hold, the continuing high levels (between 2.5 and 3.0 million initiates per year) of marijuana incidence between 1995 and 2001 indicate that substantial declines in youth prevalence may not occur in the near future. However, the NSDUH incidence estimates for youths under age 18 indicate a decline from 2000 to 2001 (from 2.1 million to 1.7 million), which suggests that youth prevalence may decline. The NSDUH youth lifetime prevalence and MTF past month prevalence estimates do show decreases from 2001 to 2002. High rates of marijuana initiation during the 1970s among the cohort identified as the "baby boomers" have resulted in an increase in the numbers needing treatment for substance abuse problems. The increase in marijuana initiation rates during the 1990s may have the same result.

Figure 10.1 Marijuana Use among NSDUH Youths Aged 16 to 20 and MTF 12th Graders: 1975-2002

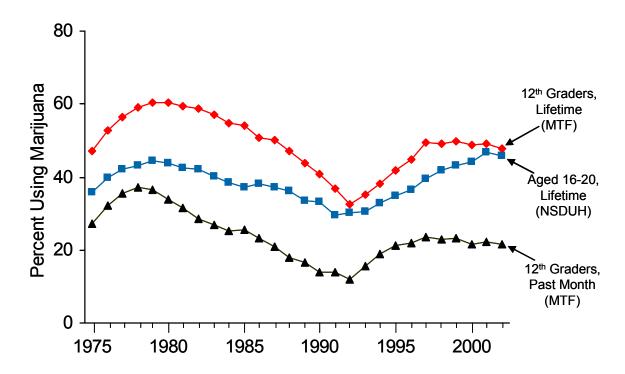


Table 10.1 Comparison of NSDUH and MTF Prevalence Rates

	NSDUH 12-17		MTF 8 th and 10 th		NSDUH 18-25		MTF 19-24	
	2001	2002	2001	2002	2001	2002	2001	2002
Marijuana								
Lifetime	21.9	20.6	30.3	29.0	53.0	53.8	56.3	56.1
Past Month		8.2	14.5	13.1		17.3	19.6	19.8
Cocaine								
Lifetime	2.3	2.7	5.0	4.9	14.9	15.4	12.4	12.9
Past Month		0.6	1.3	1.4		2.0	2.5	2.5
Ecstasy								
Lifetime	3.2	3.3	6.6	5.5	13.5	15.1	15.0	16.0
Past Month	-	0.5	2.2	1.6		1.1	2.2	1.6
LSD								
Lifetime	3.3	2.7	4.9	3.8	16.6	15.9	15.2	13.9
Past Month	-	0.2	1.3	0.7		0.1	1.0	0.4
Alcohol								
Lifetime	43.3	43.4	60.3	57.0	85.5	86.7	88.1	88.4
Past Month		17.6	30.3	27.5		60.5	67.1	67.7
Cigarettes								
Lifetime	37.3	33.3	44.7	39.4	71.3	71.2		
Past Month		13.0	16.8	14.2		40.8	32.6	31.4

⁻⁻ Not available.

Note: NSDUH data in this table are retrospective estimates from the 2002 data. MTF data for 8th and 10th graders are simple averages of estimates for those two grades reported in Johnston, O'Malley, and Bachman (2003b). MTF data for youths aged 19 to 24 are simple averages of estimates for youths aged 19-20, 21-22, and 23-24 reported in Johnston et al. (2003c).

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002. The Monitoring the Future Study, University of Michigan, 2001 and 2002.