



Substance Abuse and Mental Health Services Administration

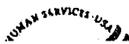
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**NATIONAL HOUSEHOLD SURVEY  
ON DRUG ABUSE:**

**Main Findings 1992**

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**NATIONAL HOUSEHOLD SURVEY ON DRUG ABUSE:  
MAIN FINDINGS 1992**

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## PREFACE

This report presents results from the 1992 National Household Survey on Drug Abuse (NHSDA) conducted by the Office of Applied Studies (OAS) within the Substance Abuse and Mental Health Services Administration (SAMHSA). Three other volumes present data from the 1992 study: 1) Advance Report Number 3: Preliminary Estimates from the 1992 National Household Survey on Drug Abuse (available from OAS/SAMHSA); 2) National Household Survey on Drug Abuse: Population Estimates 1992 (DHHS Pub. No. (SMA) 93-2053); and 3) 1992 NHSDA Public Use File and Codebook (available from OAS/SAMHSA) which contains on magnetic tape all of the data collected in the survey.

The Main Findings Report contains a more comprehensive description of the NHSDA methodology and reporting of the survey results, while the Preliminary and Population Estimates Reports are intended to provide early release of a smaller subset of the survey results.

Three volumes are currently available from the 1993 NHSDA study: 1) Advance Report Number 7: Preliminary Estimates from the 1993 National Household Survey on Drug Abuse (available from OAS/SAMHSA); 2) National Household Survey on Drug Abuse: Population Estimates 1993 (DHHS Pub. No. (SMA) 94-3017); and 3) 1993 NHSDA Public Use File and Codebook. The 1993 NHSDA Main Findings report will be available in mid-1995.

Preliminary results from the 1994 NHSDA survey will be released in the summer of 1995 and the 1994 NHSDA Population Estimates report will be released in the fall of 1995.

A household survey such as the NHSDA may yield conservative estimates of the extent of drug use among members of the general population, particularly for rarely used drugs such as heroin. Analysts at SAMHSA have developed a method for more accurately estimating the prevalence of "hard core" drug use from the NHSDA. This method includes external data on treatment and arrests to adjust the NHSDA estimates, using ratio estimation. These adjusted estimates are not included in this report. SAMHSA is continuing to refine the methodology for inclusion in future publications. A paper describing the method and showing adjusted estimates is available from OAS/SAMHSA.

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## Introduction and Highlights

This report presents the main findings of the 1992 National Household Survey on Drug Abuse (NHSDA). The 1992 survey provides information on the use of illicit drugs, alcohol, and tobacco among the 206 million members of the civilian, noninstitutionalized population age 12 and older in the United States (hereinafter referred to as the surveyed population). Specifically, the Main Findings report:

- presents data about the prevalence of use of illicit drugs, alcohol, and tobacco for the surveyed population as a whole and specifically for four age groups: 12-17, 18-25, 26-34, and 35 and older;
- examines trends between 1972 and 1992 in the prevalence of use of illicit drugs, alcohol, and tobacco for the surveyed population;
- examines the demographic correlates of the use of illicit drugs, alcohol, and tobacco among the surveyed population;
- provides information about the patterns of use, problems resulting from use, and perceptions of the harmfulness of using illicit drugs, alcohol, and tobacco among the surveyed population; and
- provides an overview of the prevalence of use of illicit drugs, alcohol, and tobacco among the population in six large Metropolitan Statistical Areas (MSAs).

**Chapter 1** provides a description of the NHSDA, including history and purposes of the survey, survey methods, and guidelines for interpreting statistics presented in this report. The main findings of the report are as follows:

- **Chapter 2**  
The overall prevalence of alcohol, tobacco, and illicit drug use in the surveyed population declined between 1991 and 1992. The declines in alcohol and illicit drug use continued a pattern initiated in the late 1970s and early 1980s; the decline in tobacco use began even earlier. In 1992, an estimated 11 million individuals in the surveyed population of 206 million were current illicit drug users, meaning they had used in the month before the interview—down from 13 million in 1991 and 24 million in 1979. About 54 million were current smokers and 98 million were current drinkers in 1992. In every age group above 12-17 years, males were about 1.5 times more likely than females to use illicit drugs. In every age group, unemployed persons were twice as likely as employed persons to be current users of illicit drugs; but most illicit drug users were working full-time. The population in the West was about 20% more likely to use illicit drugs than the rest of the population. Among 18- to 34-year-olds, college graduates were about half as likely to be current users as those who had not completed high school (7% versus 14% of the respective subgroups).
- **Chapter 3**  
Marijuana remained the most popular illicit drug in 1994, used in the past month by 9 million of the 11 million illicit drug users. Marijuana use continued its decline since 1979 in all age groups except 35 and older; the latter finding reflects the aging of drug-using "baby boomers." Past-year and current use were most prevalent among those age 18-25. Men older than 17 years were one-and-a-half to two times more likely than age-comparable women to be current users of

marijuana, but gender differences were small for the 12-17 age group. In all age groups, current marijuana users compared with nonusers were more likely to be current drinkers by a factor of two, current cigarette smokers by a factor of three, and current users of other illicit drugs by factors of ten or more.

- **Chapter 4**

**Cocaine** consumption in the surveyed population decreased from 1.9 million current users in 1991 to 1.3 million in 1992, down from a peak of 5.8 million in the 1985 NHSDA. The number of frequent users—at least weekly for the past year—is in the neighborhood of one-half million and has not changed within the survey's limits of detection since 1985. Cocaine was used predominantly by adult males. The most common form was sniffing or snorting powder rather than smoking crack. Although two-thirds of current cocaine users were white, the rates of current use among blacks and Hispanics were, on average, twice that of whites. There were very different ethnic patterns by age group, with white men age 18-25 reporting the highest rate of current use and white men and women 35 and older the lowest rates.

- **Chapter 5**

**Inhalant and hallucinogen** use declined slightly or not at all in 1992, with current users in the surveyed population numbering between one-half million and one million for each drug. Current use of heroin is not measured well by the survey due to inadequate precision and coverage of the heroin-using population. Lifetime use of these three drugs was most prevalent among young adult men between the ages of 18 and 34, especially among the unemployed.

- **Chapter 6**

**Nonmedical use of psychotherapeutic drugs** (stimulants, sedatives, tranquilizers, and analgesics requiring a prescription) declined between 1991 and 1992. Such use continued to be highest, with about 2.6 million current users, among males age 26-34, among whites, and in the West.

- **Chapter 7**

**Alcohol** was the most widely used psychoactive drug in the surveyed population; there were 98 million current drinkers and 10 million current heavy drinkers (five or more drinks per occasion on five or more days in the past month); the number of heavy drinkers was unchanged since 1988. More than 80% of heavy drinkers were male. College graduates reported the highest prevalence of current use, but persons without a high school diploma reported the highest prevalence of heavy alcohol use. Alcohol users were more likely than abstainers to have used cigarettes and illicit drugs.

- **Chapter 8**

**Cigarette** smoking has declined for men from 32% current smokers in 1988 to 28% in 1992, but over this time current smoking has not changed significantly for women (26% in 1988; 25% in 1992). In 1992, there were 54 million current smokers altogether. Current cigarette smoking was more common in the South than elsewhere and among persons who had not completed high school. There were diverging age patterns for blacks and whites. Whites age 12-25 reported significantly higher past-year and current smoking than blacks; the rates converged in the 26-34 age group and then crossed over for those 35 and older. Current use of **smokeless tobacco** has remained unchanged since 1988.

- **Chapter 9**

**Problems associated with drug use.** In the past year about 500,000 cocaine users, 750,000 marijuana users, 4.3 million alcohol drinkers, and 1.4 million cigarette smokers reported three or more problems associated with each respective substance. Most of the cigarette-related problems were health problems; most of the other substance problems were psychological or social, such as anxiety or depression and fights or arguments with friends or family. About 1.5 million cocaine users, 6 million marijuana users, 36 million drinkers, and 51 million cigarette smokers reported at least one sign of dependence on the indicated substance.

- **Chapter 10**

**Patterns of use.** The use of alcohol alone remained the most common pattern of drug use. Cigarettes, inhalants, and alcohol were typically the first drugs used, followed (by progressively fewer and fewer individuals) by marijuana, cocaine, hallucinogens, and heroin.

- **Chapter 11**

**Special topics.** More than 94% of the surveyed population age 12 and over perceived "great risk" from regular use of each of cocaine, PCP, and heroin. Smaller percentages perceived great risk from the regular use of other illicit drugs, and still smaller percentages perceived risk from regular use of alcohol and cigarettes. Receipt of welfare assistance and lack of health insurance were associated with the highest prevalence of problems attributed to drug use. The percentage receiving substance abuse treatment was highest among adults age 18-34 and among males, corresponding to broad age and sex differences in rates of heavy substance use.

- **Chapter 12**

**Six more intensively sampled metropolitan areas** (Chicago, Denver, Los Angeles, Miami, New York, and Washington, D.C.) varied in their prevalence of illicit and licit drug use. Denver residents reported the highest prevalence of cocaine and marijuana use; with half reporting lifetime and 9% current illicit drug use; Miami residents had the lowest prevalence of illicit drug use with one-quarter reporting lifetime and 4% current illicit drug use. Miami also had the lowest alcohol and cigarette prevalence rates. Residents in low-income areas were generally less likely to use alcohol and tobacco than residents in higher-income areas. Illicit drug differences, outside of cocaine and marijuana, were inconsistent from city to city and generally not statistically significant.

Appendix A presents key NHSDA definitions for survey years 1972-1992. Appendix B discusses data collection operations, response rates, and imputation and missing data in the 1992 NHSDA. Appendix C presents the statistical methods that are used in this report and information on the sampling variances and design effect of 1992 NHSDA estimates. Appendix D discusses sampling and weighting procedures. Appendix E summarizes data anomalies affecting black respondents to the 1988, 1990, 1991, and 1992 NHSDA. Appendix F contains the drug answer sheets from the 1992 NHSDA questionnaire.

## Chapter One: Description of the Report and the Survey

The 1992 National Household Survey on Drug Abuse is the twelfth in a series of studies designed to measure the prevalence and correlates of drug use in the United States and to monitor drug use trends over time. The National Commission on Marihuana and Drug Abuse sponsored the first two studies conducted in 1971 and 1972. The National Institute on Drug Abuse (NIDA) sponsored the NHSDA from 1974 to 1991. In October 1992, responsibility for conducting the NHSDA and preparing reports was moved to the Office of Applied Studies (OAS) within the newly created Substance Abuse and Mental Health Services Administration (SAMHSA).

Three other volumes present data from the 1992 study:

- *Advance Report Number 3: Preliminary Estimates from the 1992 National Household Survey on Drug Abuse.* This monograph, which is Advance Report Number 3 (June 1993) in a series published by OAS/SAMHSA, is a successor to the discontinued *Highlights* volume of earlier NHSDAs. It reports in tabular, graphical, and narrative bullet formats some key findings on illicit drug use prevalence by age and major demographic variables in 1992 and relative to other years (primarily 1988, 1990, and 1991). It also provides specific results for marijuana and hashish, cocaine, other illicit drugs, alcohol, and tobacco by age and major demographic variables. Technical appendices review the survey methodology, limitations of the data, other major data sources, and relevant references. The Advance Report series is available from OAS/SAMHSA.
- *National Household Survey on Drug Abuse: Population Estimates 1992.* This report provides estimates of the percentages and numbers of the U.S. household population who have used illicit drugs, alcohol, and tobacco in their lifetime, in the past year, and in the past month. It also contains information about needle use and the frequency of use of marijuana, cocaine, crack cocaine, inhalants, hallucinogens, psychotherapeutics, PCP, heroin, cigarettes, smokeless tobacco, and alcohol. Information is presented in tabular form with little or no explanatory text. This report is available from the National Clearinghouse for Alcohol and Drug Information and from the U.S. Government Printing Office.
- *NHSDA Public Use File and Codebook.* The 1992 NHSDA public use file has been prepared for use with the Statistical Analysis System (SAS) as a SAS data set. For each variable on the public use file, the codebook provides the SAS variable name, the interview instrumentation source, value codes and their meanings, and an unweighted univariate frequency distribution. The codebook also provides further technical documentation of NHSDA survey methodology. The Public Use File and codebook are available from OAS/SAMHSA.

### Overview of NHSDA Main Findings Report

The 1992 NHSDA Main Findings report provides information about prevalence and trends in the use of specific illicit drugs, alcohol, and tobacco (including cigarettes and smokeless tobacco). Estimates are presented for use in the respondent's lifetime, in the past year (the year before the survey), and in the past month (the month before the survey). Use in the past month is also referred to as "current use." Most estimates are presented for each of four age groups: those age 12-17, 18-25, 26-34, and 35 and older. The 1992 NHSDA provides estimates for the following drugs or classes of drugs: marijuana (including hashish), cocaine (including crack), inhalants, hallucinogens (including PCP), heroin,

nonmedical use of prescription-type psychotherapeutic drugs (including stimulants, sedatives, tranquilizers, and analgesics), alcohol, cigarettes, and smokeless tobacco.

In addition, two summary measures of drug use were constructed to examine the overall extent of involvement in drug use: "any illicit drug use" and "nonmedical use of any psychotherapeutic drugs." The summary measure "any illicit drug use" includes use of illegal drugs (such as marijuana, cocaine, inhalants, hallucinogens, and heroin) and the nonmedical use of prescription-type psychotherapeutic drugs. Throughout this report, the terms "any illicit drug use" and "illicit drugs" refer to both the use of illegal drugs and the nonmedical use of psychotherapeutic drugs. The summary measure "nonmedical use of any psychotherapeutic drugs" includes use of prescription-type psychotherapeutic drugs such as stimulants, sedatives, tranquilizers, and analgesics without a doctor's prescription and in amounts or for purposes other than prescribed.

Although the relative amount of attention given to any drug or class of drugs has varied across the NHSDA reports, there has been sufficient continuity in the survey series to chart trends in drug use since 1972. Indeed, the stability of the core questions about drug use is a hallmark of the NHSDA survey series. In each survey, drug use has been assessed in terms of use of specific drugs or classes of drugs in the respondent's lifetime, in the past year, and in the past month.

Despite the continuity in assessment of drug use throughout the survey series, the NHSDA has been sufficiently flexible to permit examination of special topics. In 1982, the NHSDA devoted considerable attention to medical as well as nonmedical use of stimulants, sedatives, tranquilizers, and analgesics. In the 1979 and 1982 surveys, supplementary information about the prevalence of heroin was obtained by questioning respondents about their friends' use of heroin. Since 1985, additional questions about cigarettes and other tobacco products, such as smokeless tobacco, have been included. Questions about the ways cocaine is used were added in 1985. Additional information about "crack" cocaine and sharing needles for injection of drugs have been included since 1988. Beginning in 1985, questions on the perceived consequences of use of various drugs were added. In 1990, questions were added about health insurance and total annual family income. A more detailed set of questions on these two topics was used in 1991 and 1992. Minor changes in question wording were made to encourage more complete disclosure, ease the administration of questionnaires, and enhance respondents' understanding and cooperation.

To increase the reliability of estimates of drug use, the NHSDA has oversampled population groups of special interest. People under age 35 have traditionally been oversampled. Blacks and Hispanics have been oversampled since 1985. In 1979, the NHSDA oversampled respondents from rural areas. In 1990, Washington, DC, and its surrounding community, referred to as a Metropolitan Statistical Area (MSA), was oversampled. In 1991 and 1992, six MSAs were oversampled: Chicago, Denver, Los Angeles, Miami, New York, and Washington, DC. In 1992, urbanized areas of the six MSAs that were low in socioeconomic status (SES) were also oversampled in order that separate estimates could be reported for low-SES urbanized areas and for all other areas of each oversampled MSA (see Chapter 12).

The principal demographic correlates of drug use examined in this and previous reports on the NHSDA are:

- age,
- sex,
- race/ethnicity,
- population density,
- geographic region of residence,

- educational attainment among those age 18 and older, and
- current employment status among those age 18 and older.

The categorization of demographic variables and presentation of results have varied over the survey years. In studies before 1985, race/ethnicity was generally dichotomized into white and nonwhite, with Hispanics not consistently classified in either category. Beginning in 1985, three mutually exclusive categories—white non-Hispanic, black non-Hispanic, and Hispanic—were used, as well as an "other" category when totals were presented. The "other" category includes American Indians, Alaskan natives, Pacific Islanders, and Asians. Similarly, before 1985, findings by age were generally presented for three age groups: people age 12-17, 18-25, and 26 and older. The 1985, 1988, 1990, 1991, and 1992 reports used this classification only in the presentation of trend data. Otherwise, people age 26 and older were divided into two groups: people age 26-34 and those age 35 and older.

In tables reporting drug use by sex, race/ethnicity, population density, region, educational attainment, or employment status, results are generally presented separately for each of the four age groups. However, no further cross-classification of demographic characteristics is provided. For example, tables showing drug use by sex and tables showing drug use by employment status also control for age, but none of the tables examine drug use while simultaneously controlling for sex, employment status, and age. Because of this limitation, there is a risk that demographic comparisons in this report will be misinterpreted when demographic characteristics are highly associated within an age group. For example, within each age group, women are less likely to be currently employed than men, so associations between drug use and sex might be at least partially attributable to the effects of current employment. Multivariate analyses would permit a more thorough examination of the unique effects of each demographic characteristic.

The variable composition of the "other" employment category is a source of possible confusion. The composition of this category varies substantially across the four age groups, with students making up the largest fraction in the youngest age group and retired and disabled persons the largest fraction in the oldest age group. The differential composition of the "other" category should be considered in comparisons of employment groups. Cautionary notes are provided in the text where appropriate.

Empirical associations between demographic variables and drug use do not imply causal relationships. In particular, except for stratification by age, this report makes no attempt to control for potentially confounding variables that might help to account for the observed associations. This point is particularly salient with respect to associations between race/ethnicity and drug use. Race/ethnicity is highly associated with socioeconomic status, educational attainment, geographic location, and many other features of the broader social environment.<sup>1</sup> The tables presented in this report are particularly useful for the purpose of identifying demographic subgroups with relatively high and low rates of drug use, regardless of the underlying causes of drug use.

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<sup>1</sup>For a demonstration of the extent to which racial/ethnic differences in drug use prevalence may be influenced by differences in other sociodemographic characteristics measured in the NHSDA, see Office of Applied Studies, SAMHSA, *NHSDA: Race/Ethnicity, Socioeconomic Status, and Drug Abuse 1991*, DHHS Publication (SMA) 93-2062, Rockville, MD: SAMHSA (December 1993).

This report presents results of tests of statistical significance for comparisons between demographic groups and for comparisons between 1991 and 1992. Differences in rates of drug use between groups and between years were tested for statistical significance using Z tests. The Z test takes into account the sizes of the subsamples being compared and the degree of variation among sample members. An observed sample difference is designated as "statistically significant" if the probability of a sample difference as large as or larger than the observed sample difference arising entirely by chance is less than or equal to .05. Most differences discussed in the text were statistically significant at the .05 level or lower.

Some substantively large and interesting differences are also discussed, even though these are not statistically significant at the .05 level; these exceptions are noted both in the text and in the footnotes of tables. A difference between subgroups or between years can be statistically insignificant even when the rate of one subgroup or year is twice or more the rate of another subgroup or year. This can occur when the rates of both groups are small, when the sample sizes are small, or both. For example, if the rate of use of one comparison group is 1% and the rate of use of the other is 1.5%, the difference may be statistically insignificant. Although the rate of the second group is 50% higher than the rate of the first, the NHSDA sample may not be large enough to detect a difference of this magnitude.

Estimates of rates, percentages, and proportions considered to be unreliable were omitted from all tables and were noted by asterisks (\*). An estimate was considered to be unreliable if the standard error was greater than 17.5% of the log transformation of the estimated proportion. Because of the relatively large sample sizes for most population subgroups, low precision usually occurs only for prevalence rates that are very close to zero or 100%. In addition, very small estimates that round to zero (i.e., are < .5%) but are not suppressed due to low precision are indicated by an asterisk (\*) in table cells.

Estimates are not available for some survey years because of differences in the survey instrument. These data points are footnoted in the tables and marked with a double hyphen (--). Estimates from 1985 are revisions of previously published 1985 NHSDA estimates. Improvements made to the 1985 data file more accurately weight the data and adjust for missing and inconsistent data for some questionnaire items.

Most tables of this report do not present estimates of the total numbers of persons using drugs or having other tabulated characteristics. However, such population estimates can be readily computed from the tables of this report. For example, Table 1.2 shows that the estimated number of persons in the surveyed population in 1992 who were age 12-17 and who resided in the Northeast equalled approximately 3,540,000. Table 2.14 shows that the percent of persons in this subgroup who reported ever using any illicit drug in their lifetime equalled 13.7%. It follows that the estimated number of surveyed population persons in the Northeast age 12-17 who ever used any illicit drug equals  $.137 \times 3,540,000 = 484,980$ . In general, population estimates can be computed for rates presented in this report by multiplying the rates, expressed as percentages, by the corresponding population bases reported in Table 1.2 and dividing by 100.

Appendix A contains definitions of key terms, including drug prevalence measures, demographic characteristics, statistical terms, and oversampled MSAs for the 1972 to 1992 surveys. Appendixes B, C, and D to this report include additional information on the quality of the data, sample selection, sampling errors, confidence intervals, significance testing, and weighting procedures. Appendix E summarizes a report on some anomalies in the data for the black subgroup in the 1988, 1990, 1991 and 1992 NHSDA. Appendix F of this report contains the drug answer sheets from the 1992 NHSDA questionnaire.

## Strengths and Limitations of the Household Survey

The NHSDA is the only survey that regularly produces estimates of drug use among members of the civilian, noninstitutionalized population age 12 and older of the United States. The survey is an appropriate technique for estimating prevalence rates for different drugs because it reports much drug use that does not ordinarily come to the attention of administrative, medical, or correctional authorities and therefore is not included in official statistics. In-person interviews with a large national probability sample seem to be the best way to estimate drug use in virtually the entire population of the United States.

Although the NHSDA is useful for many purposes, it has certain limitations. First, the data are self-reports of drug use, and their value depends on respondents' truthfulness and memory. Several studies have established the validity of self-report data.<sup>2</sup> The NHSDA procedures encourage honesty and recall. Nevertheless, some under- and overreporting very likely occurred. Second, the survey is cross-sectional rather than longitudinal. That is, individuals were interviewed only once and were not followed for subsequent interviews. The surveys therefore provide an overview of the prevalence of drug use at specific points in time rather than a view of how drug use changes over time for groups of individuals. Third, because the population of the survey is defined as the civilian, noninstitutionalized population of the United States, a small proportion (less than 2%) of the population is excluded. The subpopulations excluded are those residing in institutional group quarters (e.g., prisons, nursing homes, treatment centers), those with no permanent residence (e.g., homeless people), and active military personnel.<sup>3</sup> If the drug use of these groups differs from that of the household population, the NHSDA may provide slightly inaccurate estimates of drug use in the total population. This may be particularly true for prevalence estimates of rarely used drugs such as heroin.

## Survey Methodology

The sample for the 1992 NHSDA was designed so that study results could be used to make inferences about the civilian, noninstitutionalized population age 12 and older of the United States. This surveyed population was identical to the surveyed population of the 1991 NHSDA but differed somewhat from previous NHSDAs, which were restricted to the household population in the 48 contiguous States. Alaska and Hawaii were included in the sample for the first time in 1991, as were civilians living on military bases and persons living in noninstitutional group quarters, such as college dormitories, rooming houses, and shelters. Although this change introduces some minor inconsistency between the samples of the 1991 and 1992 NHSDAs and earlier NHSDA samples, its impact on trends in drug use estimates is generally inconsequential.

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<sup>2</sup>Harrison, Haaga, and Richards, "Self-Reported Drug Use Data: What Do They Reveal," *American Journal of Drug and Alcohol Abuse* 19(4): 423-441 (1993); National Institute on Drug Abuse, *Survey Measurement of Drug Use: Methodological Studies*, DHHS Publication No. (ADM) 92-1929, Rockville, MD: US Department of Health and Human Services (1992).

<sup>3</sup>Gerstein and Harwood (eds.), *Treating Drug Problems, Volume 1*, Washington, DC: National Academy Press (1990); Gerstein and Harwood (eds.), *Treating Drug Problems, Volume 2*, Washington, DC: National Academy Press (1992); Bray, Marsden, and Peterson, "Standardized Comparisons of the Use of Alcohol, Drugs, and Cigarettes Among Military Personnel and Civilians," *American Journal of Public Health* 81: 865-869 (1991); National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, *Prevalence of Drug Use in the DC Metropolitan Area Household and Nonhousehold Populations: 1991*, Technical Report #8, DC Metropolitan Area Drug Study, NIDA (1994).

The sample design was a multistage area probability sample. A national probability sample of dwelling units was selected from 118 Primary Sampling Units (PSUs), a subset of the 125 PSUs selected for the 1991 NHSDA. Like the 1991 NHSDA, the 1992 sample design used a composite size measure methodology and a specially designed within-dwelling unit selection procedure to meet specified precision constraints for subgroups defined by age and minority group membership. Like the 1991 NHSDA, the 1992 survey also oversampled six special-interest MSAs. The 1992 NHSDA drew large enough samples to support separate estimation for a "low socioeconomic status (SES) urbanized" area within each MSA versus the remainder of that MSA. To reduce survey costs, the design sampled Hispanics at higher rates in geographic areas where they were concentrated. The basic plan involved several selection stages: the selection of primary areas (e.g., counties), subareas (area segments) within these primary areas, sample dwelling units within subareas, and eligible residents (if any) within the households in these dwelling units.

To reduce the number of required screenings, two selections per household were allowed in some household types containing 12- to 17-year-olds. Approximately 80,000 listings were screened to identify sufficient dwelling units to yield the Hispanic and black age-domain samples. In each selected dwelling unit, a roster recording the age, race/ethnicity, and sex of all household members age 12 and older was completed. Two, one, or no household members were selected to be interviewed using a random sampling procedure, with selection probabilities based on the race/ethnicity of the head of household and the ages of household members. The procedure was designed to ensure adequate sample sizes for the four age groups (12-17, 18-25, 26-34, and 35 and older) and the three racial/ethnic groups (Hispanic, non-Hispanic black, and non-Hispanic white).

Trained interviewers interviewed respondents in person in their homes. At the conclusion of data collection for the study, sample weights that reflect the various stages of sampling described above were constructed. The sample weights were then adjusted to account for sample persons who could not be found at home or who refused to participate. In surveys prior to 1991, the weights were adjusted for nonresponse with weighting-class adjustments. In the 1991 and 1992 surveys, a generalized raking procedure based on logistic regression was used. The logistic adjustment is an extension of the weighting-class procedure that achieves more nonresponse bias reduction through the use of additional predictors of response. Finally, these weights were poststratified to Bureau of the Census projections of the number of persons in the civilian, noninstitutionalized population. This adjusted weight is used in deriving estimates. (Specific details of the sample design and weighting procedures are given in Appendix D.)

Appendix E of the 1991 Main Findings report examines the effects of the new methodology introduced in the 1991 NHSDA. Specifically, this appendix measures the impact of the newly defined surveyed population and weight adjustment procedures on the final drug use estimates. It shows that both effects generally caused slight changes in the rates, with more rates being moved higher than lower. The largest rate changes from both effects occurred in the 18- to 25-year-old age group. For the new surveyed population effect, the subgroup most clearly affected within the 18- to 25-year-old age group was persons with an employment status of "other," which includes college students. The appendix concluded that estimates from this subgroup are not comparable to previous survey estimates. For the new weighting methodology effect, the largest rate changes within the 18- to 25-year-old age group occurred for domains that characterize low-SES populations, such as people with less than a high school education and unemployed individuals.

Although the drug use estimates are affected by the new methodology, the differences from both effects are small relative to the differences between survey years. Hence, very few of the significant differences found in the trend data can be associated with the inclusion of the new surveyed population and/or new weighting methodology.

### **The Field Experience**

The fieldwork for the 1992 NHSDA was directed by the project director and other senior staff members at Research Triangle Institute. They were assisted by a national field director, two regional directors, four regional supervisors, and 20 field supervisors, each of whom supervised about 36 interviewers. Initially, 353 field interviewers were hired and trained as interviewers. Of these, 62 (18%) were black and 53 (15%) were Hispanic; 66 (19%) were bilingual in English and Spanish, and 77 (22%) were males. An additional 84 interviewers were trained during the course of the field period to offset attrition. A total of 28,832 completed interviews were obtained between January and December 1992. Of these, 12,897 were derived from the basic national sample and 15,935 from the six oversampled MSAs. A completed interview had to contain, at a minimum, data on the recency of the respondent's use of marijuana, cocaine, and alcohol.

Strategies for ensuring high rates of participation (described briefly in Appendix B) resulted in an interview response rate of 82.5%. Of the 28,832 completed interviews, 15,173 were with whites and others (i.e., non-Hispanic, nonblacks), 6,511 were with (non-Hispanic) blacks, and 7,148 were with Hispanics. Approximately 7% (2,018) of the interviews were conducted using the Spanish-language version of the questionnaire. The completed interviews represented a 95% completion rate for screening sample households and an 82.5% rate for interviewing sample individuals, for an overall response rate of 78%. The response rates for the racial/ethnic groups were 80% for whites and others, 85% for blacks, and 86% for Hispanics.

Of the 28,832 completed interviews for the total United States, 15,935 were completed in the six oversampled MSAs: 2,592 from the Chicago MSA, 2,759 from the Denver MSA, 2,691 from the Los Angeles MSA, 2,650 from the Miami MSA, 2,711 from the New York MSA, and 2,532 from the DC MSA. Overall, the completed interviews in the six-MSA oversample represented a 93.7% completion rate for screening sample dwelling units and an 83.2% completion rate for interviewing sample individuals.

Throughout the course of the study, the respondent's anonymity and the privacy of his or her responses were protected, by separating identifying information from survey responses. Respondents were assured that their identities and responses would be handled in the strictest confidence in accordance with Federal law. The questionnaire itself and the interviewing procedures were designed to enhance the privacy of responses, especially during segments of the interview in which questions of a sensitive nature were posed. Show cards were displayed when questions concerning illicit drug use were asked, and respondents were asked to mark answer sheets to record their responses to questions read aloud by the interviewer. The interviewer did not see the completed answer sheets.

### **Interpreting the Data**

In 1992, NHSDA interviews were completed with 28,832 individuals. Table 1.1 presents the number of people interviewed within each age and demographic group (unweighted N). In all tabular presentations in which race/ethnicity is used as a variable, the 1,093 "other" respondents not identified as white, black, or Hispanic were eliminated because the category combines disparate groups with

differing patterns of drug use, making interpretation of the data difficult. Education and employment status for those age 12-17 were also excluded from analyses. Because most 12- to 17-year-olds were in school at the time of the interview, educational attainment and employment status are not meaningful. In the tables, therefore, adult education and current employment are noted to be not applicable (N/A) for those age 12-17, and the totals for those two variables refer to the 21,578 respondents age 18 and older.

Table 1.2 presents the estimated number of people in the surveyed population represented by the 28,832 respondents to the 1992 NHSDA for age groups and demographic groups. All the numbers in Table 1.2 are in thousands and should be read by adding three zeros. Thus, the 3,672 males age 12-17 who were interviewed in 1992 (see Table 1.1) represent approximately 10,583,000 of their counterparts in the civilian, noninstitutional population in the United States. More detailed estimates of the number of drug users in the surveyed population are presented in the *National Household Survey on Drug Abuse: Population Estimates 1992*.<sup>4</sup> The percentage distributions of the survey population by age group and demographic group are presented in Table 1.3. This table shows, for instance, that 77% of the weighted sample is white, 11.5% is black, 8.2% is Hispanic, and 3.3% is from other racial/ethnic groups.

Many of the tables in subsequent chapters present data for the demographic groups shown in Tables 1.1, 1.2, and 1.3. The rates of use of various drugs in the lifetime, past year, and past month are generally shown for the four age groups by sex, race/ethnicity, population density, and region (and for those age 18 and older, by educational attainment and current employment status). The prevalence rates for the age groups can be compared in terms of these basic demographic variables. When other demographic variables are used or when data are presented for specific subpopulations such as current users, the appropriate unweighted  $\bar{N}$  is presented in parentheses.

All comparisons, as well as the individual rates themselves, are subject to sampling error that is readily quantified. Sampling error for individual rates results from asking questions of a sample rather than of everyone in the surveyed population. Sampling theory provides the basis for calculating confidence intervals around the estimates and tests of significance in comparing two estimates. The size of the intervals and the tests of significance depend on (a) sample size; (b) extent of homogeneity of the sample on the variable in question, that is, the appropriate design effect; (c) specific type of probability sampling procedure used; and (d) degree of confidence required in the estimate.

Standard errors of the estimates and associated confidence intervals are not presented in this report. A volume of tables that contain the standard errors is available from the OAS. In this report, Appendix C provides a means for applying conservative confidence limits for various observed estimates at given effective sample sizes at the typical confidence level of 95%.<sup>5</sup> The numbers in Table C.5 make possible such assertions as, "One may be 95% confident that between 3% and 5% of the 12- to 17-year-old population have used marijuana at least once during the previous month." More precisely, if the sampling and data collection procedures are infinitely repeated, the population value would lie between the confidence limits 95% of the time.

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<sup>4</sup>DHHS Publication No. (SMA) 93-2053, Rockville, MD: US Department of Health and Human Services (1993).

<sup>5</sup>The figures in Appendix C apply an adjustment to the normal algorithm for calculating an asymmetric confidence interval. This adjustment is necessary because of the stratification and clustering in the sample design that allowed for the oversampling of minorities and younger respondents. This is explained in more detail in Appendix C.

The tables on trends in drug use include an indication of whether a change between 1991 and 1992 is statistically significant. Differences in the proportion reporting use of a drug in 1991 and the proportion reporting use of a drug in 1992 are tested using a differences-in-proportions test. Statistical significance is reported for the .05, the .01, and the .001 levels. A significant change is operationally defined as a change so large in magnitude that it was likely to occur fewer than 5 times in 100 by chance alone (.05 level). Analogous definitions apply to significance at the .01 and .001 levels. Note that the calculations included adjustments that accounted for the design effects for each of the 1991 and 1992 surveys to determine whether differences between proportions were statistically significant.

Nonsampling error, which includes nonresponse, misreporting, and miscoding, cannot be measured as satisfactorily as sampling error. A series of studies on the validity and reliability of general population survey data are reported elsewhere.<sup>6</sup> Quality control procedures described in Appendix B that were used in NHSDA questionnaire design, field procedures, and data processing are techniques commonly used to minimize nonsampling error.

### **Comparisons between NHSDA and Other Data Sources**

Subsequent chapters of this report make some comparisons of results between NHSDA and other major substance abuse prevalence data sources in the United States. Such comparisons must be made with caution because differences can be due to methodological variations between data sources (e.g., differences in surveyed populations and data collection procedures), and can also be due to sampling and nonsampling errors. In the following pages we summarize the research designs of several data sources that are cited in subsequent chapters, with notes on methodological features that are likely to give rise to results that are perceptibly different from the NHSDA.

1. **Monitoring the Future (MTF).** This national survey, administered by the Institute for Survey Research at the University of Michigan and sponsored by the National Institute on Drug Abuse, has interviewed probability samples of high school seniors annually since 1975. Each sample comprises over 16,000 high school seniors, drawn from about 130 public and private schools throughout the United States. Student respondents answer structured self-administered questionnaires in their classrooms. In 1991, Monitoring the Future began to survey eighth and tenth graders as well as high school seniors. MTF also follows up subsamples from each year's survey. The methodology of MTF excludes persons not enrolled in the respective grades, which especially affects the high school senior cohorts; there is no such exclusion in NHSDA. MTF reports standard age categories that differ from those used in NHSDA reports. The oldest MTF age group is under 35 years.

2. **Drug Abuse Warning Network (DAWN).** This data system was established in 1972 by the Drug Enforcement Administration. It was administered by the National Institute on Drug Abuse from 1980 to 1992, when the responsibility was transferred to SAMSHA. This institutional data system monitors the consequences of drug abuse using two indicators: drug-related hospital emergency room visits, and drug-related deaths recorded in medical examiners' offices. In 1992, information was obtained from a nationally representative sample of hospital emergency rooms and from 137 medical examiners located in 38 metropolitan areas throughout the United States. The specialized nature of the DAWN sample ensures that the population it captures represents the "problem" end of the drug use spectrum rather than the general population.

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<sup>6</sup>See Turner, Lessler, and Gfroerer (Eds.), *Survey Measurement of Drug Use: Methodological Studies*, Rockville, MD: National Institute on Drug Abuse (1992).

3. **Drug Use Forecasting program (DUF).** Established in 1986 by the National Institute of Justice, this institutional data system measures the rate of drug abuse among persons arrested for serious crimes. Data are collected from arrestees in central booking units of 23 urban police departments currently participating in the data collection. Drug use measurements are based on urinalysis for 10 drugs, including cocaine, marijuana, PCP, methamphetamine, heroin, and opium. These urine tests can detect most drugs used within the previous two or three days and marijuana and PCP used within the past several weeks. The DUF sample is not a nationally representative sample of arrestees and is not representative of the particular MSAs within which the cooperating police departments are located. It is a useful system for assessing trends in drug use in a fairly consistently drawn sample of big-city arrestees.

**Table 1.1 Number of People Interviewed (Unweighted N), by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>7,254</b>	<b>7,721</b>	<b>7,516</b>	<b>6,341</b>	<b>28,832</b>
<b>Sex</b>					
Male	3,672	3,452	3,154	2,710	12,988
Female	3,582	4,269	4,362	3,631	15,844
<b>Race/Ethnicity</b>					
White	3,110	3,558	3,904	3,508	14,080
Black	1,887	1,719	1,552	1,353	6,511
Hispanic	1,941	2,112	1,801	1,294	7,148
Other	316	332	259	186	1,093
<b>Population Density</b>					
Large metro	5,243	5,727	5,392	4,615	20,977
Small metro	1,214	1,216	1,278	998	4,706
Nonmetro	797	778	846	728	3,149
<b>Region</b>					
Northeast	1,027	1,152	1,206	1,192	4,577
North Central	1,346	1,318	1,274	1,103	5,041
South	2,782	3,023	2,847	2,279	10,931
West	2,099	2,228	2,189	1,767	8,283
<b>Adult Education<sup>1</sup></b>					
Less than high school	N/A	1,907	1,463	1,685	5,055
High school graduate	N/A	2,792	2,563	1,944	7,299
Some college	N/A	2,211	1,740	1,255	5,206
College graduate	N/A	811	1,750	1,457	4,018
<b>Current Employment<sup>2</sup></b>					
Full-time	N/A	3,318	4,765	3,617	11,700
Part-time	N/A	1,518	723	541	2,782
Unemployed	N/A	973	761	422	2,156
Other <sup>3</sup>	N/A	1,912	1,267	1,761	4,940

N/A: Not applicable.

<sup>1</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>2</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 1.2 Estimated Number of People (in Thousands) in the U.S. Civilian, Noninstitutionalized Population, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	20,684	27,964	38,215	118,850	205,713
<b>Sex</b>					
Male	10,583	13,734	18,835	55,626	98,778
Female	10,101	14,230	19,380	63,224	106,935
<b>Race/Ethnicity</b>					
White	14,330	19,996	28,165	95,908	158,399
Black	3,220	3,882	4,709	11,838	23,649
Hispanic	2,343	3,009	4,044	7,454	16,849
Other	791	1,077	1,298	3,650	6,816
<b>Population Density</b>					
Large metro	8,448	12,114	18,184	51,922	90,668
Small metro	7,064	9,041	11,704	36,728	64,538
Nonmetro	5,172	6,809	8,327	30,200	50,508
<b>Region</b>					
Northeast	3,540	5,262	7,377	24,410	40,588
North Central	5,051	5,969	8,761	28,029	47,810
South	7,615	10,689	13,716	42,132	74,152
West	4,478	6,044	8,361	24,280	43,163
<b>Adult Education<sup>1</sup></b>					
Less than high school	N/A	6,050	6,168	30,697	42,914
High school graduate	N/A	10,191	13,418	39,535	63,144
Some college	N/A	8,676	8,732	22,870	40,278
College graduate	N/A	3,047	9,896	25,749	38,692
<b>Current Employment<sup>2</sup></b>					
Full-time	N/A	12,701	25,092	57,811	95,604
Part-time	N/A	5,789	3,864	10,193	19,846
Unemployed	N/A	3,272	3,275	5,602	12,150
Other <sup>3</sup>	N/A	6,201	5,984	45,244	57,429

N/A: Not applicable.

<sup>1</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>2</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 1.3 Estimated Percentage of the U.S. Civilian, Noninstitutionalized Population, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total (Row percents)</b>	<b>10.1</b>	<b>13.6</b>	<b>18.6</b>	<b>57.8</b>	<b>100.0</b>
<b>Sex</b>					
Male	51.2	49.1	49.3	46.8	48.0
<u>Female</u>	<u>48.8</u>	<u>50.9</u>	<u>50.7</u>	<u>53.2</u>	<u>52.0</u>
Total	100.0	100.0	100.0	100.0	100.0
<b>Race/Ethnicity</b>					
White	69.3	71.5	73.7	80.7	77.0
Black	15.6	13.9	12.3	10.0	11.5
Hispanic	11.3	10.8	10.6	6.3	8.2
<u>Other</u>	<u>3.8</u>	<u>3.9</u>	<u>3.4</u>	<u>3.1</u>	<u>3.3</u>
Total	100.0	100.0	100.0	100.0	100.0
<b>Population Density</b>					
Large metro	40.8	43.3	47.6	43.7	44.1
Small metro	34.2	32.3	30.6	30.9	31.4
<u>Nonmetro</u>	<u>25.0</u>	<u>24.3</u>	<u>21.8</u>	<u>25.4</u>	<u>24.6</u>
Total	100.0	100.0	100.0	100.0	100.0
<b>Region</b>					
Northeast	17.1	18.8	19.3	20.5	19.7
North Central	24.4	21.3	22.9	23.6	23.2
South	36.8	38.2	35.9	35.4	36.0
<u>West</u>	<u>21.6</u>	<u>21.6</u>	<u>21.9</u>	<u>20.4</u>	<u>21.0</u>
Total	100.0	100.0	100.0	100.0	100.0
<b>Adult Education<sup>1</sup></b>					
Less than high school	N/A	21.6	16.1	25.8	23.2
High school graduate	N/A	36.4	35.1	33.3	34.1
Some college	N/A	31.0	22.9	19.2	21.8
<u>College graduate</u>	<u>N/A</u>	<u>10.9</u>	<u>25.9</u>	<u>21.7</u>	<u>20.9</u>
Total		100.0	100.0	100.0	100.0
<b>Current Employment<sup>2</sup></b>					
Full-time	N/A	45.4	65.7	48.6	51.7
Part-time	N/A	20.7	10.1	8.6	10.7
Unemployed	N/A	11.7	8.6	4.7	6.6
<u>Other<sup>3</sup></u>	<u>N/A</u>	<u>22.2</u>	<u>15.7</u>	<u>38.1</u>	<u>31.0</u>
Total		100.0	100.0	100.0	100.0

N/A: Not applicable.

Note: Column percentages for each characteristic may not total 100.0 because of rounding.

<sup>1</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>2</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Two: Trends in Drug Use, 1972 to 1992

### Introduction

The central finding of the 1992 NHSDA is the continued overall decline in the use of illicit drugs, alcohol, and cigarettes by the surveyed population—the 206 million Americans who were civilian, noninstitutionalized, and age 12 years or older in 1992. This broad ebbing of substance use has been in progress since the late 1970s/early 1980s, steadily reversing the rising tides recorded in earlier data. For example, in the 18-25 age group, which has the highest prevalence on nearly all measures of substance use, the percentage reporting current (past-month) use of the most popular illicit drug, marijuana, was 28% at the time of the first NHSDA in 1972, 35% in the peak year of 1979, and 11% in the 1992 survey. Current use of alcohol by this age group follows a similar although less emphatic line: it was 69% in 1974 (earliest NHSDA data for this measure), 76% in 1979 (peak year), and 59% in 1992.

Other NHSDA data and data from other surveys corroborate this pattern of rise and fall.<sup>1</sup> For example, the proportion of high school seniors who reported using any illicit drug in the past 30 days rose from 31% in 1975 (the first year of the *Monitoring the Future Seniors Survey*) to 39% in 1978 and 1979 and then declined to 14% by 1992.<sup>2</sup> Estimates of the annual numbers of persons who first used marijuana or cocaine, based on retrospective reports by NHSDA respondents, show a similar pattern of increase followed by decrease during the past two decades.<sup>3</sup>

Decomposition of different prevalence measures by age group is very important in understanding trends in alcohol, tobacco, and illicit drug use. Between 1991 and 1992, the use of most substances decreased in the age groups 12-17 and 18-25—although not all the decreases were statistically significant—while remaining roughly stable for most substances in the age groups 26-34 and 35 and older. Prevalence estimates for younger groups predict future trends in older age groups because most persons who ever used any specified drug first used it during their teens or early 20s. For many years, introduction to drugs in the majority of cases has proceeded in a general, cumulative sequence (which was generally followed by progressively fewer persons at each step): tobacco, inhalants, and alcohol; marijuana; other orally or nasally ingested substances; hypodermic injection of opiates or powerful stimulants (cocaine, amphetamines). As discussed in Chapter 10 of this report, this sequence is almost always initiated between the ages of 12 and 15; the injection phase, if reached, generally begins between the ages of 17 and 20.<sup>4</sup> Therefore, if the typical age of initiation to drug use and typical rate of attrition from drug use remain roughly the same in the future as they have been for the past two decades, the

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<sup>1</sup>Smart and Adlaf, "Patterns of Drug Use Among Adolescents: The Past Decade," *Social Science and Medicine* 23:717-719 (1986).

<sup>2</sup>Johnston, O'Malley, and Bachman, *Drug Use Among American High School Seniors, College Students, and Young Adults, 1975-1993: Volume 1, Secondary School Students*, Rockville, MD: National Institute on Drug Abuse (1991).

<sup>3</sup>Gfroerer and Brodsky, "The Incidence of Illicit Drug Use in the United States, 1962-1989," *British Journal of Addiction* 87:1345-1351 (1992).

<sup>4</sup>Gerstein and Harwood (eds.), *Treating Drug Problems, Volume 1*, Washington, DC: National Academy Press (1990); Kandel, "The Social Demography of Drug Use," *The Milbank Quarterly* 69:365-414 (1991).

declines in NHSDA prevalence estimates in the age groups 12-17 and 18-25 as reported in this chapter portend future declines in past-year and current prevalence rates in the older age groups.<sup>5</sup>

The first section of this chapter summarizes the prevalence of tobacco, alcohol, and illicit drugs in the surveyed population in 1992. The sections following it decompose the trends since 1972 into lifetime, past year, and past month use by the standard age groups (except that two groups, 26-34 and 35 and older, are combined in some tables for the sake of continuity of reporting with the early survey years). Differences between 1991 and 1992 were tested for statistical significance. The final section shows the rate of *any illicit drug use* in 1991 and 1992 (and the statistical significance of changes between the two years) by age group and the key demographic correlates defined in Chapter 1.

It should be noted that estimates from 1985 are revisions of previously published 1985 NHSDA estimates. Improvements made to the 1985 data file more accurately weight the data and adjust for missing and inconsistent data for some questionnaire items. These improvements were done to make the 1985 estimates more consistent with 1988 and later estimates.

### The Prevalence of Drug Use in 1992

Table 2.1 presents the percentages and estimated numbers in the surveyed population who used alcohol, tobacco, or illicit drugs within the standard time periods used throughout this report: lifetime (that is, whether the respondent had ever used the substance), past year (the 12 months preceding the interview), and past month (the 30 days preceding the interview; this is also called current use).<sup>6</sup> The substance categories in this table are also presented, as is standard throughout this report.

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<sup>5</sup>Differences among age groups in lifetime prevalence are generally due to a combination of "aging effects" (due to maturation or getting older) and "birth cohort effects" (due to a specified time period in which a person was born). A third type of temporal effects are "period effects"—due to being alive, regardless of age, at a certain point in time. For example, Tables 2.2-2.5 report that the percentages of persons age 12-17, 18-25, 26-34, and 35 and older in 1992 who had ever used any illicit drug in 1992 were approximately 16%, 52%, 62%, and 28%, respectively. The greater lifetime prevalence in the age group 18-25 than the age group 12-17 is partly due to an aging effect, since some persons age 12-17 who have not used illicit drugs will initiate use in their late teens or early twenties. On the other hand, the greater lifetime prevalence in the age group 26-34 than in the age group 35 and older is due to a birth cohort effect, that is, to differences between the life experiences of those born between 1958 and 1966 and the experiences of those born before 1958—most of whom in this sample were born before 1950. Lifetime substance use prevalence rates for birth cohorts now in the age groups 26-34 and 35 and older—and any finer age bands within these groups—can be thought of as more or less permanently set; their lifetime rates are almost all a result of what happened during their years of high initiation risk (12-25). The birth cohorts groups who went through this part of the life cycle during the heavy drug-marketing wave of 1965-1985 (that is, those born between 1941 and 1973, with the maximum exposure risk belonging to those born between 1953 and 1960) have permanently higher lifetime prevalence than those who came immediately before.

Current and past-year prevalence rates, on the other hand, reflect less the historical residues of past behavior and more the recurrent differences between younger and older persons. For example, Tables 2.6-2.9 report that the percentage of persons in each age group who used any illicit drug in the past year were approximately 12%, 26%, 18%, and 5%, respectively. These age differences are broadly consistent with age differences in previous NHSDAs and indicate that, to a much greater extent than either alcohol use or cigarette use (Tables 2.6-2.9), illicit drug use in the general population is concentrated in adolescence and young adulthood.

<sup>6</sup>Additional measures are introduced in some chapters, such as the number of days marijuana was used in the past month (Table 3.6), number of times ever used cocaine (Table 4.6), number of cigarettes smoked per day in the past month (Table 8.6), and number of times drunk in the past year (Table 9.8).

In 1992, more than one-third (36%) of the surveyed population reported ever having used an illicit drug, one-ninth (11%) reported past-year use, and one-sixteenth (5.5%) were current users. Of the 206 million people in the surveyed population, 74 million had ever used illicit drugs, 23 million had used in the past year, and 11 million had used in the past month.

The most commonly used illicit drug was marijuana, with approximately 68 million lifetime users, 17 million in the past year, and 9 million current (past-month) users. Lifetime use of cocaine and of psychotherapeutics were at similar levels, each with about 23 million lifetime users. There were about 1.5 million current users of analgesics, 1.3 million current cocaine users (about one-fourth of them specifying crack), and fewer than one million users each of any other specific illicit drug (less than .5% of the surveyed population).

Most of the surveyed population had used alcohol (171 million) or cigarettes (146 million) at least one time in their lives. Just under half were current drinkers (98 million) and one out of four were current smokers (54 million). One in seven or 30 million had ever used smokeless tobacco, including 8 million current users.

### **Trends in Lifetime Use**

**Age 12-17.** In this age group, lifetime use of tobacco, alcohol, and most illicit drugs peaked in 1979 and fell steadily thereafter; the remaining types of illicit drugs peaked in 1982 (there was no NHSDA in 1980 or 1981), except analgesics, which showed no decisive trend during 1979-92, the only years analgesics were separately measured (Table 2.2). Between 1991 and 1992, lifetime use of any illicit drug decreased by about one-fifth, from 20% to 17%. Alcohol, tobacco, and most illicit drugs had similar declines from their 1991 levels, although the initial numbers were quite different for each drug.

**Age 18-25.** The patterns across time, including the specific peak years, for lifetime use in this age group mirrored those of the 12-17 group, but at higher rates. Between 1991 and 1992, there were statistically significant declines in stimulant, sedative, and alcohol use; no other changes reached statistical significance.

**Age 26 and older.** In this large older age group, in contrast to the younger ones, lifetime prevalence of use of most illicit drugs steadily increased from the mid-1970s through 1992 (Table 2.4). This increase largely reflects the aging of birth cohorts with high rates of drug initiation in the past, although there have been increases in continuing current use in this age group as well. Lifetime prevalence of alcohol and cigarette use increased through the late 1970s but, in contrast to the illicit drugs, lifetime alcohol use has been stable and cigarette use slightly down since then. Between 1991 and 1992, only heroin and sedatives changed significantly. The reduction in lifetime heroin use must be viewed with caution, however, since the percentage reported in 1991 appears anomalously high relative to 1990 and all earlier NHSDAs.<sup>7,8</sup>

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<sup>7</sup>Peer Review Committee on National Household Survey on Drug Abuse, "Evaluation of Results from the 1992 NHSDA," Unpublished memorandum, Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, June 3, 1993.

<sup>8</sup>Research Triangle Institute, "Analyzing the Decrease in Drug Prevalence Among the Black Population Between the 1992 NHSDA and Previous NHSDAs," Research Triangle Park, NC: RTI (1993).

Trends in 1991-1992 for the 26-34 and the 35 and older groups were very similar (Table 2.5). There were no statistically significant changes in the 26-34 group, and only heroin use changed significantly (from 1.5% to .7%) in the older group, to which the caution just noted applies.

In 1992, the 18-25, 26-34, and 35 and older groups had fairly similar levels of lifetime use of alcohol (86%, 92%, 87%) and cigarettes (69%, 75%, 77%), but the oldest group had a much lower rate of illicit drug use than the two younger age groups (any illicit drug: 52%, 61%, 28%).

### **Trends in Past Year Use**

**Age 12-17.** In this age group, past-year use of marijuana, cocaine, hallucinogens, and alcohol peaked in 1979 (Table 2.6). By 1992, prevalence rates for the first three were at less than half their 1979 equivalents, and alcohol use was about three-fifths the 1979 level. For most other substances the peak was in 1982, but missing data and imprecision made some trends indeterminate. Use of all substances declined between 1991 and 1992, but marijuana, alcohol, stimulants, analgesics, and the two composite measures (any illicit, any psychotherapeutic) fell by about one-fifth and were the only changes to reach statistical significance.

**Age 18-25.** Trends here closely resembled trends in the 12-17 age group (Table 2.7). Rates of past-year use of alcohol, cigarettes, and all illicit drugs (excepting heroin) were higher in the late 1970s or early 1980s than in previous or subsequent years. For inhalants and psychotherapeutics, the peak years occurred several years later than the corresponding peaks in the 12-17 group, probably reflecting the continued use by birth cohorts that had had relatively high rates when they were age 12-17. Most drugs declined between 1991 and 1992, but only a few changes (inhalants, stimulants, and alcohol) were significant.

**Age 26 and older.** This group's past-year trends, unlike its lifetime trends, closely resembled those of the younger groups (Table 2.8), albeit the peak years were slightly delayed. For example, in use of alcohol (73%), any illicit drug (13%), and cocaine (4%), this older group peaked in 1985 rather than 1982 or 1979. Most drug use decreased slightly from 1991 to 1992, but only in two of the largest percentages, alcohol (69%→67%) and any illicit drug (9%→8%), did the change reach statistical significance.

The 25-34 age group reported much higher past-year illicit drug use and appreciably more alcohol and cigarette use than the 35 and older group (Table 2.9). Approximately 18% versus 5% used any illicit drug, 79% versus 63% drank alcohol, and 39% versus 29% smoked cigarettes. When adults were broken into these two groups, only one 1991-1992 change stayed significant, any illicit drug use by those 35 and older (6%→5%).

### **Trends in Past Month Use**

**Age 12-17.** The trend lines in this age group for **past-month** use from 1972 to 1992 were virtually identical, substance for substance, to the trend lines of **past-year** use discussed above (Table 2.10; cf. Table 2.6). Percentage estimates of current (past-month) use in this group (and all groups) were at lower levels and therefore were generally less precise than estimates of past-year use. Therefore, although every category of licit and illicit drug (except the most rare, heroin) declined perceptibly from 1991 to 1992, only the decrease in alcohol use from 20% to 16% was statistically significant.

**Age 18-25.** As in the 12-17 group, current use trends echoed past-year trends (Table 2.11, cf. Table 2.7), with a typical peak between 1979 and 1982 and a steady drop since then; and higher percentages of this age group used every substance than in the younger group, except for inhalants. From 1991 to 1992, there were statistically significant declines in the use of any illicit drug (15%→13%), marijuana (13%→11%), inhalants (1.5%→.8%), and alcohol (64%→59%), which involved by far the largest change in numbers.

**Age 26 and older.** In this group too, current use trends were similar to past year trends, with illicit drug high use points being reached somewhat later (mid-1980s) than for the younger age groups. However, many estimates, especially in the years when NHSDA was much smaller, were too imprecise to report (Table 2.12, cf. Table 2.12). Only two changes between 1991 and 1992 were significant: use of cocaine (.8%→.5%) and alcohol (53%→50%), for which the reduction involved much greater numbers than for cocaine.

Comparing the 18-25, 26-34, and 35 and older groups, there were notable age group differences in 1992 for use of cigarettes (32%, 34%, 25%), alcohol (59%, 61%, 46%) and illicit drugs (any illicit drug: 13%, 10%, 2%).

### **Demographic Correlates of any Illicit Drug Use: 1991 and 1992**

Tables 2.14-2.16 summarize prevalence rates for lifetime, past-year, and current use of the composite category, *any illicit drug*, by age group and demographic subgroup in 1991 and 1992. The overall lifetime percentage went slightly but significantly lower, from 37% to 36%. There was also a significant decrease in past-year use (13%→11%) and a decrease in current use (6.3%→5.5%) that did not reach significance. The largest decreases in past-year use were among the 12- to 17-year-olds; the largest decreases in current use were found among 18- to 25-year-olds.

Within these changes across the three tables were three notable but not readily interpretable demographic associations: by gender, race/ethnicity, and population density. First, males 12-17 and females 18-25 reported the largest significant decreases in past-year use; as did females age 18-25 and 35 and older for current use. Why these somewhat disjoint age/sex groups, each at different absolute levels of use, should stand out in this respect is difficult to explain and invites further study.

Second, there were significant decreases in 9 out of 12 cells representing black respondents, compared with 3 in white and 2 in Hispanic cells. Black respondents reported one-sixth less lifetime use of any illicit drug, one-quarter less past-year use, and one-third less current use—remarkable shifts across a single year. A substantial analysis, undertaken by SAMHSA and described in Appendix E, failed to identify any clear explanation for this anomaly.<sup>9</sup> However, inspection of the time series does suggest that the data for black respondents in 1991, rather than 1992, are out of synchrony. Third, there is a marked pattern of changes in prevalence in the small metropolitan areas which was not as pronounced in large metropolitan areas or nonmetropolitan areas. The 18- to 25-year-old group, in particular, reported very steep declines in lifetime, past year, and past month use.

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<sup>9</sup>Peer Review Committee on National Household Survey on Drug Abuse, "Evaluation of Results from the 1992 NHSDA," Unpublished memorandum, Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, June 3, 1993; Research Triangle Institute, "Analyzing the Decrease in Drug Prevalence Among the Black Population Between the 1992 NHSDA and Previous NHSDAs," Research Triangle Park, NC: RTI (1993).

In addition to trend differences, these tables introduce demographic correlates of prevalence rates within the 1992 survey, which will be explored in more detail in the next 10 chapters. The most striking associations between demographic variables and the composite measure of illicit drug use were as follows:

- **Sex:** men used illicit drugs more than women; male percentages exceeded female by about 1½:1 for current and past-year use in every age group above 12-17.
- **Region:** the 20% of the surveyed population who lived in the West were more prone to use illicit drugs than the rest of the country, exceeding other regions on nearly all measures for all age groups by ratios of about 1½:1.
- **Adult education:** the thirteen million young college graduates (18-34) in the surveyed population were one third to one half as likely to have used illicit drugs during the past month and past year as their 53 million agemates with less education, but they had virtually the same lifetime prevalence.
- **Current employment:** the unemployed population of 12 million had about double the rate of being a current or past-year user compared with the rest of the surveyed population.

**Table 2.1 Percentage and Estimated Number of Users (in Thousands) of Illicit Drugs, Alcohol, and Tobacco in the U.S. Civilian, Noninstitutionalized Population Age 12 and Older in Their Lifetime, the Past Year, and the Past Month: 1992**

Drug	Time Period					
	Lifetime		Past Year		Past Month	
	Percent	Number of Users (Thousands)	Percent	Number of Users (Thousands)	Percent	Number of Users (Thousands)
<b>Any Illicit Drug Use<sup>1</sup></b>	<b>36.2</b>	<b>74,378</b>	<b>11.1</b>	<b>22,862</b>	<b>5.5</b>	<b>11,404</b>
Marijuana/hashish	32.8	67,525	8.5	17,400	4.4	8,950
Cocaine	11.0	22,603	2.4	4,973	0.6	1,305
Crack	1.4	2,798	0.4	805	0.2	314
Inhalants	4.8	9,785	1.0	2,037	0.4	886
Hallucinogens	8.0	16,437	1.2	2,440	0.3	525
PCP	4.0	8,216	0.2	467	*	*
Heroin	0.9	1,840	0.2	323	*	*
Nonmedical use of any psychotherapeutic <sup>2</sup>	11.6	23,837	3.8	7,797	1.3	2,600
Stimulants	6.3	12,870	1.0	1,981	0.2	507
Sedatives	3.5	7,113	0.9	1,806	0.4	721
Tranquilizers	5.1	10,555	1.5	3,046	0.4	769
Analgesics	5.5	11,303	2.4	4,884	0.8	1,547
<b>Alcohol</b>	<b>83.0</b>	<b>170,685</b>	<b>64.7</b>	<b>133,018</b>	<b>47.8</b>	<b>98,413</b>
<b>Cigarettes</b>	<b>71.0</b>	<b>146,012</b>	<b>31.2</b>	<b>64,262</b>	<b>26.2</b>	<b>53,892</b>
<b>Smokeless tobacco</b>	<b>14.7</b>	<b>30,262</b>	<b>5.0</b>	<b>10,264</b>	<b>3.7</b>	<b>7,541</b>

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 2.2 Trends in Percentage of Youth Age 12-17 Reporting Drug Use in Their Lifetime: 1972-1992**

Drug (Unweighted N)	1972 (880)	1974 (952)	1976 (986)	1977 (1,272)	1979 (2,165)	1982 (1,581)	1985 (2,230)	1988 (3,095)	1990 (2,177)	1991 (8,005)	1992 (7,254)
<b>Any Illicit Drug Use<sup>1</sup></b>	--	--	--	--	34.3	27.6*	29.7	24.7	22.7	20.1	16.5**
Marijuana/hashish	14.0	23.0	22.4	28.0	30.9	26.7	23.2	17.4	14.8	13.0	10.6*
Cocaine	1.5	3.6	3.4	4.0	5.4	6.5	4.8	3.4	2.6	2.4	1.7
Inhalants	6.4	8.5	8.1	9.0	9.8	--	9.6	8.8	7.8	7.0	5.7*
Hallucinogens	4.8	6.0	5.1	4.6	7.1	5.2	3.2	3.5	3.3	3.3	2.6
Heroin	0.6	1.0	0.5	1.1	0.5	*	0.4	0.6	0.7	0.3	0.2
<b>Nonmedical use of any psychotherapeutic<sup>2,3</sup></b>	--	--	--	--	7.3	10.3	12.1	7.7	10.2	7.5	5.5**
Stimulants	4.0	5.0	4.4	5.2	3.4	6.7	5.5	4.2	4.5	3.0	2.1*
Sedatives	3.0	5.0	2.8	3.1	3.2	5.8	4.1	2.3	3.3	2.4	1.5**
Tranquilizers	3.0	3.0	3.3	3.8	4.1	4.9	4.9	2.0	2.7	2.1	1.6
Analgesics	--	--	--	--	3.2	4.2	6.0	4.1	6.5	4.4	3.9
<b>Alcohol<sup>3</sup></b>	--	54.0	53.6	52.6	70.3	65.2	55.4	50.2	48.2	46.4	39.3***
<b>Cigarettes<sup>4</sup></b>	--	52.0	45.5	47.3	54.1	49.5	45.3	42.3	40.2	37.9	33.7**

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>†</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

\*Difference between 1991 and 1992 statistically significant at the .05 level.

\*\*Difference between 1991 and 1992 statistically significant at the .01 level.

\*\*\*Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.3 Trends in Percentage of Young Adults Age 18-25 Reporting Drug Use in Their Lifetime: 1972-1992**

Drug (Unweighted N)	1972 (772)	1974 (849)	1976 (882)	1977 (1,500)	1979 (2,044)	1982 (1,283)	1985 (1,812)	1988 (1,505)	1990 (2,052)	1991 (7,937)	1992 (7,721)
<b>Any Illicit Drug Use<sup>1</sup></b>	--	--	--	--	69.9	65.3 <sup>r</sup>	63.7	58.9	55.8	54.7	51.7
Marijuana/hashish	47.9	52.7	52.9	59.9	68.2	64.1	59.4	56.4	52.2	50.5	48.1
Cocaine	9.1	12.7	13.4	19.1	27.5	28.3	24.4	19.7	19.4	17.9	15.8
Inhalants	--	9.2	9.0	11.2	16.5	--	13.0	12.5	10.4	10.9	9.8
Hallucinogens	--	16.6	17.3	19.8	25.1	21.1	11.6	13.8	12.0	13.1	13.4
Heroin	4.6	4.5	3.9	3.6	3.5	1.2	1.3	0.3	0.6	0.8	1.3
<b>Nonmedical use of any psychotherapeutic<sup>2,3</sup></b>	--	--	--	--	29.5	28.4	26.6	17.6	15.6	17.9	15.4 <sup>+</sup>
Stimulants	12.0	17.0	16.6	21.2	18.2	18.0	17.5	11.3	9.0	9.4	6.8 <sup>++</sup>
Sedatives	10.0	15.0	11.9	18.4	17.0	18.7	11.8	5.5	4.0	4.3	3.2 <sup>+</sup>
Tranquilizers	7.0	10.0	9.1	13.4	15.8	15.1	12.6	7.8	5.9	7.4	6.8
Analgesics	--	--	--	--	11.8	12.1	11.5	9.4	8.1	10.2	8.7
<b>Alcohol<sup>3</sup></b>	--	81.6	83.6	84.2	95.3	94.6	92.0	90.3	88.2	90.2	86.3 <sup>+++</sup>
<b>Cigarettes<sup>4</sup></b>	--	68.8	70.1	67.6	82.8	76.9	75.2	74.9	70.5	71.2	68.7

--Estimate not available.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>r</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>++</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

<sup>+++</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

Table 2.4 Trends in Percentage of Adults Age 26 and Older Reporting Drug Use in Their Lifetime: 1972-1992

Drug (Unweighted N)	1972 (1,613)	1974 (2,221)	1976 (1,708)	1977 (1,822)	1979 (3,015)	1982 (2,760)	1985 (3,979)	1988 (4,214)	1990 (5,030)	1991 (16,652)	1992 (13,857)
Any Illicit Drug Use <sup>1</sup>	--	--	--	--	23.0	24.7*	31.7	33.7	35.3	36.0	36.0
Marijuana/hashish	7.4	9.9	12.9	15.3	19.6	23.0	26.6	30.7	31.8	32.7	33.0
Cocaine	1.6	0.9	1.6	2.6	4.3	8.5	9.2	9.9	10.9	11.6	11.4
Inhalants	--	1.2	1.9	1.8	3.9	--	5.3	3.9	3.8	4.2	3.7
Hallucinogens	--	1.3	1.6	2.6	4.5	6.4	6.0	6.6	7.4	7.8	7.7
Heroin	*	0.5	0.5	0.8	1.0	1.1	1.1	1.1	0.9	1.5	0.9**
Nonmedical use of any psychotherapeutic <sup>2,3</sup>	--	--	--	--	9.2	8.8	14.4	11.3	11.5	12.2	11.7
Stimulants	3.0	3.0	5.6	4.7	5.8	6.2	7.9	6.6	6.9	7.1	6.7
Sedatives	2.0	2.0	2.4	2.8	3.5	4.8	5.6	3.3	3.7	4.5	3.8*
Tranquilizers	5.0	2.0	2.7	2.6	3.1	3.6	7.8	4.5	4.2	5.7	5.3
Analgesics	--	--	--	--	2.7	3.2	5.9	4.5	5.1	5.5	5.1
Alcohol <sup>3</sup>	--	73.2	74.7	77.9	91.5	88.2	89.2	88.6	86.8	88.6	88.1
Cigarettes <sup>4</sup>	--	65.4	64.5	67.0	83.0	78.7	80.6	79.6	78.0	77.6	76.3

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

\*The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

\*Difference between 1991 and 1992 statistically significant at the .05 level.

\*\*Difference between 1991 and 1992 statistically significant at the .01 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.5 Trends in Percentage of Middle Adults Age 26-34 and Older Adults Age 35 and Older Reporting Drug Use in Their Lifetime: 1991 and 1992**

Drug (Unweighted N)	Age Group (Years)/Survey Year					
	26-34 Years		≥35 Years		Total ≥26 Years	
	1991 (8,126)	1992 (7,516)	1991 (8,526)	1992 (6,341)	1991 (16,652)	1992 (13,857)
<b>Any Illicit Drug Use<sup>1</sup></b>	<b>61.8</b>	<b>60.8</b>	<b>27.3</b>	<b>28.0</b>	<b>36.0</b>	<b>36.0</b>
Marijuana/hashish	59.5	58.6	23.7	24.8	32.7	33.0
Cocaine	25.8	25.2	6.8	6.9	11.6	11.4
Inhalants	9.2	9.2	2.5	2.0	4.2	3.7
Hallucinogens	15.5	15.6	5.2	5.2	7.8	7.7
Heroin	1.8	1.6	1.5	0.7 <sup>**</sup>	1.5	0.9 <sup>**</sup>
Nonmedical use of any psychotherapeutic <sup>2</sup>	20.0	19.5	9.6	9.2	12.2	11.7
Stimulants	12.2	11.9	5.4	5.0	7.1	6.7
Sedatives	7.5	6.3	3.5	2.9	4.5	3.8 <sup>+</sup>
Tranquilizers	10.0	9.0	4.2	4.1	5.7	5.3
Analgesics	9.8	10.0	4.1	3.5	5.5	5.1
<b>Alcohol</b>	<b>92.4</b>	<b>91.7</b>	<b>87.4</b>	<b>87.0</b>	<b>88.6</b>	<b>88.1</b>
<b>Cigarettes</b>	<b>76.3</b>	<b>74.8</b>	<b>78.0</b>	<b>76.8</b>	<b>77.6</b>	<b>76.3</b>

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>\*\*</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

Table 2.6 Trends in Percentage of Youth Age 12-17 Reporting Drug Use in the Past Year: 1972-1992

Drug (Unweighted N)	1972 (880)	1974 (952)	1976 (986)	1977 (1,272)	1979 (2,165)	1982 (1,581)	1985 (2,230)	1988 (3,095)	1990 (2,177)	1991 (8,005)	1992 (7,254)
Any Illicit Drug Use <sup>1</sup>	--	--	--	--	26.0	22.0 <sup>†</sup>	23.3	16.8	15.9	14.8	11.7 <sup>**</sup>
Marijuana/hashish	--	18.5	18.4	22.3	24.1	20.6	19.4	12.6	11.3	10.1	8.1 <sup>†</sup>
Cocaine	1.5	2.7	2.3	2.6	4.2	4.1	3.9	2.9	2.2	1.5	1.1
Inhalants	2.9	2.4	2.9	2.2	4.6	--	5.3	3.9	4.0	4.0	3.4
Hallucinogens	3.6	4.3	2.8	3.1	4.7	3.6	2.6	2.8	2.4	2.1	1.9
Heroin	*	*	*	0.6	*	*	0.3	0.4	0.6	0.2	0.1
Nonmedical use of any psychotherapeutic <sup>2,3</sup>	--	--	--	--	5.6	8.3	8.2	5.4	7.0	5.0	3.6 <sup>**</sup>
Stimulants	--	3.0	2.2	3.7	2.9	5.6	4.1	2.8	3.0	1.9	1.3 <sup>†</sup>
Sedatives	--	2.0	1.2	2.0	2.2	3.7	2.8	1.7	2.2	1.3	1.0
Tranquilizers	--	2.0	1.8	2.9	2.7	3.3	3.4	1.5	1.5	1.3	1.0
Analgesics	--	--	--	--	2.2	3.7	4.0	3.0	4.8	3.3	2.4 <sup>†</sup>
Alcohol <sup>3</sup>	--	51.0	49.3	47.5	53.6	52.4	51.6	44.6	41.0	40.3	32.6 <sup>***</sup>
Cigarettes <sup>4</sup>	--	--	--	--	13.3	24.8	25.5	22.8	22.2	20.1	18.2

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>†</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>†</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>\*\*</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

<sup>\*\*\*</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.7 Trends in Percentage of Young Adults Age 18-25 Reporting Drug Use in the Past Year: 1972-1992**

Drug (Unweighted N)	1972 (772)	1974 (849)	1976 (882)	1977 (1,500)	1979 (2,044)	1982 (1,283)	1985 (1,812)	1988 (1,505)	1990 (2,052)	1991 (7,937)	1992 (7,721)
Any Illicit Drug Use <sup>1</sup>	--	--	--	--	49.4	43.4 <sup>r</sup>	41.0	32.0	28.7	29.1	26.4
Marijuana/hashish	--	34.2	35.0	38.7	46.9	40.4	36.3	27.9	24.6	24.5	22.7
Cocaine	--	8.1	7.0	10.2	19.6	18.8	15.6	12.1	7.5	7.7	6.3
Inhalants	--	1.2	1.4	1.7	3.8	--	2.1	4.1	3.0	3.5	2.3 <sup>+</sup>
Hallucinogens	--	6.1	6.0	6.4	9.9	6.9	4.0	5.6	3.9	4.7	4.8
Heroin	--	0.8	0.6	1.2	0.8	*	0.6	0.3	0.5	0.3	0.5
Nonmedical use of any psychotherapeutic <sup>2,3</sup>	--	--	--	--	16.3	16.1	15.2	11.3	7.0	8.6	7.7
Stimulants	--	8.0	8.8	10.4	10.1	10.8	9.8	6.4	3.4	3.3	2.3 <sup>+</sup>
Sedatives	--	4.2	5.7	8.2	7.3	8.7	5.1	3.3	2.0	1.9	1.7
Tranquilizers	--	4.6	6.2	7.8	7.1	5.9	6.4	4.6	2.4	2.6	3.0
Analgesics	--	--	--	--	5.2	4.4	6.8	5.5	4.1	5.3	4.8
Alcohol <sup>3</sup>	--	77.1	77.9	79.8	86.6	87.1	86.4	81.7	80.2	82.8	77.7 <sup>+++</sup>
Cigarettes <sup>4</sup>	--	--	--	--	46.7	47.2	43.9	44.7	39.7	41.2	41.1

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>r</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>++</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

<sup>+++</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.8 Trends in Percentage of Adults Age 26 and Older Reporting Drug Use in the Past Year: 1972-1992**

Drug (Unweighted N)	1972 (1,613)	1974 (2,221)	1976 (1,708)	1977 (1,822)	1979 (3,015)	1982 (2,760)	1985 (3,979)	1988 (4,214)	1990 (5,030)	1991 (16,652)	1992 (13,857)
<b>Any Illicit Drug Use<sup>1</sup></b>	--	--	--	--	10.0	11.8 <sup>r</sup>	12.7	10.2	10.0	9.4	8.3 <sup>+</sup>
Marijuana/hashish	--	3.8	5.4	6.4	9.0	10.6	9.3	6.9	7.3	6.6	6.0
Cocaine	--	*	0.6	0.9	2.0	3.8	4.0	2.7	2.4	2.3	1.9
Inhalants	--	*	*	*	1.0	--	0.8	0.4	0.5	0.5	0.4
Hallucinogens	--	*	*	*	0.5	0.8	0.9	0.6	0.4	0.5	0.4
Heroin	--	*	*	*	*	*	*	0.2	0.1	0.2	0.1
<b>Nonmedical use of any psychotherapeutic<sup>2,3</sup></b>	--	--	--	--	2.3	3.1	6.0	4.7	3.4	3.6	3.1
Stimulants	--	*	0.8	0.8	1.3	1.7	2.6	1.7	1.0	0.9	0.7
Sedatives	--	*	0.6	*	0.8	1.4	2.0	1.2	0.8	0.9	0.7
Tranquilizers	--	*	1.2	1.1	0.9	1.1	2.8	1.8	1.0	1.5	1.3
Analgesics	--	--	--	--	0.5	1.0	2.8	2.1	1.9	1.9	1.9
<b>Alcohol<sup>3</sup></b>	--	62.7	64.2	65.8	72.4	72.0	73.1	68.6	66.6	68.9	66.6 <sup>+</sup>
<b>Cigarettes<sup>4</sup></b>	--	--	--	--	39.7	38.2	35.7	33.6	31.9	32.0	31.2

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>r</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.9 Trends in Percentage of Middle Adults Age 26-34 and Older Adults Age 35 and Older Reporting Drug Use in the Past Year: 1991 and 1992**

Drug (Unweighted <u>N</u> )	Age Group (Years)/Survey Year					
	26-34 Years		≥ 35 Years		Total ≥ 26 Years	
	1991 (8,126)	1992 (7,516)	1991 (8,526)	1992 (6,341)	1991 (16,652)	1992 (13,857)
<b>Any Illicit Drug Use<sup>1</sup></b>	<b>18.4</b>	<b>18.3</b>	<b>6.4</b>	<b>5.1*</b>	<b>9.4</b>	<b>8.3*</b>
Marijuana/hashish	14.4	14.3	4.0	3.3	6.6	6.0
Cocaine	5.1	4.9	1.4	0.9	2.3	1.9
Inhalants	0.9	1.1	0.4	0.2	0.5	0.4
Hallucinogens	1.1	1.4	0.2	0.1	0.5	0.4
Heroin	0.3	0.2	0.1	0.1	0.2	0.1
Nonmedical use of any psychotherapeutic <sup>2</sup>	6.1	5.9	2.8	2.2	3.6	3.1
Stimulants	1.9	1.8	0.5	0.3	0.9	0.7
Sedatives	1.2	1.0	0.7	0.6	0.9	0.7
Tranquilizers	2.4	2.0	1.2	1.0	1.5	1.3
Analgesics	3.6	3.6	1.3	1.4	1.9	1.9
<b>Alcohol</b>	<b>80.9</b>	<b>79.0</b>	<b>64.9</b>	<b>62.6</b>	<b>68.9</b>	<b>66.6*</b>
<b>Cigarettes</b>	<b>38.1</b>	<b>38.8</b>	<b>30.0</b>	<b>28.8</b>	<b>32.0</b>	<b>31.2</b>

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

\*Difference between 1991 and 1992 statistically significant at the .05 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

**Table 2.10 Trends in Percentage of Youth Age 12-17 Reporting Drug Use in the Past Month: 1972-1992**

Drug (Unweighted N)	1972 (880)	1974 (952)	1976 (986)	1977 (1,272)	1979 (2,165)	1982 (1,581)	1985 (2,230)	1988 (3,095)	1990 (2,177)	1991 (8,005)	1992 (7,254)
<b>Any Illicit Drug Use<sup>1</sup></b>	--	--	--	--	17.6	12.7 <sup>†</sup>	14.9	9.2	8.1	6.8	6.1
Marijuana/hashish	7.0	12.0	12.3	16.6	16.7	11.5	11.9	6.4	5.2	4.3	4.0
Cocaine	0.6	1.0	1.0	0.8	1.4	1.6	1.4	1.1	0.6	0.4	0.3
Inhalants	1.0	0.7	0.9	0.7	2.0	--	3.7	2.0	2.2	1.8	1.6
Hallucinogens	1.4	1.3	0.9	1.6	2.2	1.4	1.2	0.8	0.9	0.8	0.6
Heroin	*	*	*	*	*	*	0.1	*	*	0.1	0.1
<b>Nonmedical use of any psychotherapeutic<sup>2,3</sup></b>	--	--	--	--	2.3	3.8	3.0	2.4	2.7	1.9	1.2
Stimulants	--	1.0	1.2	1.3	1.2	2.6	1.6	1.2	1.0	0.5	0.2
Sedatives	--	1.0	*	0.8	1.1	1.3	1.0	0.6	0.9	0.5	0.4
Tranquilizers	--	1.0	1.1	0.7	0.6	0.9	0.6	0.2	0.5	0.4	0.2
Analgesics	--	--	--	--	0.6	0.7	1.7	0.9	1.4	1.1	0.8
<b>Alcohol<sup>3</sup></b>	--	34.0	32.4	31.2	37.2	30.2	31.0	25.2	24.5	20.3	15.7 <sup>+++</sup>
<b>Cigarettes<sup>4</sup></b>	--	25.0	23.4	22.3	12.1	14.7	15.3	11.8	11.6	10.8	9.6

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>†</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>+++</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.11 Trends in Percentage of Young Adults Age 18-25 Reporting Drug Use in the Past Month: 1972-1992**

Drug (Unweighted N)	1972 (772)	1974 (849)	1976 (882)	1977 (1,500)	1979 (2,044)	1982 (1,283)	1985 (1,812)	1988 (1,505)	1990 (2,052)	1991 (7,937)	1992 (7,721)
Any Illicit Drug Use <sup>1</sup>	--	--	--	--	37.1	30.4 <sup>†</sup>	25.1	17.8	14.9	15.4	13.0 <sup>†</sup>
Marijuana/hashish	27.8	25.2	25.0	27.4	35.4	27.4	21.9	15.5	12.7	13.0	11.0 <sup>†</sup>
Cocaine	--	3.1	2.0	3.7	9.3	6.8	7.5	4.5	2.2	2.0	1.8
Inhalants	--	*	0.5	*	1.2	--	0.8	1.7	1.2	1.5	0.8 <sup>†</sup>
Hallucinogens	--	2.5	1.1	2.0	4.4	1.7	1.8	1.9	0.8	1.2	1.3
Heroin	--	*	*	*	*	*	0.3	*	0.1	0.1	0.2
Nonmedical use of any psychotherapeutic <sup>2,3</sup>	--	--	--	--	6.2	7.0	6.3	3.8	2.6	2.7	2.3
Stimulants	--	3.7	4.7	2.5	3.5	4.7	3.8	2.4	1.2	0.8	0.7
Sedatives	--	1.6	2.3	2.8	2.8	2.6	1.6	0.9	0.7	0.7	0.6
Tranquilizers	--	1.2	2.6	2.4	2.1	1.6	1.6	1.0	0.5	0.6	0.6
Analgesics	--	--	--	--	1.0	1.0	2.0	1.5	1.2	1.4	1.2
Alcohol <sup>3</sup>	--	69.3	69.0	70.0	75.9	70.9	70.7	65.3	63.3	63.6	59.2 <sup>**</sup>
Cigarettes <sup>4</sup>	--	48.8	49.4	47.3	42.6	39.5	36.6	35.2	31.5	32.2	31.9

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>†</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>†</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>\*\*</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.12 Trends in Percentage of Adults Age 26 and Older Reporting Drug Use in the Past Month: 1972-1992**

Drug (Unweighted N)	1972 (1,613)	1974 (2,221)	1976 (1,708)	1977 (1,822)	1979 (3,015)	1982 (2,760)	1985 (3,979)	1988 (4,214)	1990 (5,030)	1991 (16,652)	1992 (13,857)
<b>Any Illicit Drug Use<sup>1</sup></b>	--	--	--	--	6.5	7.5 <sup>†</sup>	8.0	4.9	4.6	4.6	4.1
Marijuana/hashish	2.5	2.0	3.5	3.3	6.0	6.6	6.0	3.9	3.6	3.3	3.2
Cocaine	--	*	*	*	0.9	1.2	1.9	0.9	0.6	0.8	0.5 <sup>†</sup>
Inhalants	--	*	*	*	0.5	--	0.5	0.2	0.3	0.3	0.2
Hallucinogens	--	*	*	*	*	*	*	*	0.1	0.1	*
Heroin	--	*	*	*	*	*	*	*	*	*	*
<b>Nonmedical use of any psychotherapeutic<sup>2,3</sup></b>	--	--	--	--	1.1	1.2	2.5	1.2	1.0	1.4	1.1
Stimulants	--	*	*	0.6	0.5	0.6	0.7	0.5	0.3	0.2	0.2
Sedatives	--	*	0.5	*	*	*	0.6	0.3	0.1	0.3	0.3
Tranquilizers	--	*	*	*	*	*	1.0	0.6	0.2	0.5	0.4
Analgesics	--	--	--	--	*	*	0.9	0.4	0.6	0.5	0.7
<b>Alcohol<sup>3</sup></b>	--	54.5	56.0	54.9	61.3	59.8	59.8	54.8	52.3	52.5	50.1 <sup>†</sup>
<b>Cigarettes<sup>4</sup></b>	--	39.1	38.4	38.7	36.9	34.6	32.7	29.8	27.7	28.2	27.4

--Estimate not available.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>Estimates before 1979 for alcohol and 1982 for psychotherapeutics may not be comparable to those for later years due to a change in methodology. See Key Definitions for explanation.

<sup>4</sup>For 1979, includes only people who ever smoked at least five packs.

<sup>†</sup>The exclusion of inhalants in 1982 is believed to have resulted in underestimates in any illicit use for that year, especially for youth age 12-17.

<sup>†</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1972-1992.

**Table 2.13 Trends in Percentage of Middle Adults Age 26-34 and Older Adults Age 35 and Older Reporting Drug Use in the Past Month: 1991 and 1992**

Drug (Unweighted N)	Age Group (Years)/Survey Year					
	26-34 Years		≥35 Years		Total ≥ 26 Years	
	1991 (8,126)	1992 (7,516)	1991 (8,526)	1992 (6,341)	1991 (16,652)	1992 (13,857)
<b>Any Illicit Drug Use<sup>1</sup></b>	9.0	10.1	3.1	2.2*	4.6	4.1
Marijuana/hashish	7.0	8.2	2.1	1.6	3.3	3.2
Cocaine	1.8	1.4	0.5	0.2*	0.8	0.5*
Inhalants	0.5	0.4	0.2	0.1	0.3	0.2
Hallucinogens	0.2	0.1	0.1	*	0.1	*
Heroin	0.1	*	*	*	*	*
Nonmedical use of any psychotherapeutic <sup>2</sup>	2.2	2.4	1.1	0.7	1.4	1.1
Stimulants	0.5	0.4	0.1	0.1	0.2	0.2
Sedatives	0.4	0.6	0.3	0.2	0.3	0.3
Tranquilizers	0.7	0.5	0.5	0.3	0.5	0.4
Analgesics	1.0	1.4	0.4	0.4	0.5	0.7
<b>Alcohol</b>	61.7	61.2	49.5	46.5	52.5	50.1*
<b>Cigarettes</b>	32.9	33.7	26.6	25.3	28.2	27.4

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

\*Difference between 1991 and 1992 statistically significant at the .05 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

**Table 2.14 Trends in Percentage Reporting Use of Any Illicit Drug in Their Lifetime, by Age Group and Demographic Characteristics: 1991 and 1992**

Demographic Characteristic	Age Group (Years)									
	12-17		18-25		26-34		≥35		Total	
	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
<b>Total</b>	20.1	16.5 <sup>+</sup>	54.7	51.7	61.8	60.8	27.3	28.0	37.0	36.2 <sup>++</sup>
<b>Sex</b>										
Male	21.2	16.3 <sup>++</sup>	56.6	53.3	66.7	66.1	31.6	34.1	41.0	41.0
Female	18.9	16.6	52.8	50.0	57.0	55.5	23.5	22.7	33.4	31.7
<b>Race/Ethnicity<sup>1</sup></b>										
White	20.6	16.9 <sup>++</sup>	59.1	56.3	65.7	65.7	26.9	28.7	37.7	37.7
Black	20.4	15.1 <sup>+</sup>	46.4	42.3	58.0	51.4 <sup>+</sup>	34.0	28.7 <sup>+</sup>	39.2	33.6 <sup>+++</sup>
Hispanic	17.9	17.6	40.1	39.2	42.2	44.3	24.9	20.7	30.9	29.2
<b>Population Density</b>										
Large metro	18.3	15.9	54.9	54.3	62.3	61.8	31.7	30.5	39.9	38.6
Small metro	22.8	17.2 <sup>++</sup>	57.8	48.9 <sup>++</sup>	63.8	64.0	24.0	26.8	36.3	35.6
Nonmetro	19.1	16.3	49.6	50.5	57.4	54.0	24.0	25.3	32.7	32.5
<b>Region</b>										
Northeast	18.1	13.7	55.3	55.1	61.1	61.6	26.7	25.5	36.4	34.9
North Central	19.4	16.3	53.4	51.6	63.3	58.4	26.7	23.4	36.5	32.6
South	20.1	14.9 <sup>+++</sup>	51.2	47.9	59.0	59.0	22.8	24.2	33.3	33.1
West	22.8	21.5	62.0	55.5 <sup>+</sup>	65.2	65.4	36.7	42.5 <sup>++</sup>	44.8	46.6
<b>Adult Education<sup>2</sup></b>										
Less than high school	N/A	N/A	57.6	53.3	58.5	58.9	15.3	16.1	28.0	27.5
High school graduate	N/A	N/A	52.5	52.5	63.4	61.8	25.2	24.5	38.0	36.9
Some college	N/A	N/A	55.9	49.7 <sup>+</sup>	63.9	62.9	38.8	33.9	48.2	43.6 <sup>+</sup>
College graduate	N/A	N/A	52.8	51.3	59.4	58.7	33.7	42.5 <sup>++</sup>	41.9	47.4 <sup>+</sup>
<b>Current Employment<sup>3</sup></b>										
Full-time	N/A	N/A	58.3	54.3	62.5	62.2	36.6	39.4	46.6	47.3
Part-time	N/A	N/A	50.8	47.5	63.3	58.1	31.3	25.4	42.6	38.2
Unemployed	N/A	N/A	58.6	57.1	71.0	65.1	45.7	32.4 <sup>+</sup>	55.9	47.9 <sup>+</sup>
Other <sup>4</sup>	N/A	N/A	50.2	47.2	52.8	54.2	11.7	13.6	20.8	21.5

N/A: Not applicable.

Note: Any illicit drug use is use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>++</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

<sup>+++</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

**Table 2.15 Trends in Percentage Reporting Use of Any Illicit Drug in the Past Year, by Age Group and Demographic Characteristics: 1991 and 1992**

Demographic Characteristic	Age Group (Years)									
	12-17		18-25		26-34		≥35		Total	
	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
<b>Total</b>	14.8	11.7 <sup>**</sup>	29.1	26.4	18.4	18.3	6.4	5.1 <sup>+</sup>	12.7	11.1 <sup>**</sup>
<b>Sex</b>										
Male	15.9	11.0 <sup>**</sup>	31.4	30.4	22.2	22.3	7.5	6.7	14.7	13.4
Female	13.7	12.5	27.0	22.6 <sup>+</sup>	14.7	14.4	5.4	3.7 <sup>+</sup>	10.9	9.0 <sup>***</sup>
<b>Race/Ethnicity<sup>1</sup></b>										
White	15.1	12.1 <sup>+</sup>	31.4	28.7	18.3	19.1	6.0	5.3	12.4	11.3 <sup>+</sup>
Black	15.2	9.9 <sup>**</sup>	25.6	22.2	23.0	18.1 <sup>+</sup>	9.6	5.8 <sup>**</sup>	15.8	11.5 <sup>***</sup>
Hispanic	13.3	12.7	20.9	20.0	13.1	15.1	7.0	4.1 <sup>+</sup>	11.9	10.8
<b>Population Density</b>										
Large metro	12.9	12.0	28.7	28.7	20.5	18.4	7.8	6.0 <sup>+</sup>	13.7	12.1 <sup>+</sup>
Small metro	17.2	12.2 <sup>**</sup>	32.4	22.6 <sup>***</sup>	18.1	19.9	4.8	4.0	12.6	10.4 <sup>**</sup>
Nonmetro	14.6	10.7	25.1	27.6	14.2	15.9	6.0	4.8	11.0	10.3
<b>Region</b>										
Northeast	13.6	9.9	28.6	29.5	18.2	19.3	6.6	3.6 <sup>+</sup>	12.5	10.3 <sup>+</sup>
North Central	15.0	10.7 <sup>+</sup>	28.6	24.2	16.7	13.4	6.0	4.3	11.9	9.1 <sup>**</sup>
South	14.1	10.4 <sup>+</sup>	26.9	23.7	16.8	18.0	5.2	4.1	11.5	10.2
West	17.4	16.6	34.6	30.7	22.8	23.0	8.8	9.2	16.1	15.7
<b>Adult Education<sup>2</sup></b>										
Less than high school	N/A	N/A	36.0	30.2 <sup>+</sup>	25.8	20.8 <sup>+</sup>	4.1	3.5	12.2	9.8 <sup>+</sup>
High school graduate	N/A	N/A	26.1	26.2	19.6	19.6	6.9	5.0	12.8	11.5
Some college	N/A	N/A	30.1	27.0	17.5	20.4	8.9	6.1	15.5	13.7
College graduate	N/A	N/A	22.6	18.0	13.3	13.1	5.8	6.2	9.0	8.9
<b>Current Employment<sup>3</sup></b>										
Full-time	N/A	N/A	26.9	25.3	17.7	17.7	8.1	6.6	13.1	12.0
Part-time	N/A	N/A	28.1	26.8	17.1	19.2	6.4	4.6	14.7	13.9
Unemployed	N/A	N/A	36.9	36.6	38.9	31.5	17.8	12.4	28.8	24.0
Other <sup>4</sup>	N/A	N/A	30.2	23.2 <sup>**</sup>	12.5	13.0	2.8	2.4	7.3	5.8 <sup>+</sup>

N/A: Not applicable.

Note: Any illicit drug use is use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

<sup>+</sup>Difference between 1991 and 1992 statistically significant at the .05 level.

<sup>\*\*</sup>Difference between 1991 and 1992 statistically significant at the .01 level.

<sup>\*\*\*</sup>Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

**Table 2.16 Trends in Percentage Reporting Use of Any Illicit Drug in the Past Month, by Age Group and Demographic Characteristics: 1991 and 1992**

Demographic Characteristic	Age Group (Years)									
	12-17		18-25		26-34		≥35		Total	
	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
<b>Total</b>	6.8	6.1	15.4	13.0*	9.0	10.1	3.1	2.2*	6.3	5.5
<b>Sex</b>										
Male	7.1	5.7	17.6	16.7	11.3	12.6	3.8	3.2	7.6	7.1
Female	6.4	6.5	13.3	9.5**	6.6	7.6	2.5	1.4**	5.2	4.1**
<b>Race/Ethnicity<sup>1</sup></b>										
White	6.6	6.1	16.0	13.7	8.7	10.6*	2.7	2.2	5.9	5.5
Black	7.0	6.1	16.9	12.1**	13.7	10.3*	5.8	3.5*	9.4	6.6***
Hispanic	7.9	7.1	11.6	10.2	5.9	7.8	3.8	1.3**	6.3	5.3
<b>Population Density</b>										
Large metro	6.5	5.7	15.2	14.8	10.6	9.7	3.8	2.7	7.0	6.0*
Small metro	6.8	7.0	16.6	10.1***	8.3	11.1*	2.7	1.6	6.2	5.1
Nonmetro	7.1	5.7	13.9	13.8	6.2	9.5*	2.4	2.1	5.2	5.3
<b>Region</b>										
Northeast	5.0	4.1	15.5	15.6	8.4	11.4	3.5	1.1**	6.2	5.1
North Central	7.3	6.3	14.3	11.0	9.1	6.9	2.7	2.1	5.9	4.5*
South	6.4	5.9	14.1	12.3	7.3	9.9*	2.5	1.7	5.5	5.2
West	8.6	7.9	19.1	14.2*	11.9	12.5	4.3	4.4	8.3	7.7
<b>Adult Education<sup>2</sup></b>										
Less than high school	N/A	N/A	19.4	16.7	13.8	11.9	2.0	2.2	6.4	5.6
High school graduate	N/A	N/A	15.1	13.5	10.2	10.3	3.8	2.1*	7.0	5.7*
Some college	N/A	N/A	14.2	12.3	8.8	11.2	3.9	1.8*	7.3	6.1
College graduate	N/A	N/A	11.4	6.3*	4.7	7.6*	2.7	2.8	3.8	4.3
<b>Current Employment<sup>3</sup></b>										
Full-time	N/A	N/A	13.1	12.2	8.3	9.8	3.9	2.6*	6.3	5.8
Part-time	N/A	N/A	16.4	11.7*	8.8	10.1	3.7	1.6	8.3	6.2*
Unemployed	N/A	N/A	20.8	23.3	21.9	18.1	11.0	5.8	16.7	13.8
Other <sup>4</sup>	N/A	N/A	15.8	10.6**	5.7	6.8	1.0	1.4	3.4	3.0

N/A: Not applicable.

Note: Any illicit drug use is use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Totals refer to those age 18 and older, unweighted N=24,589 for 1991; unweighted N=21,578 for 1992.

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

\*Difference between 1991 and 1992 statistically significant at the .05 level.

\*\*Difference between 1991 and 1992 statistically significant at the .01 level.

\*\*\*Difference between 1991 and 1992 statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1991 and 1992.

## Chapter Three: Marijuana

### Introduction

Marijuana was the most commonly used illicit drug in 1992; nearly 80 percent of current illicit drug users were marijuana or hashish users. Approximately 68 million of the 206 million persons represented in 1992, or 32.8%, reported marijuana use in their lifetime, 17 million (8.5%) reported use in the past year, and 9 million (4.4%) reported current use (in the past month). Marijuana use in the past year was proportionately more common among males and young adults (18-25 years of age), in the West, and among the unemployed. However, reported marijuana use in the surveyed population continued its 13-year decline, especially in the 12-17 and 18-25 age groups. The following sections provide a detailed description of the prevalence of marijuana use in demographic subgroups defined by age, sex, race/ethnicity, population density, region, education, and current employment status.

### General Prevalence of Marijuana Use by Age

Tables 3.1-3.3 present lifetime, past-year, and current use of marijuana. One-third of the respondents had ever used marijuana, but only 1 in 12 had used in the past year and 1 in 23 in the past month. Prevalence varied greatly across age groups. Lifetime use ranged from 59% of the 26-34 age group to 11% of the 12-17 group. Past-year and current use were highest in the 18-25 group (23% and 11%), lowest in the 35 and older group (3.3% and 1.6%). Table 3.4 gives a finer picture of the age distribution. Lifetime prevalence of marijuana use was successively higher in each age group from 12-13 to 30-34 years of age, then decreased gradually. The youngest and oldest groups reported the lowest lifetime use, the one group not yet old enough for the typical age of onset, the other too old to have participated in the rapidly growing onset rates of 1965-79. Current and past-year use were highest among 18- to 21-year-olds, slightly lower until age 44, and fell rapidly after 45. Other surveys have reported a slightly younger peak but the same overall pattern.<sup>1</sup>

### Sex and Race/Ethnicity

Among persons age 26 and older, lifetime use was significantly more common for males than for females, and there was also a higher male rate in the two younger groups, but the difference was too small to be statistically significant. Current and past-year use were significantly higher for males by about a 2:1 ratio in all but the 12-17 age group, in which there was no significant sex difference.

Race/ethnicity was significantly related to marijuana use, but the relationships varied across age groups. Among respondents age 35 and older, blacks reported the highest prevalence for each time period, followed by whites and Hispanics; but only the black-Hispanic difference was statistically significant. In the 18-34 group, in contrast, whites had the higher percentages for each time period. But in the 12-17 group, there were no significant racial/ethnic differences except in past-year use, on which Hispanics were significantly higher than whites or blacks. Moreover, when the percentages in Table 3.5 for Hispanic males 12-17 are compared with percentages in 1990 and 1991, this group appears to have been moving along a different track, with all its marijuana measures heading upward, instead of downward with the rest of the surveyed population—a matter that commands particular attention.

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<sup>1</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*. Rockville, MD: US Department of Health and Human Services (1993), 37,43.

Table 3.5 is a more complete breakdown of marijuana use by age, sex, and race. Within every racial/ethnic group, past-year use was significantly higher for males than females by 1½-2:1 ratios, except among blacks and whites age 12-17. Within gender groups, past-year use among 18- to 34-year-old whites was significantly higher than use among their Hispanic counterparts, with blacks in between.

In summary, there was a consistent male-female difference in current and past-year marijuana use in all adult age groups. There were also some significant associations between race/ethnicity and marijuana use—but they were not simple. Multivariate analyses<sup>2</sup> have suggested that other socioeconomic variables may interact heavily with racial and ethnic differences, and this is an area that calls for further study.

### **Population Density and Region**

Large metropolitan areas tended to have higher percentages of marijuana use, but these differences were small and scattered compared with differences by other demographic characteristics, in particular by geographic region. In the 26 and older age groups, lifetime and past-year use was higher in the West than in all other regions, and in the 18-25 age group, lifetime and past-year use was significantly more common in the West and Northeast than in the North Central or South.

### **Adult Education and Current Employment**

The final demographic comparisons of marijuana prevalence involve education, where there were different patterns for older and younger age groups (adults only; 12- to 17-year-olds are omitted from these analyses); and current employment, where the patterns for all adult age groups converged. Lifetime use differed significantly by education level only in the 35 and older group, increasing from 13% among less-than-high-school-graduates to 38% among college graduates. The reverse relationship occurred for past-year use in both of the younger groups (18-25 and 26-34). College graduates reported significantly lower past-year use than persons at other education levels; the same significant reversal held for past-month use in the 18-25 group, where 6% of college graduates and 14% of the less-than-high-school group were current users.

Past-year use was highest among the unemployed (20%) and lowest (4%) in the "other" category of retirees, homemakers, the disabled, and students. These differences were consistent across all age categories and were echoed by reports for current and lifetime use.

### **Frequency of Use**

Tables 3.6 and 3.7 present lifetime and past-year data on how many times or days marijuana was used among all respondents and just among those who used at least once. Among adults who used marijuana at least once, there was some, but not much, variation by age group in the number of times used; 22% of 18- to 25-year-olds, 29% of 26- to 34-year-olds, and 21% of those 35 and older had used 100 times or more, versus 10% of the 12-17 lifetime user group. A similar result applies for current use; 21% of the 18-25 age group and 16% of the 26-34 age group who were current users had used marijuana on at least 20 days in the past month, compared with 8% of the current users age 12-17 (there were too few

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<sup>2</sup>Office of Applied Studies, SAMHSA, *Race/Ethnicity, Socioeconomic Status, and Drug Abuse, 1991*, Rockville, MD: SAMHSA (December 1993), 36-39; Wallace and Bachman, "Explaining Racial/Ethnic Differences in Adolescent Drug Use: The Impact of Background and Lifestyle," *Social Problems* 38:346 (Table 4), 347-348 (1991).

current users 35 and older for their data to be included in this comparison). In summary, the adult users were twice as likely as the 12- to 17-year-old users to be at the high end of the respective frequency distributions.

### **Use of Marijuana and Other Drugs**

Current users of marijuana were significantly more likely than nonusers to drink alcohol, smoke cigarettes, and use other illicit drugs (Table 3.8). These associations varied, however, across age groups and substances, in ways that demonstrate the coherence of illicit drug use patterns. In the 35 and older age group, where current marijuana use is by far the most unusual, current marijuana users were more than 30 times more likely to use other illicit drugs than those 35 and older who were not current marijuana users. For all other age groups, the comparable coefficients were between 12 and 13. Alcohol and cigarettes, on the other hand, are not legal for the 12-17 age group, where current drinking and smoking cigarettes are most atypical. The adolescent current marijuana users were about 6 times more likely than nonusers to drink alcohol or smoke cigarettes, versus a factor of 2 for adult marijuana users age 18-34.

**Table 3.1 Percentage Reporting Marijuana Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>10.6</b>	<b>48.1</b>	<b>58.6</b>	<b>24.8</b>	<b>32.8</b>
<b>Sex</b>					
Male	11.6	49.7	64.3	31.2	38.0
Female	9.6	46.6	52.9	19.2	28.0
<b>Race/Ethnicity<sup>1</sup></b>					
White	10.8	53.0	63.6	25.2	34.2
Black	9.1	38.9	48.9	27.5	31.1
Hispanic	11.9	35.0	41.4	18.2	25.9
<b>Population Density</b>					
Large metro	10.6	50.2	59.2	27.1	35.1
Small metro	11.3	46.0	61.8	24.4	32.8
Nonmetro	9.9	47.2	52.6	21.4	28.8
<b>Region</b>					
Northeast	10.2	53.1	59.7	23.5	32.7
North Central	10.0	47.6	56.6	20.5	29.4
South	9.1	44.3	56.6	21.5	30.0
West	14.3	50.9	62.9	37.0	41.6
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	49.4	56.5	13.3	24.6
High school graduate	N/A	49.2	59.6	21.8	34.3
Some college	N/A	45.5	60.6	31.3	40.7
College graduate	N/A	49.4	56.5	37.5	43.3
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	50.9	60.0	35.9	44.2
Part-time	N/A	44.0	56.4	24.2	36.2
Unemployed	N/A	54.2	63.2	30.9	45.9
Other <sup>4</sup>	N/A	43.0	51.4	10.1	18.0

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.2 Percentage Reporting Marijuana Use in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>8.1</b>	<b>22.7</b>	<b>14.3</b>	<b>3.3</b>	<b>8.5</b>
<b>Sex</b>					
Male	8.7	27.1	18.9	4.5	10.8
Female	7.5	18.4	9.9	2.2	6.3
<b>Race/Ethnicity<sup>1</sup></b>					
White	8.4	24.8	14.9	3.4	8.6
Black	5.9	19.8	15.4	4.4	9.3
Hispanic	9.0	15.4	10.8	2.2	7.5
<b>Population Density</b>					
Large metro	8.6	24.8	14.2	4.2	9.4
Small metro	8.7	18.9	15.7	2.4	7.8
Nonmetro	6.4	23.9	12.6	2.8	7.6
<b>Region</b>					
Northeast	8.0	27.6	15.7	2.2	8.4
North Central	7.7	20.8	10.9	2.7	7.0
South	6.2	20.2	13.8	2.5	7.5
West	11.9	24.6	17.7	6.3	11.7
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	26.9	16.4	2.5	7.9
High school graduate	N/A	22.8	15.6	2.9	8.8
Some college	N/A	22.5	15.4	4.2	10.6
College graduate	N/A	14.4	10.5	4.0	6.5
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	21.7	13.8	4.1	9.0
Part-time	N/A	23.5	16.3	3.3	11.7
Unemployed	N/A	32.6	27.3	9.2	20.4
Other <sup>4</sup>	N/A	18.8	8.2	1.5	4.1

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.3 Percentage Reporting Marijuana Use in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>4.0</b>	<b>11.0</b>	<b>8.2</b>	<b>1.6</b>	<b>4.4</b>
<b>Sex</b>					
Male	4.6	14.5	11.0	2.3	5.9
Female	3.5	7.5	5.5	1.0	2.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	4.1	11.6	8.8	1.6	4.4
Black	3.4	11.2	8.2	2.5	5.2
Hispanic	4.8	8.0	5.6	0.7	3.7
<b>Population Density</b>					
Large metro	4.1	12.2	8.0	2.0	4.8
Small metro	4.7	8.7	9.1	1.1	4.0
Nonmetro	3.0	11.8	7.5	1.5	4.0
<b>Region</b>					
Northeast	2.9	13.4	9.1	0.9	4.2
North Central	4.7	9.0	5.9	1.8	3.7
South	3.2	10.6	7.7	1.1	3.9
West	5.7	11.5	10.8	3.0	6.0
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	14.0	9.5	1.6	4.5
High school graduate	N/A	11.8	8.5	1.5	4.6
Some college	N/A	9.8	9.1	1.3	4.8
College graduate	N/A	5.5	6.3	2.1	3.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	10.3	7.9	1.7	4.5
Part-time	N/A	10.1	8.4	1.4	5.3
Unemployed	N/A	19.6	15.8	4.8	11.7
Other <sup>4</sup>	N/A	8.5	5.1	1.1	2.3

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.4 Percentage Reporting Marijuana Use in Their Lifetime, the Past Year, and the Past Month, by Age: 1992**

Age Group	(Unweighted N)	Time Period		
		Lifetime	Past Year	Past Month
<b>Total</b>	<b>(28,832)</b>	<b>32.8</b>	<b>8.5</b>	<b>4.4</b>
<b>12-17 Years Old</b>	<b>(7,254)</b>	<b>10.6</b>	<b>8.1</b>	<b>4.0</b>
12-13	(2,466)	2.0	1.5	0.9
14-15	(2,350)	9.9	7.6	3.8
16-17	(2,438)	20.9	15.9	7.8
<b>18-25 Years Old</b>	<b>(7,721)</b>	<b>48.1</b>	<b>22.7</b>	<b>11.0</b>
18-21	(3,817)	42.1	24.7	11.8
22-25	(3,904)	54.1	20.6	10.1
<b>26-34 Years Old</b>	<b>(7,516)</b>	<b>58.6</b>	<b>14.3</b>	<b>8.2</b>
26-29	(3,317)	58.4	15.9	8.9
30-34	(4,199)	58.6	13.2	7.7
<b>35 Years and Older</b>	<b>(6,341)</b>	<b>24.8</b>	<b>3.3</b>	<b>1.6</b>
35-39	(1,824)	51.1	7.8	3.9
40-44	(1,383)	44.7	7.6	3.7
45-49	(1,284)	30.8	2.2	1.1
≥50	(1,850)	8.5	0.7	0.3

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.5 Percentage Reporting Marijuana Use in Their Lifetime, the Past Year, and the Past Month, by Age Group, Race/Ethnicity, and Sex: 1992**

Race/Ethnicity <sup>1</sup> and Sex	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
White male	(1,607)	(1,665)	(1,683)	(1,548)	(6,503)
Black male	(944)	(667)	(565)	(487)	(2,663)
Hispanic male	(968)	(949)	(789)	(576)	(3,282)
White female	(1,503)	(1,893)	(2,221)	(1,960)	(7,577)
Black female	(943)	(1,052)	(987)	(866)	(3,848)
Hispanic female	(973)	(1,163)	(1,012)	(718)	(3,866)
<b>A. Used Marijuana in Their Lifetime</b>					
White male	11.5	53.5	68.4	31.4	39.1
Black male	10.4	42.8	55.2	37.1	37.6
Hispanic male	13.9	37.1	51.2	27.4	33.3
White female	10.1	52.6	58.9	19.7	29.7
Black female	7.8	35.4	43.6	20.0	25.7
Hispanic female	9.8	32.9	30.5	9.9	18.6
<b>B. Used Marijuana in the Past Year</b>					
White male	8.9	29.2	19.8	4.7	11.0
Black male	5.6	24.5	19.9	5.0	11.3
Hispanic male	11.1	19.0	14.2	3.2	9.9
White female	8.0	20.5	10.1	2.2	6.3
Black female	6.3	15.6	11.6	3.9	7.6
Hispanic female	6.8	11.8	7.0	1.2	5.2
<b>C. Used Marijuana in the Past Month</b>					
White male	4.7	15.7	11.7	2.4	6.0
Black male	2.9	13.9	11.8	3.1	6.6
Hispanic male	6.0	10.0	7.4	0.9	5.0
White female	3.5	7.6	5.9	0.9	2.8
Black female	3.9	8.9	5.2	2.0	4.0
Hispanic female	3.5	6.0	3.6	0.5	2.5

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.6 Percentage Distribution of Frequency of Marijuana Use in Their Lifetime for the Total Sample and for Marijuana Users, by Age Group: 1992**

Times Used Marijuana in Their Lifetime	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
1-2 times	4.1	12.8	13.4	8.6	9.6
3-10 times	2.8	12.6	15.1	6.0	8.2
11-99 times	2.3	12.1	13.0	4.9	7.1
100 times or more	1.0	10.4	16.9	5.3	7.7
Used in lifetime/times not reported	<u>0.4</u>	<u>0.3</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>
<b>Total (used 1 or more times)</b>	<b>10.6</b>	<b>48.2</b>	<b>58.5</b>	<b>24.9</b>	<b>32.7</b>
<b>B. Used Marijuana at Least Once</b>					
(Unweighted <b>N</b> )	(776)	(3,224)	(3,895)	(2,037)	(9,932)
1-2 times	39.9	26.7	22.9	34.9	29.5
3-10 times	27.4	26.2	25.9	24.1	25.2
11-99 times	22.9	25.3	22.3	19.7	21.8
100 times or more	9.9	21.8	28.9	21.3	23.5

Note: Because of rounding, column percentages for Part A may not add to the total, and for Part B may not total 100.0. Estimates for persons who used marijuana at least once exclude those who did not report the number of times they used marijuana.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.7 Percentage Distribution of Days of Marijuana Use in the Past Month for the Total Sample and for Past-Month Marijuana Users, by Age Group: 1992**

Days of Use in the Past Month	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
1-2 days	1.6	3.4	2.7	0.4	1.3
3-4 days	0.6	1.6	1.1	0.3	0.6
5-19 days	0.8	3.1	2.3	0.4	1.2
20-30 days	0.3	2.1	1.2	0.3	0.7
Used in past month/days not reported	<u>0.7</u>	<u>0.8</u>	<u>1.0</u>	<u>0.2</u>	<u>0.5</u>
Total (used 1 or more days)	4.0	11.0	8.3	1.7	4.3
<b>B. Used Marijuana in the Past Month</b>					
(Unweighted N)	(249)	(682)	(483)	(144)	(1,558)
1-2 days	48.8	33.1	36.8	*	34.9
3-4 days	18.8	15.4	15.1	20.5	16.6
5-19 days	24.6	30.7	31.7	*	30.0
20-30 days	7.8	20.8	16.4	*	18.5

Note: Because of rounding, column percentages for Part A may not add to the total, and for Part B may not total 100.0. Estimates for persons who used marijuana at least once exclude those who did not report the number of times they used marijuana.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 3.8 Percentage Reporting Use of Selected Drugs in the Past Month, by Age Group and Marijuana Use in the Past Month: 1992**

Age Group and Drugs Used in the Past Month	Marijuana Use in the Past Month		
	No	Yes	Total
<b>Total</b>	<b>(N=27,053)</b>	<b>(N=1,779)</b>	<b>(N=28,832)</b>
Alcohol	45.9	90.0	47.8
Cigarettes	24.5	63.4	26.2
Drugs other than marijuana	1.2	24.7	2.3
Nonmedical use of any psychotherapeutic <sup>1</sup>	0.8	12.4	1.3
Cocaine	0.2	10.8	0.6
<b>12-17 Years Old</b>	<b>(N=6,954)</b>	<b>(N=300)</b>	<b>(N=7,254)</b>
Alcohol	12.9	81.9	15.7
Cigarettes	7.8	52.1	9.6
Drugs other than marijuana	2.2	27.9	3.2
Nonmedical use of any psychotherapeutic	0.8	10.6	1.2
Cocaine	0.1	4.6	0.3
<b>18-25 Years Old</b>	<b>(N=6,959)</b>	<b>(N=762)</b>	<b>(N=7,721)</b>
Alcohol	55.3	90.9	59.2
Cigarettes	28.4	60.5	31.9
Drugs other than marijuana	2.3	28.9	5.2
Nonmedical use of any psychotherapeutic	1.2	11.4	2.3
Cocaine	0.3	14.5	1.8
<b>26-34 Years Old</b>	<b>(N=6,968)</b>	<b>(N=548)</b>	<b>(N=7,516)</b>
Alcohol	58.6	90.4	61.2
Cigarettes	30.9	65.9	33.7
Drugs other than marijuana	2.0	23.1	3.8
Nonmedical use of any psychotherapeutic	1.3	13.7	2.4
Cocaine	0.5	10.5	1.4
<b>35 Years or Older</b>	<b>(N=6,172)</b>	<b>(N=169)</b>	<b>(N=6,341)</b>
Alcohol	45.7	91.5	46.5
Cigarettes	24.6	69.1	25.3
Drugs other than marijuana	0.6	19.2	0.9
Nonmedical use of any psychotherapeutic	0.5	*	0.7
Cocaine	0.1	8.0	0.2

<sup>1</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Four: Cocaine

### Introduction

Cocaine continued to be used in 1992 by an appreciable number of the surveyed population. However, total reported cocaine use decreased significantly from 1991 to 1992, continuing to decline from its peak in the early 1980s. Although most of the observed declines within age categories between 1991 and 1992 proved not to be statistically significant, as reported in Chapter 2, they were consistent with the overall trend of a three- to fourfold decrease in the number and proportion of cocaine users in the surveyed population in the past 10 years.

Approximately 23 million of the 206 million persons represented in 1992, or 11%, reported cocaine use in their lifetime, 5 million (2.4%) reported use in the past year, and 1.3 million (.6%) reported current use (in the past 30 days). Moreover, about 2.8 million (1.4%) of the surveyed population reported crack use<sup>1</sup> in their lifetime, and about 805,000 (.4%) reported past-year use.<sup>2</sup> Reported use of cocaine was proportionately more common among males and adults 26-34 years of age, in the West and Northeast regions of the country, and among the unemployed. In addition, although crack smoking continued to attract substantial media and public policy attention, the most common method of use remained sniffing or snorting cocaine powder. The following sections provide a detailed description of the prevalence of cocaine use in demographic subgroups defined by age, sex, race/ethnicity, population density, region, education, and current employment status.

### General Prevalence of Cocaine Use by Age

Tables 4.1-4.3 present reported lifetime, past-year, and current use of cocaine among the surveyed population. Approximately 11% of the respondents had ever used cocaine in their lifetimes, 2.4% had used in the past year, and .6% used currently (in the previous month). Lifetime use of cocaine was highest among the 26-34 age group (25%), past-year use was highest among the 18-25 group (6%), and current use was highest among both of these adult age groups compared with the 12-17 and 35 and older age groups (see Table 4.3).

Table 4.4 clarifies the age distinctions even further. There were rising levels of lifetime prevalence from the youngest ages until 30-34, then decreasing levels in older age groups. The lowest prevalence estimates occurred among those 12-13 and 50 and older. Past-year and current use of cocaine were highest in the 18-21 age group and then gradually lower until age 35, with a substantial reduction among older adults. Other surveys of cocaine use found that the highest level occurred at a slightly older age, but followed a similar pattern.<sup>3</sup> The pattern reflected the much higher prevalence of youthful cocaine use among people who were born after about 1955 than those born earlier.

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<sup>1</sup>Since crack (also called "rock" or "base") is a form of cocaine, reported crack users are included under the more general set of cocaine users.

<sup>2</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates 1992*, Rockville, MD: US Department of Health and Human Services (October 1993), 31,37.

<sup>3</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), Figure 5.

## Sex and Race/Ethnicity

In general, cocaine use was more common among males than females. In every age group except 12-17, lifetime and past-year use were significantly higher among males. For example, the rate of reported past-year cocaine use was about twice as great for young and middle adult males as for their female counterparts. However, current use was significantly higher only among 18- to 25-year-old males, by a ratio of 3:1. These results coincided with other national surveys and, based on the age differences described in the previous section, continued to show that cocaine use was predominately a young and middle adult male phenomenon.<sup>4</sup>

Racial/ethnic differences in cocaine use were not as consistent as the gender differences (Tables 4.1-4.3). Young Hispanics (12-17) reported significantly greater lifetime, past-year, and current cocaine use than whites or blacks within their age group. However, in the 18-25 and 26-34 groups, whites reported the highest lifetime use, and there were no significant differences among racial/ethnic groups in past-year or current use.

Table 4.5 clarifies further the racial/ethnic distinctions by breaking down reported cocaine prevalence simultaneously by race, sex, and age. The results generally show that lifetime and past-year cocaine prevalence were higher among males within and across every adult racial/ethnic group above 12-17. For example, white males were significantly more likely to report past-year cocaine use than white, black, or Hispanic females in the younger and middle adult age groups. Similarly, Hispanic males were more likely to report past-year cocaine use than black or Hispanic females in all age groups except 35 and older.<sup>5</sup> The one partial exception is that the difference in lifetime use between Hispanic males and females age 18-25 did not quite reach statistical significance. Within gender groups, whites tended to report significantly higher lifetime use than blacks within the young and middle adult age groups; however, there were few significant differences when assessing past-year or current use. This may have reflected a pattern of more widespread youthful "experimental" cocaine use by whites—compared with blacks and Hispanics—that was followed by converging rates of continuing use in later life. The overall results for current use demonstrated few significant differences,<sup>6</sup> but current use was so rare in the sample that significance was almost impossible to attain in these finer categories.

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<sup>4</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary Students*, Rockville, MD: US Department of Health and Human Services (1993); NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993); Kandel and Davies, "Cocaine Use in a National Sample of U.S. Youth (NLSY): Ethnic Patterns, Progression, and Prediction," pp.151-188 in Schober and Schade (eds.), *The Epidemiology of Cocaine Use and Abuse*, Rockville, MD: NIDA (1991).

<sup>5</sup>Exceptions to these general findings included the following nonsignificant differences: Hispanic males vs. white females, 12-17 years of age; Hispanic males vs. white females, 18-25 years of age; white males vs. black females, 26-34 years of age.

<sup>6</sup>An important caveat to these general patterns involves recent research that suggests that blacks tend to significantly underreport cocaine use. Potential underreporting by black respondents has important implications for the racial/ethnic comparisons described here. See: Fendrich and Vaughn, "Diminished Lifetime Substance Use Over Time: An Inquiry into Differential Underreporting," *Public Opinion Quarterly* 58:96-123 (1994).

## Population Density and Region

Lifetime cocaine use tended to be more common in large metropolitan areas, especially among the most active current users, the 18-25 group (see Tables 4.1-4.3). However, these differences disappeared when use among other age groups was examined. As for past-year cocaine use, the only significant difference was in the 18-25 group in large and small metropolitan areas, with rates being higher in large metropolitan areas. There were no significant differences in current use by population density.

On the other hand, there were several significant regional differences. In general, lifetime cocaine prevalence was higher among residents of the Northeast and West than among residents of the North Central area or South. The partial exception to this general finding occurred in the 12-17 group: there were no significant differences in lifetime use among residents of the Northeast, South, or West; the only significant difference occurred between the North Central region and the West.

Significant regional differences were less marked for past-year and current use of cocaine. Only among middle and older adults did the West show significantly greater rates of use. Among 26- to 34-year-olds, the prevalence of past-year cocaine use in the West was significantly higher than the comparable figure from the North Central or South; among those 35 and older, the West led all other regions in the rate of past-year cocaine use.

These findings agreed with other national estimates that had shown higher rates of past-year cocaine use among adults in both the Northeast and West than in the North Central and South.<sup>7</sup> However, the age groupings were not directly comparable between these studies.

## Adult Education and Current Employment

The final categorical comparisons of cocaine prevalence involved education and current employment among adult respondents (18 and older). Among those 35 and older, lifetime use of cocaine was significantly higher among college graduates than among those with less education. This difference occurred principally in the 35-44 age group; lifetime use among older respondents was too rare for separate significance testing. However, past-year use among the 18-25 and 26-34 groups was significantly lower for college graduates than for those who had not completed high school. The same applied to the 18-25 and 26-34 age groups with respect to current use, which was significantly higher for those who had not completed high school than for those who completed college. A further analysis of particular age groups (cf. Table 4.4) demonstrated a distinction that is particularly clear for those age 22-25 and 30-34: those with less than a high school education reported approximately three times the prevalence compared with those with a college degree. In sum, although 35- to 44-year-olds who had ever tried cocaine tended to be college graduates, current and past-year cocaine use among younger adults was strongly associated with lower levels of education. In particular, those with a college degree were

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<sup>7</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1992), p.62 and Table 4.

significantly less likely to have used cocaine in the past year and currently than those who had not completed high school.<sup>8</sup> Since the causes of these associations are not clear from the results alone, and factors correlated with education (e.g., income) may be influential, the results suggest important issues for future research.

Tables 4.1-4.3 indicated that cocaine use was relatively more common among unemployed persons than among employed persons. However, unemployed persons were a relatively small proportion of the surveyed population, so most cocaine users were employed (nearly 60% of past-year cocaine users were employed full-time). Persons in the "other" category, which includes students, retirees, and homemakers, were the least likely to have used cocaine. The data on past-year use provided the clearest picture of these associations. In the two younger adult age groups (18-25 and 26-34) as well as overall, unemployed persons reported significantly higher rates of past-year cocaine use relative to employed persons or persons in the "other" category.<sup>9</sup> For example, among 26- to 34-year-olds the unemployed group reported past-year cocaine use at twice the rate of the other three groups. Current use did not show such a uniform pattern by age groups, although overall the unemployed group reported relatively more current cocaine use than the remaining groups by 2:1 or higher margins.

### Lifetime Frequency of Use

Table 4.6 provides a cumulative quantitative measure of cocaine use in the overall sample and among those who reported using cocaine at least once in their lives. About one-third of the young adult cocaine users reported that they had used cocaine only 1-2 times in total. Proportionately fewer of the middle and older adult cocaine users reported using so few times. This probably reflects that the younger adults had had less time and thus fewer opportunities to use cocaine.

An interesting result emerged from comparing Table 4.6 with its counterparts in previous NHSDA reports. People who had used cocaine at all, especially younger and middle adults (see Table 4.6, panel B), have reported steadily increasing frequencies of use since 1985. For example, in 1985 7% of the 18-25 age group and 12% of the 26-34 age group who ever used cocaine reported having used it at least 100 times. The corresponding figures for 1988 were 8% and 10%; for 1990, 10% and 13%; for 1991, 12% and 14%; and for 1992, 12% and 18%.<sup>10</sup> Although these trends were not tested for statistical significance, they point toward higher average levels of cocaine use among proportionately smaller groups of active users since 1985. The dynamics of this trend need to be studied in more detail.

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<sup>8</sup>See also: NIDA, *Socioeconomic and Demographic Correlates of Drug and Alcohol Use*, Rockville, MD: US Department of Health and Human Services (1992), Table 4.4.

<sup>9</sup>See also: NIDA, *Socioeconomic and Demographic Correlates of Drug and Alcohol Use*, Rockville, MD: US Department of Health and Human Services (1992), Table 4.4.

<sup>10</sup>Cf. NIDA, *National Household Survey on Drug Abuse: Main Findings 1985*, Rockville, MD: US Department of Health and Human Services (1988), Table 33; NIDA, *National Household Survey on Drug Abuse: Main Findings 1988*, Rockville, MD: US Department of Health and Human Services (1990), Table 4.6; NIDA, *National Household Survey on Drug Abuse: Main Findings 1990*, Rockville, MD: US Department of Health and Human Services (1991), Table 4.6; Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Main Findings 1991*, Rockville, MD: US Department of Health and Human Services (1993), Table 4.6.

## Crack Cocaine Use and Routes of Administration

Crack cocaine captured a great deal of media and public policy attention over the last decade. However, as Table 4.7 makes clear, the most common route of cocaine administration remained sniffing or snorting. The category that includes crack—freebasing or smoking—was the second most common route of administration mentioned by respondents, although sniffing/snorting was more prevalent by a margin of at least two to one. Although the number of past-year cocaine users has dropped from 8 million in 1988 to 5 million in 1992, the percent of these users freebasing or smoking has remained relatively constant over time (31% in 1988 and 1990, 28% in 1991, and 31% in 1992).

Nevertheless, Tables 4.8-4.9 suggest that nearly three million members of the surveyed population had used crack in their lifetime and nearly one million had used crack in the past year. Compared with younger and older respondents (12-17 and 35 and older), younger and middle adults reported significantly higher lifetime and past-year use. In addition, males tended to report higher lifetime crack use than females, but this was limited to the middle age groups and the overall sample. Blacks in the 26-34 age group were significantly more likely to report lifetime and past-year crack use than either whites or Hispanics. Overall, crack use made up a much larger proportion of adult past-year cocaine use among blacks than among whites or Hispanics.

There was no clear association between crack use and population density. Lifetime prevalence was significantly higher overall in large metropolitan areas, but this association varied across age categories. Use was generally higher in the West, but, once again, this varied by age group. Finally, crack use was more commonly reported by those with less than a high school education—higher prevalence tended to be associated with less education and with unemployment.

## Conclusion

Age and gender differences were the most notable facts of cocaine prevalence: adult males used more cocaine than adult females; young adults 18-34 used cocaine much more often than older or younger age groups. Cocaine use continued to decline in the survey, and this year's overall level of use was significantly lower than the previous year's. Although some data sources, such as the Drug Abuse Warning Network (DAWN), indicate that emergency room mentions of cocaine increased substantially in the past several years,<sup>11</sup> most other national indicators of cocaine use have shown a declining trend.<sup>12</sup> The increase in emergency room episodes may be attributable to heavier use among those who

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<sup>11</sup>Office of Applied Studies, SAMHSA, *Estimates From The Drug Abuse Warning Network*, Advance Report Number 4, Rockville, MD: SAMHSA (September 1993).

<sup>12</sup>See, generally, Harrison, "Trends in Illicit Drug Use in the United States: Conflicting Results From National Surveys," *International Journal of the Addictions* 27:817-847 (1992). See also: NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary Students*, Rockville, MD: US Department of Health and Human Services (1993); NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993).

continue to use, the aging of active users, greater cocaine purity,<sup>13</sup> or issues involving access to health care. The survey's measure of weekly or higher-frequency cocaine use in the past year has yielded no significant increases or decreases since 1985,<sup>14</sup> but the number of cases is too small for effective comparisons with DAWN trends.

Past year and current cocaine use were associated with less education and with unemployment. The general decline in cocaine use since the early 1980s varied by education and income: the decline across time for those who are well-educated or employed was much steeper than for those who lacked a high school diploma or were currently unemployed. Nevertheless, multivariate analyses using 1988 and 1990 NHSDA data demonstrated that factors such as sex, age, and marital status were the strongest cross-sectional correlates of past-year cocaine use.<sup>15</sup> The relationships with education and employment were nuances of these major demographic facts of cocaine prevalence, but nuances whose effects across time need further study.

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<sup>13</sup>From 1990 to 1992 the purity of cocaine seized by enforcement agents increased from 54% to 64% (see: NNICC, *The NNICC Report, 1992: The Supply of Illicit Drugs to the United States*, Arlington, VA: Drug Enforcement Administration (September 1993), p.2).

<sup>14</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMSHA (June 1993), p.12.

<sup>15</sup>NIDA, *Socioeconomic and Demographic Correlates of Drug and Alcohol Use*, Rockville, MD: US Department of Health and Human Services (1992), p.77 and Table 5.5.

**Table 4.1 Percentage Reporting Cocaine Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.7	15.8	25.2	6.9	11.0
<b>Sex</b>					
Male	1.6	18.8	29.8	8.8	13.4
Female	1.8	12.9	20.8	5.2	8.7
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.7	17.7	28.1	7.2	11.8
Black	0.8	10.0	17.5	6.7	8.6
Hispanic	3.6	13.4	18.6	5.3	9.7
<b>Population Density</b>					
Large metro	2.0	18.2	26.7	8.4	12.8
Small metro	1.5	13.9	26.7	6.8	10.8
Nonmetro	1.5	14.1	19.9	4.4	8.0
<b>Region</b>					
Northeast	1.2	19.1	28.7	6.7	11.8
North Central	1.2	13.5	20.2	5.3	8.6
South	1.7	13.2	21.3	4.3	8.4
West	2.6	19.9	33.8	13.5	17.2
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	20.9	25.0	3.5	9.0
High school graduate	N/A	15.6	24.9	5.4	11.2
Some college	N/A	12.9	26.4	8.4	13.3
College graduate	N/A	14.6	24.6	11.9	15.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	17.8	25.4	9.7	14.9
Part-time	N/A	12.8	25.2	8.3	12.9
Unemployed	N/A	21.5	30.4	10.5	18.8
Other <sup>4</sup>	N/A	11.6	21.7	2.5	5.5

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.2 Percentage Reporting Cocaine Use in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.1	6.3	4.9	0.9	2.4
<b>Sex</b>					
Male	1.0	8.5	6.3	1.3	3.2
Female	1.2	4.2	3.5	0.6	1.7
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.0	6.9	4.8	0.9	2.4
Black	0.4	4.4	5.4	1.5	2.6
Hispanic	2.8	5.4	5.6	0.9	3.1
<b>Population Density</b>					
Large metro	1.2	7.7	5.3	1.1	2.8
Small metro	1.1	4.9	4.3	0.9	2.1
Nonmetro	1.1	5.7	4.8	0.8	2.2
<b>Region</b>					
Northeast	0.6	6.8	5.7	0.5	2.3
North Central	1.0	5.5	3.8	0.8	2.0
South	1.1	5.9	3.8	0.7	2.1
West	1.5	7.3	7.1	2.0	3.7
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	9.4	6.8	0.9	3.0
High school graduate	N/A	7.0	5.7	0.8	2.9
Some college	N/A	4.8	4.3	1.4	2.7
College graduate	N/A	2.0	3.1	0.8	1.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	6.8	4.5	1.0	2.7
Part-time	N/A	5.5	4.6	1.5	3.3
Unemployed	N/A	11.6	10.6	3.7	7.7
Other <sup>4</sup>	N/A	3.3	3.5	0.4	1.1

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.3 Percentage Reporting Cocaine Use in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>0.3</b>	<b>1.8</b>	<b>1.4</b>	<b>0.2</b>	<b>0.6</b>
<b>Sex</b>					
Male	0.2	2.9	1.7	0.3	0.9
Female	0.3	0.8	1.1	0.1	0.4
<b>Race/Ethnicity<sup>1</sup></b>					
White	0.1	2.0	1.2	0.1	0.5
Black	0.2	1.4	1.7	0.8	1.0
Hispanic	1.2	1.8	2.4	0.4	1.2
<b>Population Density</b>					
Large metro	0.3	2.0	1.5	0.3	0.7
Small metro	0.3	1.5	1.1	0.1	0.5
Nonmetro	0.2	2.0	1.5	*	0.6
<b>Region</b>					
Northeast	0.3	2.4	2.5	0.1	0.8
North Central	*	2.2	1.1	0.2	0.6
South	0.3	1.1	0.9	0.2	0.4
West	0.5	2.3	1.5	0.3	0.8
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	2.8	1.8	0.3	0.9
High school graduate	N/A	2.3	1.8	0.1	0.8
Some college	N/A	0.9	1.2	0.2	0.5
College graduate	N/A	0.9	0.6	0.2	0.3
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	2.3	1.1	0.2	0.7
Part-time	N/A	1.7	1.7	0.2	0.9
Unemployed	N/A	2.1	3.6	0.6	1.8
Other <sup>4</sup>	N/A	0.9	1.0	*	0.2

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.4 Percentage Reporting Cocaine Use in Their Lifetime, the Past Year, and the Past Month, by Age: 1992**

Age Group	(Unweighted N)	Time Period		
		Lifetime	Past Year	Past Month
<b>Total</b>	<b>(28,832)</b>	<b>11.0</b>	<b>2.4</b>	<b>0.6</b>
<b>12-17 Years Old</b>	<b>(7,254)</b>	<b>1.7</b>	<b>1.1</b>	<b>0.3</b>
12-13	(2,466)	0.1	0.1	*
14-15	(2,350)	1.4	1.1	0.1
16-17	(2,438)	3.7	2.2	0.7
<b>18-25 Years Old</b>	<b>(7,721)</b>	<b>15.8</b>	<b>6.3</b>	<b>1.8</b>
18-21	(3,817)	11.9	6.5	2.1
22-25	(3,904)	19.7	6.2	1.6
<b>26-34 Years Old</b>	<b>(7,516)</b>	<b>25.2</b>	<b>4.9</b>	<b>1.4</b>
26-29	(3,317)	24.2	5.6	1.6
30-34	(4,199)	25.9	4.4	1.2
<b>35 Years and Older</b>	<b>(6,341)</b>	<b>6.9</b>	<b>0.9</b>	<b>0.2</b>
35-39	(1,824)	20.2	3.2	0.5
40-44	(1,383)	13.6	1.4	0.5
45-49	(1,284)	5.6	0.5	0.2
≥50	(1,850)	0.6	0.1	*

\*Low precision; no estimate reported.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.5 Percentage Reporting Cocaine Use in Their Lifetime, the Past Year, and the Past Month, by Age Group, Race/Ethnicity, and Sex: 1992**

Race/Ethnicity <sup>1</sup> and Sex	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
White male	(1,607)	(1,665)	(1,683)	(1,548)	(6,503)
Black male	(944)	(667)	(565)	(487)	(2,663)
Hispanic male	(968)	(949)	(789)	(576)	(3,282)
White female	(1,503)	(1,893)	(2,221)	(1,960)	(7,577)
Black female	(943)	(1,052)	(987)	(866)	(3,848)
Hispanic female	(973)	(1,163)	(1,012)	(718)	(3,866)
<b>A. Used Cocaine in Their Lifetime</b>					
White male	1.4	20.4	32.3	8.8	13.9
Black male	1.3	14.9	22.4	10.0	12.0
Hispanic male	3.5	15.5	25.7	8.8	13.5
White female	1.9	15.1	24.0	5.8	9.8
Black female	0.4	5.7	13.4	4.2	5.8
Hispanic female	3.7	11.2	10.9	2.1	5.9
<b>B. Used Cocaine in the Past Year</b>					
White male	0.9	9.0	6.1	1.2	3.1
Black male	0.7	6.6	7.1	2.0	3.6
Hispanic male	2.8	8.0	7.5	1.5	4.4
White female	1.2	4.8	3.5	0.6	1.7
Black female	0.1	2.5	4.0	1.2	1.8
Hispanic female	2.8	2.8	3.4	0.4	1.8
<b>C. Used Cocaine in the Past Month</b>					
White male	0.1	3.1	1.5	0.1	0.8
Black male	0.4	2.4	2.1	1.3	1.5
Hispanic male	1.0	2.9	2.8	0.8	1.7
White female	0.2	1.0	1.0	0.1	0.3
Black female	0.1	0.4	1.3	0.4	0.6
Hispanic female	1.3	0.7	2.0	*	0.8

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.6 Percentage Distribution of Frequency of Cocaine Use in Their Lifetime for the Total Sample and for Cocaine Users, by Age Group: 1992**

Times Used Cocaine in Their Lifetime	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
1-2 times	0.6	5.5	5.7	1.9	3.0
3-10 times	0.4	4.3	7.8	2.4	3.4
11-99 times	0.3	3.8	6.9	1.4	2.6
100 times or more	0.1	1.9	4.5	1.1	1.7
Used in lifetime/times not reported	0.3	0.4	0.2	0.2	0.2
<b>Total (used 1 or more times)</b>	<b>1.7</b>	<b>15.9</b>	<b>25.1</b>	<b>7.0</b>	<b>10.9</b>
<b>B. Used Cocaine at Least Once</b>					
(Unweighted N)	(127)	(1,076)	(1,706)	(684)	(3,593)
1-2 times	*	35.6	22.8	28.4	27.6
3-10 times	*	28.0	31.3	34.9	31.9
11-99 times	*	24.3	27.7	20.5	24.3
100 times or more	*	12.1	18.2	16.2	16.2

Note: Because of rounding, column percentages for Part A may not add to the total, and for Part B may not total 100.0. Estimates for persons who used cocaine at least once exclude those who did not report the number of times they used cocaine.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.7 Percentage Reporting Various Routes of Administration for Cocaine for the Total Sample, Those Who Used at Least Once in the Past Year, and Those Who Used Once a Month or More Often in the Past Year, by Age Group: 1992**

Route of Administration During the Past Year <sup>1,2</sup>	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
Sniff/snort	0.7	5.2	3.7	0.8	1.9
Freebase/smoke <sup>3</sup>	0.6	2.2	1.5	0.2	0.7
Swallow/oral	0.1	0.5	0.1	*	0.1
IV/inject	0.1	0.7	0.4	0.1	0.3
Other	*	0.1	*	*	*
<b>B. Used Cocaine at Least Once in the Past Year</b>					
(Unweighted N)	(98)	(445)	(395)	(123)	(1,061)
Sniff/snort	*	81.8	75.7	82.3	78.8
Freebase/smoke <sup>3</sup>	*	35.6	31.6	18.6	31.0
Swallow/oral	*	8.1	2.1	*	4.2
IV/inject	*	11.9	7.8	*	11.0
Other	*	2.1	0.3	*	1.3
<b>C. Used Cocaine Once a Month or More Often in the Past Year</b>					
(Unweighted N)	(28)	(150)	(165)	(40)	(383)
Sniff/snort	*	81.8	69.0	*	73.2
Freebase/smoke <sup>3</sup>	*	*	*	*	49.9
Swallow/oral	*	*	3.0	*	8.1
IV/inject	4.0	*	*	*	19.8
Other	*	*	*	*	1.9

\* Low precision; no estimate reported.

<sup>1</sup>Some column percents total more than 100.0 because multiple routes of administration could be indicated by the same respondent.

<sup>2</sup>The weighted Ns are for each age group within the total subpopulations (i.e., past year or monthly cocaine users) in Parts B and C. The actual unweighted Ns for the estimates in each of the table cells may be smaller due to differing patterns of nonresponse for the different routes of administration.

<sup>3</sup>Freebasing is the processing of cocaine to free the more potent cocaine base, which is then smoked. Crack users are also included in this category.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.8 Percentage Reporting Crack Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	0.6	3.2	3.3	0.4	1.4
<b>Sex</b>					
Male	0.7	4.5	4.6	0.6	1.9
Female	0.6	2.0	2.1	0.3	0.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	0.7	3.3	3.1	0.3	1.2
Black	0.4	3.7	5.6	1.4	2.5
Hispanic	1.0	2.2	2.5	0.3	1.3
<b>Population Density</b>					
Large metro	0.7	3.7	3.4	0.7	1.7
Small metro	0.5	2.1	3.4	0.1	1.1
Nonmetro	0.6	3.8	2.8	0.3	1.2
<b>Region</b>					
Northeast	0.6	3.0	3.7	0.1	1.2
North Central	0.2	2.9	2.0	0.4	1.0
South	0.9	3.1	3.1	0.3	1.3
West	0.7	3.9	4.6	0.9	2.0
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	7.0	5.6	0.5	2.1
High school graduate	N/A	3.1	4.1	0.5	1.7
Some college	N/A	1.6	2.5	0.4	1.1
College graduate	N/A	0.6	1.6	0.2	0.6
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	3.8	2.4	0.4	1.4
Part-time	N/A	1.9	2.7	0.5	1.4
Unemployed	N/A	6.1	10.2	2.3	5.5
Other <sup>4</sup>	N/A	1.6	3.5	0.2	0.7

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 4.9 Percentage Reporting Crack Use in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>0.3</b>	<b>1.1</b>	<b>0.9</b>	<b>0.1</b>	<b>0.4</b>
<b>Sex</b>					
Male	0.2	1.5	1.2	0.1	0.5
Female	0.3	0.7	0.5	0.1	0.3
<b>Race/Ethnicity<sup>1</sup></b>					
White	0.2	1.2	0.7	*	0.3
Black	0.2	1.2	2.4	0.8	1.1
Hispanic	0.6	0.8	0.7	0.2	0.5
<b>Population Density</b>					
Large metro	0.2	1.6	1.2	0.2	0.6
Small metro	0.2	0.2	0.6	*	0.2
Nonmetro	0.3	1.5	0.6	*	0.4
<b>Region</b>					
Northeast	0.1	1.2	0.6	0.1	0.3
North Central	*	1.4	0.7	0.1	0.3
South	0.4	0.9	0.8	0.1	0.4
West	0.4	1.1	1.4	0.2	0.6
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	2.7	1.8	0.2	0.8
High school graduate	N/A	1.0	0.9	*	0.4
Some college	N/A	0.5	0.7	0.1	0.3
College graduate	N/A	*	0.4	*	0.1
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	0.9	0.6	*	0.3
Part-time	N/A	1.1	1.0	*	0.5
Unemployed	N/A	3.1	2.8	0.9	2.0
Other <sup>4</sup>	N/A	0.5	0.8	0.1	0.2

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Five: Inhalants, Hallucinogens, and Heroin

### Introduction

Fewer than 9% of the NHSDA surveyed population in 1992 reported ever having used either inhalants or hallucinogens. Even so, use of inhalants and hallucinogens could pose a significant public health problem. Heroin use, despite its relatively low prevalence in the U.S. population, has been widely regarded in some recent periods of American history as the single most serious problem of drug abuse in the United States.<sup>1</sup> Rates of use of hallucinogens and heroin<sup>2</sup> remained roughly stable between 1991 and 1992, while inhalant use decreased. The following sections examine the associations between demographic characteristics and use of inhalants, hallucinogens, and heroin.

### Prevalence of Inhalant Use

Approximately 10 million of the 206 million persons in the 1992 NHSDA-surveyed population (4.8%) used inhalants in their lifetime. About 2 million (1%) used in the past year, and 886,000 (.4%) used in the past month.<sup>3</sup> Reported prevalence of past-year and past-month inhalant use decreased significantly between 1991 and 1992. This decline continued a downward trend in the prevalence of inhalant use that began in the early 1980s.<sup>4</sup> Lifetime use of inhalants in 1992 was more prevalent among males, young adults (age groups 18-25 and 26-34), whites, persons residing in the West, unemployed persons, and college graduates.

Lifetime use of inhalants was proportionately higher in the 18-25 and 26-34 age groups than in the 12-17 and 35 and older groups. However, past-month use was highest in the 12-17 age group (1.6%).<sup>5</sup> For lifetime use, nitrous oxide and amyl nitrite were the inhalants most frequently used by adults age 18 and older, while gasoline and glue were the inhalants most frequently used by youths (Table 5.1).

Table 5.2 reports lifetime inhalant use for various demographic subgroups by age of the respondents. Adult males (age 18 and older) reported significantly higher prevalence of lifetime inhalant use than their female counterparts. The sex differences in lifetime inhalant use increased with age: adult males age 18-25 were about 1.6 times more likely to report lifetime use than their female counterparts, while adult males age 26-34 were 2.2 times more likely, and adult males 35 and over were 3.5 times more likely. Males age 12-17 reported about the same lifetime prevalence of inhalant use as their female counterparts.

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<sup>1</sup>Kleiman, *Against Excess: Drug Policy for Results*, New York: Basic Books, p.358.

<sup>2</sup>The 1991 NHSDA reported a significant increase in lifetime use of heroin. However, this increase appears to have been an anomaly, as the 1992 estimate follows the same trend as the estimates previous to the 1991 NHSDA. See: Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), p.15.

<sup>3</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates, 1992*, Rockville, MD: US Department of Health and Human Services (October, 1993), p.43.

<sup>4</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), pp.15, 41.

<sup>5</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), p.15.

Race/ethnicity was strongly associated with lifetime prevalence of inhalant use, but the direction and magnitude of the association varied across age groups. Whites age 18-25 and 26-34 were significantly more likely to report lifetime inhalant use than either blacks or Hispanics in the same age groups, whereas Hispanic and white youth in the 12-17 age group were significantly more likely to report lifetime inhalant use than blacks in the same age group.

Population density and region evidence few significant associations with lifetime inhalant use. In the 18-25 age group, lifetime inhalant use was higher in large than in small metropolitan areas. In the age group 26-34 as well as in the total sample, lifetime inhalant use was significantly higher in the West than in the North Central region.

Education was significantly associated with lifetime inhalant use only among adult respondents age 26 and older. In the age group 26 to 34, college graduates were 1.5 times more likely to report lifetime inhalant use than those with some college education. In the age group 35 and older, college graduates were about twice as likely to report lifetime inhalant use as those who had not attended college.

Employment status was significantly associated with lifetime inhalant use only in the 18-25 and 35 and older groups. In the 18-25 group, the unemployed were significantly more likely to report lifetime inhalant use than those who worked part-time. In the 35 and older group, lifetime inhalant use was more common among the unemployed than among part-time workers or "others" (e.g., retired persons, homemakers, disabled persons, students).

### **Prevalence of Hallucinogen Use**

Approximately 16 million of the 206 million persons in the NHSDA-surveyed population (8%) used hallucinogens in their lifetime, 2.4 million (1.2%) used in the past year, and 525,000 (.3%) used in the past month. The number and proportion of the persons reporting lifetime, past-year, and past-month hallucinogen use remained unchanged from 1991 to 1992.<sup>6</sup> Reported past-year hallucinogen use in the total sample was relatively more common among whites, males, persons living in the West, the unemployed, and persons with some college education. LSD, psilocybin, and PCP were the most frequently used hallucinogens among both adult respondents age 18 and older and youth age 12-17 (see Table 5.3). In 1992, 8.2 million (4%) of the sampled respondents reported ever using PCP and 467,000 (.2%) reported using PCP in the past year.<sup>7</sup> Lifetime use of PCP was higher among 26- to 34-year-olds, and among males, whites, Western residents, and the unemployed.

Tables 5.4 and 5.5 show hallucinogen prevalence in lifetime and the past year, respectively, and Table 5.6 shows PCP prevalence in lifetime for various demographic groups by age of respondent. Significant age differences in lifetime hallucinogen use were observed: 26- to 34-year-olds reported the highest lifetime prevalence (16%) and the 12-17 age group reported the lowest (2.6%). Past-year use of hallucinogens was highest among 18- to 25-year-olds. Lifetime PCP use was reported most often by the 26- to 34-year-olds (8.7%) and least often by the adolescents age 12-17 (1.1%).

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<sup>6</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates, 1992*, Rockville, MD: US Department of Health and Human Services (October, 1993), p.49.

<sup>7</sup>Office of Applied Studies, SAMSHA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report 3, Rockville, MD: SAMSHA (June 1993), pp.40-41.

Except for the 12-17 age group, lifetime and past-year hallucinogen use was proportionately more common among males than among females. Among respondents 35 and older, males were about twice as likely as females to report lifetime hallucinogen use; the sex ratio is lower for the 18-25 and 26-34 age groups. Significant sex differences in past-year use of hallucinogens were reported by the 18-25 and 26-34 age groups; males in the 26-34 group reported ever using PCP 1.6 times more often than their female counterparts.

In every age group, whites had the highest and blacks the lowest rates of lifetime and past-year use of hallucinogens, with Hispanics in between; most differences between blacks and whites were statistically significant. For all ages, whites reported at least twice the prevalence of PCP use in their lifetime as blacks.

Lifetime hallucinogen use was significantly more likely in large metropolitan areas than in nonmetropolitan areas (ratio = 1.3:1), and in the 12-17 age group, both lifetime and past-year use were higher in nonmetropolitan areas. Among 18- to 25-year-olds, PCP prevalence was significantly higher in large metropolitan than in small metropolitan areas (ratio = 1.8:1); however, 26- to 34-year-olds reported just the opposite by a smaller ratio (1.4:1).

Among the four geographic regions in the country, overall lifetime hallucinogen use was significantly higher in the West than in the South, Northeast, or North Central areas. Respondents in the West reported significantly higher PCP use in their lifetime than respondents in the South and Northeast regions.

Persons who graduated or attended college reported higher hallucinogen use in their lifetime than those who did not attend college. In addition, high school graduates 35 and older reported significantly higher lifetime hallucinogen use than nongraduates. Among 18- to 25-year-olds, however, respondents with some college education reported twice the rate of hallucinogen use as did college graduates. Among adults in the 18-25 and 26-34 age categories, those with less than a high school education were the most likely to have ever used PCP.

Lifetime and past-year hallucinogen use was higher among the relatively small unemployed population than among those who worked full-time or part-time. The "other" group reported significantly lower prevalence rates than all other groups. Among 26- to 34-year-old adults, the unemployed had (strikingly and significantly) higher past-year use than those who worked full-time (ratio = 4:1). Highest lifetime PCP use was also reported by the unemployed, and lowest by those in the "other" category.

### **Prevalence of Heroin Use**

About 1.8 million (.9%) of the 206 million persons represented in 1992 reported heroin use in their lifetime (see Table 2.1), 323,000 (.2%) in the past year.<sup>8</sup> Estimates of heroin use from the NHSDA are very conservative due to the acknowledged undercoverage of the heroin-using population, many of whom are outside the household sampling frame. Although prevalence of heroin use in the past year remained unchanged from 1991 to 1992, a significant decline was recorded in lifetime heroin use, especially among

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<sup>8</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse Population*, Advance Report Number 3, Rockville, MD: U.S. Department of Health and Human Services (June 1993), p.15.

those age 26 and older, which is attributable to the anomalous 1991 data (see footnote 2, page 64).<sup>9</sup> Data obtained from the Drug Abuse Warning Network (DAWN) indicate that emergency room mentions of heroin use increased significantly from 1991 to 1992.<sup>10</sup> As mentioned earlier in connection with cocaine-related emergency room visits, an increase in heroin-related emergency room visits does not necessarily indicate an increase in heroin users. Lifetime use of heroin was more common among males, young and middle adults (18-25 and 26-34 years of age), in the West, and among the unemployed and persons with less than a college education.

Table 5.7 shows lifetime heroin prevalence for various demographic groups by age of the respondents. Respondents age 26-34 and 18-25 were significantly more likely to report lifetime heroin use than those older or younger. Among respondents in the 26-34 and 35 and older age groups, males were more likely than females to report lifetime use (ratio = 1.8 for the 18-25 age group and 2.5 for the 26-34 age group). No significant racial/ethnic differences in lifetime heroin use were observed except in the 18-25 age group, where whites reported relatively higher lifetime prevalence of heroin use than Hispanics (ratio = 2:1).

No significant differences were found by population density; regional differences in lifetime use were observed only for the 35 and older age group, whose lifetime heroin use was proportionately more common in the West, than in other regions.

For the 26-34 age group, lifetime heroin use was highest among respondents who did not graduate from high school, followed by high school graduates, those who had some college, and college graduates. Lifetime heroin use among those age 26-34 was reported about five times more often by respondents with less than high school education versus the college educated or college graduates. Also, in this age group, the unemployed group had significantly greater lifetime heroin use than the other employment categories.

## Conclusion

Age, sex, racial/ethnic, and regional differences were recorded in the prevalence of inhalants, hallucinogens, and heroin. Lifetime use of the three drugs was more common among young adults age 18-34, males, whites, and the unemployed. Since past-year and current use of inhalants, hallucinogens, and heroin are estimated to be quite rare, it is difficult to draw conclusions from the NHSDA about increases or decreases in the prevalence of current use.

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<sup>9</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: US Department of Health and Human Services (June 1993), p.41.

<sup>10</sup>Office of Applied Studies, SAMHSA, *Annual Emergency Room Data, 1992: Data from the Drug Abuse Warning Network (DAWN)*, Series I, Number 12-A, Rockville, MD: SAMHSA (March 1994), p.85 (Table 4.03).

**Table 5.1 Percentage Reporting Inhalant Use in Their Lifetime, by Inhalant Type and Age Group: 1992**

Inhalant Type	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Any Inhalant</b>	<b>5.7</b>	<b>9.8</b>	<b>9.2</b>	<b>2.0</b>	<b>4.8</b>
Gasoline	2.3	1.8	1.1	0.3	0.9
Lighter gases	0.7	0.5	0.3	0.1	0.2
Spray paints	1.2	0.8	0.5	0.1	0.4
Aerosol sprays	1.0	0.4	0.5	0.1	0.3
Glue	1.6	0.9	1.0	0.3	0.7
Lacquer thinners	0.6	0.6	0.4	0.1	0.3
Amyl nitrite	0.4	3.1	4.1	0.8	1.7
Ether	0.2	0.1	0.1	*	0.1
Nitrous oxide	0.8	4.1	3.7	0.5	1.6
Correction fluids	0.7	0.8	0.2	0.1	0.3

\*Low precision; no estimate reported.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.2 Percentage Reporting Inhalant Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	5.7	9.8	9.2	2.0	4.8
<b>Sex</b>					
Male	5.6	12.0	12.6	3.2	6.5
Female	5.7	7.7	5.8	0.9	3.2
<b>Race/Ethnicity<sup>1</sup></b>					
White	6.2	11.7	10.9	2.2	5.3
Black	3.1	2.8	2.8	1.3	2.1
Hispanic	6.5	6.6	6.4	1.7	4.4
<b>Population Density</b>					
Large metro	4.9	11.3	9.4	2.2	5.1
Small metro	5.6	8.6	9.9	1.9	4.7
Nonmetro	6.9	8.7	7.6	1.8	4.2
<b>Region</b>					
Northeast	4.2	10.2	10.6	1.9	4.8
North Central	5.6	9.7	7.0	2.0	4.3
South	5.9	8.5	8.2	1.8	4.4
West	6.6	11.7	11.9	2.3	5.9
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	10.9	9.7	1.6	4.1
High school graduate	N/A	8.6	8.4	1.4	4.0
Some college	N/A	10.8	7.5	2.0	5.1
College graduate	N/A	8.4	11.4	3.3	5.8
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	10.2	9.0	3.0	5.5
Part-time	N/A	8.2	10.6	1.8	5.4
Unemployed	N/A	13.5	10.0	4.2	8.3
Other <sup>4</sup>	N/A	8.5	8.7	0.4	2.2

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.3 Percentage Reporting Hallucinogen Use in Their Lifetime, by Hallucinogen Type and Age Group: 1992**

Hallucinogen	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
Any Hallucinogen	2.6	13.4	15.6	5.2	8.0
LSD	2.2	10.7	11.3	3.9	6.0
Peyote	0.1	0.9	2.9	1.3	1.4
Mescaline	0.1	2.3	5.5	2.7	2.9
Psilocybin	0.5	4.7	6.8	2.0	3.1
PCP	1.1	4.6	8.7	2.9	4.0
Ecstasy	0.2	1.8	1.7	0.3	0.7

LSD = lysergic acid diethylamide.

PCP = phencyclidine.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.4 Percentage Reporting Use of Any Hallucinogens in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>2.6</b>	<b>13.4</b>	<b>15.6</b>	<b>5.2</b>	<b>8.0</b>
<b>Sex</b>					
Male	2.4	15.9	19.6	7.3	10.3
Female	2.9	11.1	11.7	3.4	5.8
<b>Race/Ethnicity<sup>1</sup></b>					
White	3.2	16.5	19.2	5.8	9.3
Black	0.2	3.0	3.7	2.7	2.6
Hispanic	2.8	8.1	8.4	2.8	5.1
<b>Population Density</b>					
Large metro	3.3	15.7	15.1	5.3	8.5
Small metro	3.0	11.6	18.6	5.7	8.5
Nonmetro	1.1	11.8	12.4	4.4	6.4
<b>Region</b>					
Northeast	2.4	16.2	17.4	4.1	8.0
North Central	1.7	12.6	14.8	4.8	7.3
South	2.3	11.2	13.0	3.5	6.2
West	4.4	15.9	19.2	9.7	11.9
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	16.1	18.5	2.9	7.0
High school graduate	N/A	11.3	14.9	4.5	7.8
Some college	N/A	14.3	15.0	6.4	10.0
College graduate	N/A	12.5	15.2	7.9	10.2
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	13.1	16.2	7.5	10.5
Part-time	N/A	13.5	14.4	6.0	9.8
Unemployed	N/A	20.3	17.7	9.6	14.7
Other <sup>4</sup>	N/A	10.5	12.8	1.5	3.7

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.5 Percentage Reporting Use of Any Hallucinogens in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.9	4.8	1.4	0.1	1.2
<b>Sex</b>					
Male	1.8	6.5	2.3	0.3	1.7
Female	1.9	3.2	0.5	*	0.7
<b>Race/Ethnicity<sup>1</sup></b>					
White	2.3	6.0	1.6	0.2	1.3
Black	0.1	0.6	0.5	0.2	0.3
Hispanic	2.0	2.7	1.1	*	1.1
<b>Population Density</b>					
Large metro	2.3	5.8	1.5	0.2	1.4
Small metro	2.1	2.8	1.3	0.1	0.9
Nonmetro	0.8	5.8	1.5	0.1	1.2
<b>Region</b>					
Northeast	1.0	4.3	1.3	0.2	1.0
North Central	1.2	5.4	1.0	*	1.0
South	2.1	4.8	1.3	0.1	1.2
West	3.0	4.7	2.1	0.3	1.5
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	5.1	1.3	0.1	1.0
High school graduate	N/A	4.9	1.9	0.1	1.2
Some college	N/A	5.3	0.9	0.3	1.5
College graduate	N/A	2.6	1.2	0.2	0.6
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	4.7	1.2	0.1	1.0
Part-time	N/A	5.9	1.6	0.7	2.4
Unemployed	N/A	6.8	4.3	0.3	3.1
Other <sup>4</sup>	N/A	3.0	0.4	*	0.4

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.6 Percentage Reporting PCP Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.1	4.6	8.7	2.9	4.0
<b>Sex</b>					
Male	1.0	5.2	10.7	3.9	5.1
Female	1.2	3.9	6.7	1.9	3.0
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.2	5.3	10.5	3.1	4.5
Black	0.1	1.6	3.1	1.9	1.8
Hispanic	1.4	4.0	4.6	1.9	2.8
<b>Population Density</b>					
Large metro	1.5	5.7	7.6	3.1	4.2
Small metro	0.8	3.1	10.7	2.9	4.1
Nonmetro	0.6	4.4	8.2	2.4	3.5
<b>Region</b>					
Northeast	1.1	4.8	10.2	2.2	3.9
North Central	0.4	5.3	8.9	3.2	4.2
South	1.4	3.8	7.1	1.7	3.0
West	1.2	4.9	9.6	5.2	5.6
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	6.6	12.5	2.0	4.2
High school graduate	N/A	4.1	9.3	2.9	4.4
Some college	N/A	3.6	7.9	3.7	4.6
College graduate	N/A	4.6	6.1	3.2	4.0
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	4.6	8.6	3.9	5.2
Part-time	N/A	2.9	8.1	2.9	3.9
Unemployed	N/A	8.3	12.3	6.6	8.6
Other <sup>4</sup>	N/A	4.1	7.2	1.1	2.0

N/A: Not applicable.

PCP = phencyclidine.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 5.7 Percentage Reporting Heroin Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>0.2</b>	<b>1.3</b>	<b>1.6</b>	<b>0.7</b>	<b>0.9</b>
<b>Sex</b>					
Male	0.3	1.6	2.1	1.0	1.2
Female	0.1	1.0	1.2	0.4	0.6
<b>Race/Ethnicity<sup>1</sup></b>					
White	0.2	1.4	1.8	0.7	0.9
Black	0.2	0.9	1.4	1.1	1.0
Hispanic	0.2	0.6	1.6	0.6	0.8
<b>Population Density</b>					
Large metro	0.4	1.7	1.4	0.9	1.0
Small metro	*	0.9	1.5	0.6	0.7
Nonmetro	0.2	1.3	2.3	0.4	0.8
<b>Region</b>					
Northeast	*	1.1	2.2	0.4	0.8
North Central	0.1	1.4	0.9	0.7	0.8
South	0.4	1.3	1.9	0.3	0.8
West	0.1	1.4	1.5	1.4	1.3
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	2.2	3.5	0.5	1.1
High school graduate	N/A	1.2	2.0	0.9	1.2
Some college	N/A	1.0	0.8	0.4	0.6
College graduate	N/A	*	0.7	0.8	0.8
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	1.2	0.9	1.0	1.0
Part-time	N/A	0.7	1.3	0.6	0.8
Unemployed	N/A	4.0	6.5	0.9	3.2
Other <sup>4</sup>	N/A	0.7	2.3	0.3	0.5

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Six: Nonmedical Use of Psychotherapeutic Drugs

### Introduction

Psychotherapeutic drugs as defined here mean prescribed (not over-the-counter) stimulants, sedatives, tranquilizers, and analgesics. Stimulants such as Dexedrine and Preludin are often called "uppers" or "speed." Sedatives such as Seconal, Quaalude, and other "sleeping pills" are sometimes called "downers." Tranquilizers or "tranks" include anxiety-reducing drugs such as Valium and Librium. Analgesics include prescription painkillers such as Darvon, Demerol, Percodan, and Tylenol with codeine. All of these drugs may be prescribed for specific medical reasons, but they are also used for nonmedical reasons, which includes use without a legitimate prescription, use in greater amounts than prescribed, more often than prescribed, or for reasons other than those prescribed.

There was a significant decrease between 1991 and 1992 in the nonmedical use of psychotherapeutic drugs in the past year and past month.<sup>1</sup> Significant decreases occurred particularly among youths age 12-17 and young adults age 18-25. Approximately 12% or 24 million of the 206 million persons in the surveyed population in 1992 reported lifetime nonmedical use of at least one psychotherapeutic. About 8 million persons (3.8%) reported use in the past year and 2.6 million (1.3%) reported current use—in the past month. Generally, rates of nonmedical use of any psychotherapeutic were much higher than rates of heroin use, much lower than marijuana use, and in the same general ranges as use of cocaine.

The following sections analyze the nonmedical use of any psychotherapeutic drug and specifically of stimulants, sedatives, tranquilizers, and analgesics according to demographic subgroups defined by age, sex, race/ethnicity, population density, region, education, and employment status.

### Use of Any Psychotherapeutic Drug

Tables 6.1-6.3 report the percentage of psychotherapeutic drug use by age group and other demographic characteristics for lifetime, past-year, and current periods. About one-fifth of the 26-34 age group, significantly more than any other age group, had ever used a prescription-type psychotherapeutic drug for nonmedical reasons. Past-year use, however, was highest (7.7%) among adults age 18-25. Current use was virtually the same for the 18-25 and 26-34 age groups (2.3% and 2.4%, respectively), significantly above the rates for the younger or older groups.

Nonmedical use was generally the same for adult men and women (except that male lifetime use was higher in one age group). However, in the 12-17 age group, females reported double the male rate of lifetime, past-year, and current use. *Monitoring the Future* reported similar findings: female twelfth graders reported higher rates of stimulant use (including over-the-counter diet pills, omitted here) than male twelfth graders, but there were no differences between male and female college students in the rates of stimulant or tranquilizer use. White respondents were roughly twice as likely as their black and Hispanic counterparts to report lifetime nonmedical use of any psychotherapeutic (13% versus 5.8% and 8%, respectively). Whites had higher rates of lifetime and past-year nonmedical use than blacks and

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<sup>1</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), Table 5A.

Hispanics in every age group except 12-17, but there were no race/ethnicity differences in current use. *Monitoring the Future* also reported higher rates of sedative and tranquilizer use among whites than in other racial/ethnic groups.<sup>2</sup>

Persons residing in the West were almost twice as likely as those in any other region to report ever using any psychotherapeutic nonmedically. This regional difference also appears to characterize past-year and current use, but only for adults and not at comparable ratios or significance levels. The association of education and use of these drugs depended on the age group. Among persons age 35 and older, college graduates had the highest rate of lifetime use. However, among those age 18-25 and 26-34, college graduates had the lowest rate of lifetime use. Educational differences in past-year and current use were generally not statistically significant. Finally, as with other drugs, unemployed persons reported the highest lifetime, past-year, and, especially, current use.

### Use of Stimulants

Tables 6.4-6.7 present demographic breakdowns of data on the nonmedical use of four specific kinds of prescription-type psychotherapeutics: stimulants, sedatives, tranquilizers, and analgesics. Table 6.8 presents similar but simpler breakdowns of current use. Table 6.4 shows that about 6.3% of the surveyed population or 13 million individuals ever used prescription-type stimulants for nonmedical purposes. Lifetime use was significantly higher at a rate of 12% in the age group 26-34 than in younger or older age groups. In every age group except 12-17, males were significantly more likely to report ever using stimulants than females. The West had significantly higher lifetime rates than other regions. Among those 35 and older, college graduates had a significantly higher percentage of users than other educational groups, while lifetime prevalence of stimulant use was lowest in the "other" employment category (e.g., retired, disabled, homemaker, or student).

### Use of Sedatives, Tranquilizers, and Analgesics

About 3.5% of the surveyed population reported ever using prescription-type sedatives for nonmedical purposes, compared with 5.1% who had ever used tranquilizers and 5.5% who had ever used analgesics. These groups overlap with each other and the stimulant users to some extent, and their overall demographic distributions are largely along the lines just reported. Respondents age 26-34 had the highest rates of lifetime use for each of these drugs. Men in that age group reported higher lifetime use than women; however, females in the 12-17 age group were more likely than their male peers to have ever used sedatives. (No other sex differences were significant.)

Whites 18 years and older generally reported significantly higher levels of ever using these drugs than blacks or Hispanics. Adults in the West generally reported about 1.5 times higher lifetime prevalence than residents of other regions—except that more residents of the South in the 18-34 age group had ever used tranquilizers. In the 18-34 age group, persons who had not graduated from high school were significantly more likely to have ever used tranquilizers than people who had attended college, while the opposite was reported by adults aged 35 and older. Unemployed persons generally had a higher overall lifetime prevalence than persons in other employment categories.

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<sup>2</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary School Students*, Rockville, MD: US Department of Health and Human Services (1993), pp.12, 105, 128.

## Conclusion

Age, region, and current unemployment were consistent correlates of the nonmedical use of psychotherapeutic drugs. Across each of the major types of psychotherapeutics, the 18-25 and 26-34 age groups were more likely to have ever used these drugs than younger or older persons. Also, residents of the West (with some exception) and people currently unemployed were more likely ever to have used these drugs and to use them currently. Beyond these findings, the results are less easily summarized or interpreted. Males tended to have higher rates than females and whites to have higher rates than blacks or Hispanics; however, these differences generally reached statistical significance only in the 18-25 and 26-34 age groups and only for lifetime and past-year use; moreover, in the 12-17 group, females generally had higher prevalence rates than males. A previous multivariate analysis of NHSDA data concluded that neither sex nor race was a significant correlate of whether persons were current nonmedical users of psychotherapeutic drugs.<sup>3</sup>

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<sup>3</sup>Office of Applied Studies, SAMHSA, *National Household Survey of Drug Abuse: Race/Ethnicity, Socioeconomic Status, and Drug Abuse 1991*, Rockville, MD: SAMHSA (December 1993), Table 4.3.

**Table 6.1 Percentage Reporting Nonmedical Use of Any Prescription-Type Psychotherapeutic in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	5.5	15.4	19.6	9.2	11.6
<b>Sex</b>					
Male	4.2	16.1	22.3	10.1	12.6
Female	6.8	14.8	16.8	8.5	10.7
<b>Race/Ethnicity<sup>1</sup></b>					
White	5.4	18.3	22.8	10.3	13.1
Black	5.5	5.9	10.0	4.1	5.8
Hispanic	5.6	10.4	11.7	5.7	8.0
<b>Population Density</b>					
Large metro	5.7	15.8	19.1	9.9	12.1
Small metro	5.1	14.1	21.7	8.7	11.4
Nonmetro	5.7	16.5	17.3	8.6	10.8
<b>Region</b>					
Northeast	3.7	12.0	17.7	6.6	9.1
North Central	5.3	14.4	15.1	8.1	9.9
South	6.0	15.8	20.7	6.3	10.3
West	6.4	18.7	23.7	18.0	18.0
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	19.2	20.9	5.3	9.5
High school graduate	N/A	14.2	19.4	8.2	11.5
Some college	N/A	15.4	21.3	9.4	13.3
College graduate	N/A	11.9	17.2	15.2	15.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	16.2	19.1	11.8	14.3
Part-time	N/A	14.5	21.5	10.4	13.8
Unemployed	N/A	19.1	22.8	10.6	16.2
Other <sup>4</sup>	N/A	12.7	18.3	5.5	7.6

N/A: Not applicable.

Note: Psychotherapeutic drugs are any prescription-type stimulant, sedative, tranquilizer, or analgesic used for nonmedical reasons; over-the-counter drugs are not included.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.2 Percentage Reporting Nonmedical Use of Any Prescription-Type Psychotherapeutic in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	3.6	7.7	5.9	2.2	3.8
<b>Sex</b>					
Male	2.4	8.4	6.0	2.8	4.1
Female	4.8	6.9	5.9	1.8	3.5
<b>Race/Ethnicity<sup>1</sup></b>					
White	3.9	8.7	6.5	2.4	4.1
Black	2.6	3.9	4.0	1.8	2.7
Hispanic	3.3	5.8	5.2	1.9	3.6
<b>Population Density</b>					
Large metro	3.5	8.3	6.0	2.3	4.0
Small metro	3.2	6.3	5.1	1.9	3.2
Nonmetro	4.3	8.3	7.0	2.5	4.2
<b>Region</b>					
Northeast	1.6	4.7	3.9	1.4	2.3
North Central	3.0	7.9	4.1	2.4	3.4
South	4.9	7.9	6.9	2.0	4.1
West	3.7	9.5	8.0	3.3	5.1
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	10.1	6.7	1.5	3.5
High school graduate	N/A	7.3	6.1	2.6	4.1
Some college	N/A	7.7	7.8	2.0	4.5
College graduate	N/A	4.0	3.5	2.8	3.1
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	7.6	5.5	2.8	4.1
Part-time	N/A	7.0	4.6	1.7	3.8
Unemployed	N/A	11.9	9.4	5.9	8.5
Other <sup>4</sup>	N/A	6.2	6.8	1.1	2.3

N/A: Not applicable.

Note: Psychotherapeutic drugs are any prescription-type stimulant, sedative, tranquilizer, or analgesic used for nonmedical reasons; over-the-counter drugs are not included.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N = 21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N = 21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.3 Percentage Reporting Nonmedical Use of Any Prescription-Type Psychotherapeutic in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.2	2.3	2.4	0.7	1.3
<b>Sex</b>					
Male	0.7	2.4	2.3	0.8	1.3
Female	1.8	2.2	2.4	0.6	1.2
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.2	2.6	2.5	0.7	1.3
Black	1.5	1.2	2.2	0.7	1.2
Hispanic	1.0	1.8	2.4	0.5	1.2
<b>Population Density</b>					
Large metro	1.4	2.9	2.4	0.9	1.5
Small metro	1.1	1.8	2.3	0.5	1.0
Nonmetro	1.2	1.9	2.4	0.6	1.1
<b>Region</b>					
Northeast	0.5	2.1	1.4	0.2	0.7
North Central	1.3	2.3	1.8	0.8	1.2
South	1.7	2.3	2.8	0.4	1.3
West	1.0	2.6	3.0	1.5	1.9
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	3.7	3.3	0.9	1.6
High school graduate	N/A	1.9	2.3	0.5	1.1
Some college	N/A	2.4	3.0	0.4	1.4
College graduate	N/A	0.7	1.3	0.8	0.9
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	2.1	2.2	0.7	1.3
Part-time	N/A	1.8	2.4	*	1.0
Unemployed	N/A	4.1	3.9	2.5	3.3
Other <sup>4</sup>	N/A	2.2	2.3	0.6	0.9

N/A: Not applicable.

Note: Psychotherapeutic drugs are any prescription-type stimulant, sedative, tranquilizer, or analgesic used for nonmedical reasons; over-the-counter drugs are not included.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.4 Percentage Reporting Nonmedical Use of Any Prescription-Type Stimulant in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>2.1</b>	<b>6.8</b>	<b>11.9</b>	<b>5.0</b>	<b>6.3</b>
<b>Sex</b>					
Male	1.7	7.0	14.3	6.0	7.3
Female	2.5	6.6	9.6	4.2	5.3
<b>Race/Ethnicity<sup>1</sup></b>					
White	2.2	8.3	14.4	5.8	7.3
Black	1.3	0.9	3.1	1.9	1.9
Hispanic	2.4	4.9	7.0	2.7	4.1
<b>Population Density</b>					
Large metro	1.9	6.9	11.0	5.5	6.5
Small metro	2.7	6.1	14.0	5.3	6.7
Nonmetro	1.6	7.4	11.1	3.9	5.3
<b>Region</b>					
Northeast	1.3	4.1	10.6	3.5	4.7
North Central	1.3	6.4	8.1	4.8	5.2
South	2.6	5.8	12.0	2.8	4.9
West	2.7	11.1	17.0	10.7	11.2
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	8.9	13.6	3.3	5.6
High school graduate	N/A	6.6	11.3	4.2	6.1
Some college	N/A	5.9	12.6	5.7	7.2
College graduate	N/A	5.6	11.3	7.9	8.6
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	7.2	11.5	6.9	8.2
Part-time	N/A	7.0	13.5	6.8	8.2
Unemployed	N/A	8.9	14.0	5.1	8.5
Other <sup>4</sup>	N/A	4.5	11.6	2.2	3.4

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.5 Percentage Reporting Nonmedical Use of Any Prescription-Type Sedative in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.5	3.2	6.3	2.9	3.5
<b>Sex</b>					
Male	0.9	4.4	7.8	3.3	4.1
Female	2.1	2.1	4.9	2.6	2.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.5	3.8	7.6	3.3	3.9
Black	1.1	0.6	3.3	1.7	1.8
Hispanic	1.5	2.7	3.0	1.6	2.1
<b>Population Density</b>					
Large metro	1.3	3.6	5.8	3.2	3.6
Small metro	1.4	2.9	7.7	2.1	3.2
Nonmetro	2.0	3.0	5.7	3.4	3.6
<b>Region</b>					
Northeast	0.9	2.0	6.2	2.4	2.9
North Central	1.2	3.2	5.0	3.2	3.3
South	2.0	3.5	7.8	1.8	3.2
West	1.3	3.9	5.4	5.2	4.7
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	4.4	7.0	2.2	3.2
High school graduate	N/A	2.8	6.7	2.3	3.3
Some college	N/A	3.3	6.6	3.0	3.9
College graduate	N/A	2.1	5.2	4.7	4.6
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	3.0	6.3	3.4	4.1
Part-time	N/A	2.5	6.5	2.4	3.2
Unemployed	N/A	6.6	7.4	6.0	6.5
Other <sup>4</sup>	N/A	2.6	5.8	2.0	2.5

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.6 Percentage Reporting Nonmedical Use of Any Prescription-Type Tranquilizer in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	1.6	6.8	9.0	4.1	5.1
<b>Sex</b>					
Male	1.5	7.8	10.6	4.4	5.8
Female	1.6	5.8	7.4	3.9	4.6
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.7	8.2	10.8	4.7	5.9
Black	0.8	1.9	4.0	1.7	2.1
Hispanic	0.8	4.0	4.4	2.6	3.1
<b>Population Density</b>					
Large metro	1.7	6.5	8.3	4.4	5.2
Small metro	1.3	5.9	10.5	3.4	4.8
Nonmetro	1.7	8.4	8.2	4.6	5.4
<b>Region</b>					
Northeast	1.5	4.4	9.2	3.6	4.5
North Central	1.1	5.9	5.6	3.6	4.0
South	1.9	8.8	11.4	2.3	4.9
West	1.6	6.0	8.3	8.5	7.4
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	10.0	12.2	2.6	5.0
High school graduate	N/A	6.0	9.6	3.4	5.1
Some college	N/A	6.1	8.1	4.9	5.8
College graduate	N/A	4.7	6.9	6.5	6.5
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	7.6	8.3	4.6	6.0
Part-time	N/A	5.7	10.0	3.9	5.6
Unemployed	N/A	8.3	12.0	7.8	9.1
Other <sup>4</sup>	N/A	5.2	9.2	3.1	4.0

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.7 Percentage Reporting Nonmedical Use of Any Prescription-Type Analgesic in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>3.9</b>	<b>8.7</b>	<b>10.0</b>	<b>3.5</b>	<b>5.5</b>
<b>Sex</b>					
Male	3.3	9.2	11.6	4.0	6.1
Female	4.6	8.2	8.6	3.1	4.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	3.7	10.1	11.5	3.8	6.0
Black	4.3	4.3	6.8	2.4	3.8
Hispanic	3.9	5.8	6.0	2.4	4.1
<b>Population Density</b>					
Large metro	4.0	9.9	9.6	3.9	5.8
Small metro	3.8	6.9	11.2	3.2	5.2
Nonmetro	4.0	9.1	9.4	3.4	5.2
<b>Region</b>					
Northeast	2.4	7.0	9.4	2.6	4.4
North Central	3.9	9.0	8.2	3.3	5.0
South	4.4	8.5	10.5	3.0	5.3
West	4.4	10.3	11.7	5.7	7.4
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	11.2	12.5	2.1	4.9
High school graduate	N/A	8.1	10.2	2.9	5.3
Some college	N/A	9.0	11.2	3.6	6.4
College graduate	N/A	5.1	7.3	6.2	6.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	9.4	10.0	4.6	6.7
Part-time	N/A	7.6	9.6	3.1	5.7
Unemployed	N/A	12.3	11.7	6.0	9.2
Other <sup>4</sup>	N/A	6.6	9.7	2.0	3.3

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 6.8 Percentage Reporting Nonmedical Use of Specific Types of Psychotherapeutic Drugs in the Past Month, by Demographic Characteristics: 1992**

Demographic Characteristic	Type of Psychotherapeutic Drug			
	Stimulants	Sedatives	Tranquilizers	Analgesics
<b>Total</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.8</b>
<b>Age</b>				
12-17	0.2	0.4	0.2	0.8
18-25	0.7	0.6	0.6	1.2
26-34	0.4	0.6	0.5	1.4
≥ 35	0.1	0.2	0.3	0.4
<b>Sex</b>				
Male	0.3	0.4	0.3	0.7
Female	0.2	0.3	0.4	0.8
<b>Race/Ethnicity<sup>1</sup></b>				
White	0.3	0.3	0.4	0.8
Black	0.1	0.4	0.3	0.9
Hispanic	0.3	0.3	0.3	0.7
<b>Population Density</b>				
Large metro	0.3	0.5	0.4	1.0
Small metro	0.2	0.2	0.3	0.6
Nonmetro	0.3	0.3	0.4	0.5
<b>Region</b>				
Northeast	0.1	0.3	*	0.3
North Central	0.1	0.5	0.5	0.8
South	0.3	0.2	0.4	0.7
West	0.5	0.4	0.5	1.2
<b>Adult Education<sup>2</sup></b>				
Less than high school	0.4	0.7	0.7	1.0
High school graduate	0.2	0.2	0.4	0.7
Some college	0.4	0.4	0.4	0.6
College graduate	*	0.1	0.1	0.6
<b>Current Employment<sup>3</sup></b>				
Full-time	0.2	0.3	0.2	0.8
Part-time	0.5	0.2	0.2	0.5
Unemployed	0.7	1.5	1.5	1.2
Other <sup>4</sup>	0.1	0.3	0.5	0.6

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N = 21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N = 21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Seven: Alcohol

### Introduction

Alcohol is the most commonly used psychoactive drug in the United States. Nevertheless, consistent with the illegal drugs assessed in this report, patterns of alcohol use have also shown a decreasing trend. Compared with 1991, significantly smaller proportions of youths and adults in the surveyed population reported alcohol use currently and in the past year. Moreover, reported lifetime use decreased significantly among 12- to 25-year-olds from 1991 to 1992 (see Chapter 2). These trends reflect an overall decrease in alcohol use since its peak in the early to mid-1980s.<sup>1</sup>

Approximately 171 million (83%) of the 206 million persons represented in 1992 reported alcohol use in their lifetime, 133 million (64.7%) reported use in the past year, and 98 million (47.8%) reported current use (in the previous month).<sup>2</sup> Furthermore, about 10 million (5%) reported heavy alcohol use in the past month.<sup>3</sup> In general, alcohol use was relatively more common among males, whites, adults age 18-34, and those who had attended college. Heavy alcohol use, however, was relatively more common among those who did not graduate from college and among the unemployed group. The following sections provide a more detailed description of the prevalence and intensity of alcohol use among the demographic subgroups.

### General Prevalence of Use by Age

It is not surprising given its legal status that alcohol use is more common among adults than youths. Lifetime, past-year, and current alcohol use were reported two to three times more often by adults than by those age 12-17. Within the adult age categories, lifetime use was highest among those age 26-34, while both past-year and current use were highest among the two younger adult groups (18-25 and 26-34; see Tables 7.1-7.3).

Table 7.4 presents a more detailed age analysis for alcohol use. Past-year and current alcohol use rose for each age band until around ages 22-25, when they leveled off. An appreciable decrease in the rate of use did not occur until the 50-and-older group. This pattern is similar to the age distributions for illegal drugs, but alcohol use decreased in a much older age group (cf. Tables 3.4, 4.4). These data are consistent with other national indicators of alcohol use; however, the proportion of young alcohol users (age 12-17) is substantially higher in surveys of secondary school students than in our present data.<sup>4</sup> This incongruity suggests that there are important methodological questions for school-based versus household-based surveys of alcohol use among adolescent populations.

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<sup>1</sup>See also: Midanik and Clark, "The Demographic Distribution of US Drinking Patterns in 1990: Description and Trends from 1984," *American Journal of Public Health* 84:1218-1222 (1994).

<sup>2</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates, 1992*, Rockville, MD: US Department of Health and Human Services (October 1993), Table 13-A.

<sup>3</sup>Heavy alcohol use is defined as drinking five or more drinks per occasion on five or more days in the previous 30 days. See Tables 7.7, 7.8.

<sup>4</sup>Cf. NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary School Students*, Rockville, MD: US Department of Health and Human Services (1993), Table 7, Table 8; NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), Table 4, Table 5.

## Sex and Race/Ethnicity

Males were more likely to report alcohol use in their lifetimes, in the past year, and currently (see Tables 7.1-7.3). In each age group except 18-25, males reported higher lifetime use; and they reported higher past-year and current use in each age group except 12-17. This disparity tended to increase proportionally as one moved from past-year to current use, especially among older adults (26 and older). Although this was not tested for statistical significance, it appeared that the gender gap in alcohol use widened substantially with increased age.

In general, the racial/ethnic comparisons indicate that whites reported significantly more lifetime, past-year, and current alcohol use than blacks or Hispanics.<sup>5</sup> The only exception to this general pattern is that white and Hispanic youths (age 12-17) reported similar levels of current alcohol use. Table 7.5 provides a more detailed description of racial/ethnic patterns of use stratified by age and sex. White and Hispanic males tended to report the highest levels of alcohol use. For example, white and Hispanic males reported significantly higher levels of past-year use than black males, black females, and Hispanic females overall and among the 35 and older group. Adult white males reported significantly greater current alcohol use than females in any racial/ethnic group.

## Population Density and Region

Respondents from large and small metropolitan areas of the U.S. were significantly more likely to use alcohol in the past year than those from nonmetropolitan areas. Respondents from large metropolitan areas were significantly more likely to report current alcohol use than those from nonmetropolitan areas. These findings generally parallel the results of other national surveys that have shown that reported alcohol use increases with higher population density.<sup>6</sup> However, few of the specific population density comparisons by age yielded significant differences; they were limited primarily to the older adult age group (35 and older). Moreover, since 1988 the differences in current alcohol prevalence by population density have narrowed.<sup>7</sup>

The regional differences demonstrated greater diversity than the density differences. In general, past-year and current use tended to be lowest in the South.<sup>8</sup> For example, older adults (35 and older) from the South reported significantly less lifetime, past-year, and current alcohol use than older adults from the other three regions of the country. Furthermore, adults age 18-25 from the South reported significantly less past-year and current alcohol use than their counterparts from the Northeast. Among adults age 26-34, the prevalence of past-year and current alcohol use in the South was significantly lower than the comparable figure from the Northeast and West.

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<sup>5</sup>See also: Wallace and Bachman, "Explaining Racial/Ethnic Differences in Adolescent Drug Use: The Impact of Background and Lifestyle," *Social Problems* 38:333-357 (1991).

<sup>6</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), Table 4, Table 5.

<sup>7</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), p.17.

<sup>8</sup>See also: NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), Table 4, Table 5.

## **Adult Education and Employment**

In contrast with the illegal drug use assessed in the survey, past-year and current alcohol use were positively associated with educational attainment. Those who had attended or graduated from college reported significantly greater lifetime, past-year, and current alcohol use than those who had not attended college. The only exception to this general pattern occurred among 26- to 34-year-olds: high school graduates and those who had attended some college reported similar levels of use.

The current employment patterns indicated that, in general, those in the "other" category—which includes retired persons, homemakers, students—reported less alcohol use than the employed or unemployed. For example, those in the "other" category reported significantly less past-year and current alcohol use than respondents from each other employment category. These patterns should be viewed cautiously, however, since the composition of the "other" category varies by age. Finally, although it appears that the employed group reported higher levels of alcohol use than the unemployed group, these differences were significant only among 18- to 25-year-olds in past-year and lifetime use, and among 26- to 34-year-olds in lifetime use.

### **Days of Alcohol Use**

Table 7.6 indicates that about 13 million persons (6.4%) represented in the 1992 survey were daily or almost daily drinkers: they consumed alcohol on 20 or more days in the previous month. Daily drinking was more common among males (3.5:1), whites, and college graduates. It also increased with age; the two older age groups reported the highest proportion of daily drinking. Finally, daily drinking was significantly more common in large metropolitan areas and in the Western region of the United States.

### **Heavy Alcohol Use**

Heavy alcohol use is defined as drinking five or more drinks per occasion on five or more days in the previous 30 days. Tables 7.7 and 7.8 provide estimates of the distribution of heavy alcohol use by demographic characteristics. The results indicate that about 10 million of the U.S. population represented in the 1992 survey reported heavy alcohol use. Moreover, 18- to 25-year-olds were significantly more likely to report heavy alcohol use, followed by 26- to 34-year-olds, those 35 and older, and 12- to 17-year-olds. Males were more than three times as likely as females to report heavy alcohol use. This gender difference was significant in each age category, although it was most prominent among the oldest adults. There were few significant race/ethnicity differences, although whites reported significantly more heavy alcohol use than either blacks or Hispanics in the 18-25 age group. Table 7.8 supports this result and indicates that among all those under age 21, whites reported significantly higher levels of heavy use than blacks or Hispanics.

Contrary to the findings for alcohol use, the prevalence of heavy use was significantly higher among those who had not graduated from college. This finding was most pronounced in the 26-34 age group: respondents who had not attended college were significantly more likely than those who had attended

college to report heavy alcohol use.<sup>9</sup> Moreover, the unemployed in this age group reported significantly higher levels of heavy drinking than those in the other employment categories.

The phenomenon of heavy use among the education and employment groups representing the least overall alcohol use is displayed in Table 7.8. Among those age 21 and older, college graduates reported significantly higher current use, but significantly lower heavy use, than members of the other education categories. Furthermore, although there was no significant difference among the employed and unemployed in terms of current use, the unemployed were significantly more likely to report heavy alcohol use.

### Use of Alcohol and Other Drugs in the Past Month

Table 7.9 presents the cross-classification of alcohol use and other drug use reported by the respondents. As previous NHSDA surveys and other literature have indicated,<sup>10</sup> current use of alcohol was strongly associated with use of other legal and illegal drugs. Among the entire sample, over one-third of current alcohol users also used cigarettes in the past month, while about one-tenth of current alcohol users were current illegal drug users. Alcohol users were six times more likely than alcohol abstainers to use illegal drugs. This association was especially pronounced among the adolescent group. Alcohol users 12-17 were about 11 times as likely as abstainers within their age cohort to report illegal drug use. The differences were not as dramatic in the older age groups, but they still represent a well-established association between alcohol use and other drug use.

### Conclusion

In agreement with all other national data sources on drug use,<sup>11</sup> alcohol continued to be the most widely used psychoactive drug in the United States. This finding did not vary by demographic subgroup. As with several other drugs such as marijuana and cocaine, however, past-year and current alcohol use have continued to decline significantly among the surveyed population.

Both the prevalence and intensity of alcohol use were greater among males. In addition, whites tended to report higher levels of alcohol use than blacks or Hispanics. There were diverging patterns of alcohol use on the one hand, and heavy alcohol use on the other. Although the general prevalence

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<sup>9</sup>See also: Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Race/Ethnicity, Socioeconomic Status, and Drug Abuse 1991*, Rockville, MD: US Department of Health and Human Services (December 1993), Table 4.3; Crum, Helzer, and Anthony, "Level of Education and Alcohol Abuse and Dependence in Adulthood: A Further Inquiry," *American Journal of Public Health* 83:830-837 (1993).

<sup>10</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Main Findings 1991*, Rockville, MD: US Department of Health and Human Services (May 1993), Table 7.9; National Institute on Drug Abuse, *National Household Survey on Drug Abuse: Main Findings 1990*, Rockville, MD: US Department of Health and Human Services (1991), Table 7.9; National Institute on Drug Abuse, *National Household Survey on Drug Abuse: Main Findings 1988*, Rockville, MD: US Department of Health and Human Services (1990), Table 7.9; Yamaguchi and Kandel, "Patterns of Drug Use from Adolescence to Young Adulthood: II. Sequences of Progression," *American Journal of Public Health* 74:668-672 (1984); Kandel and Yamaguchi, "From Beer to Crack: Developmental Patterns of Drug Involvement," *American Journal of Public Health* 83:851-855 (1993).

<sup>11</sup>Cf. NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary School Students*, Rockville, MD: US Department of Health and Human Services (1993); NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993).

estimates suggested that those with more education were more likely to use alcohol, heavy use among adults was more common among the less educated and the unemployed.<sup>12</sup> This reflects an important pattern that deserves and has received attention from researchers and policy makers.<sup>13</sup>

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<sup>12</sup>See also: Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Race/Ethnicity, Socioeconomic Status, and Drug Abuse 1991*, Rockville, MD: US Department of Health and Human Services (December 1993), Table 4.3.

<sup>13</sup>Crum, Helzer, and Anthony, "Level of Education and Alcohol Abuse and Dependence in Adulthood: A Further Inquiry," *American Journal of Public Health* 83:830-837 (1993); and Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Race/Ethnicity, Socioeconomic Status, and Drug Abuse 1991*, Rockville, MD: SAMHSA (Dec. 1993), Table 4.3.

**Table 7.1 Percentage Reporting Alcohol Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>39.3</b>	<b>86.3</b>	<b>91.7</b>	<b>87.0</b>	<b>83.0</b>
<b>Sex</b>					
Male	41.6	87.7	93.4	93.8	87.3
Female	37.0	85.0	90.0	81.0	79.0
<b>Race/Ethnicity<sup>1</sup></b>					
White	41.7	89.9	94.3	88.5	85.5
Black	33.7	77.1	84.1	82.3	75.2
Hispanic	36.8	79.8	85.6	79.9	75.3
<b>Population Density</b>					
Large metro	39.0	85.5	91.5	88.7	84.2
Small metro	38.5	85.5	91.5	88.1	82.9
Nonmetro	41.0	88.8	92.3	82.7	80.8
<b>Region</b>					
Northeast	36.6	89.7	92.2	89.7	85.5
North Central	41.7	87.5	91.5	89.3	84.4
South	37.7	85.3	91.4	81.8	79.5
West	41.7	84.0	91.8	90.6	84.8
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	80.6	87.6	79.7	81.0
High school graduate	N/A	86.1	92.0	85.6	87.1
Some college	N/A	88.5	92.1	92.8	91.7
College graduate	N/A	92.0	93.4	92.6	92.8
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	89.9	92.9	91.0	91.4
Part-time	N/A	87.4	92.3	91.8	90.6
Unemployed	N/A	85.0	88.2	90.1	88.2
Other <sup>4</sup>	N/A	78.6	88.0	80.3	81.0

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.2 Percentage Reporting Alcohol Use in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>32.6</b>	<b>77.7</b>	<b>79.0</b>	<b>62.6</b>	<b>64.7</b>
<b>Sex</b>					
Male	33.7	79.8	83.6	69.0	69.5
Female	31.4	75.6	74.5	57.0	60.2
<b>Race/Ethnicity<sup>1</sup></b>					
White	35.1	81.4	81.7	64.4	67.0
Black	26.0	67.0	70.2	51.8	54.5
Hispanic	30.6	71.3	73.7	60.1	61.3
<b>Population Density</b>					
Large metro	32.8	78.2	81.3	66.8	68.1
Small metro	31.5	77.4	79.0	63.2	64.6
Nonmetro	33.7	77.0	73.8	54.5	58.6
<b>Region</b>					
Northeast	31.9	83.5	82.7	68.5	69.9
North Central	34.3	80.5	79.9	65.8	66.9
South	31.0	73.8	75.1	52.8	57.7
West	33.8	76.6	81.1	69.8	69.2
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	70.2	71.6	43.0	50.9
High school graduate	N/A	75.9	78.7	61.7	67.6
Some college	N/A	81.5	78.7	70.2	74.5
College graduate	N/A	87.2	84.1	80.5	81.9
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	82.2	81.8	71.7	75.7
Part-time	N/A	80.4	75.9	68.6	73.5
Unemployed	N/A	75.3	77.6	66.0	71.6
Other <sup>4</sup>	N/A	67.0	70.0	49.2	53.3

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.3 Percentage Reporting Alcohol Use in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	15.7	59.2	61.2	46.5	47.8
<b>Sex</b>					
Male	16.9	65.6	70.0	56.1	55.9
Female	14.5	53.0	52.8	38.0	40.4
<b>Race/Ethnicity<sup>1</sup></b>					
White	16.7	62.9	63.7	47.8	49.7
Black	13.2	50.9	55.6	37.2	39.8
Hispanic	16.2	52.8	56.1	44.9	45.0
<b>Population Density</b>					
Large metro	15.1	61.2	64.7	50.2	51.3
Small metro	16.3	58.8	61.0	47.8	48.3
Nonmetro	15.9	56.1	53.9	38.4	41.0
<b>Region</b>					
Northeast	14.3	67.2	66.8	51.1	52.9
North Central	18.1	60.3	61.7	48.5	49.2
South	14.5	55.4	56.2	38.4	41.7
West	16.2	57.8	64.1	53.4	52.2
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	47.9	53.8	30.3	36.1
High school graduate	N/A	57.4	60.7	44.3	49.9
Some college	N/A	63.6	58.5	52.2	56.0
College graduate	N/A	75.0	69.1	63.9	66.1
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	65.0	64.6	55.0	58.9
Part-time	N/A	58.6	59.7	53.1	56.0
Unemployed	N/A	60.3	61.1	48.1	54.9
Other <sup>4</sup>	N/A	47.2	48.1	33.8	36.7

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.4 Percentage Reporting Alcohol Use in Their Lifetime, the Past Year, and the Past Month, by Age: 1992**

Age Group	(Unweighted N)	Time Period		
		Lifetime	Past Year	Past Month
<b>Total</b>	<b>(28,832)</b>	<b>83.0</b>	<b>64.7</b>	<b>47.8</b>
<b>12-17 Years Old</b>	<b>(7,254)</b>	<b>39.3</b>	<b>32.6</b>	<b>15.7</b>
12-13	(2,466)	15.7	10.7	3.8
14-15	(2,350)	39.2	32.3	14.8
16-17	(2,438)	65.6	56.9	29.9
<b>18-25 Years Old</b>	<b>(7,721)</b>	<b>86.3</b>	<b>77.7</b>	<b>59.2</b>
18-21	(3,817)	82.4	74.7	54.2
22-25	(3,904)	90.2	80.6	64.1
<b>26-34 Years Old</b>	<b>(7,516)</b>	<b>91.7</b>	<b>79.0</b>	<b>61.2</b>
26-29	(3,317)	90.9	79.6	62.4
30-34	(4,199)	92.3	78.5	60.3
<b>35 Years and Older</b>	<b>(6,341)</b>	<b>87.0</b>	<b>62.6</b>	<b>46.5</b>
35-39	(1,824)	92.3	75.3	58.6
40-44	(1,383)	91.2	73.2	52.7
45-49	(1,284)	91.1	71.5	56.9
≥50	(1,850)	82.9	52.9	37.8

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.5 Percentage Reporting Alcohol Use in Their Lifetime, the Past Year, and the Past Month, by Age Group, Race/Ethnicity, and Sex: 1992**

Race/Ethnicity <sup>1</sup> and Sex	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
White male	(1,607)	(1,665)	(1,683)	(1,548)	(6,503)
Black male	(944)	(667)	(565)	(487)	(2,663)
Hispanic male	(968)	(949)	(789)	(576)	(3,282)
White female	(1,503)	(1,893)	(2,221)	(1,960)	(7,577)
Black female	(943)	(1,052)	(987)	(866)	(3,848)
Hispanic female	(973)	(1,163)	(1,012)	(718)	(3,866)
A. Used Alcohol in Their Lifetime					
White male	44.8	89.2	94.8	94.6	89.1
Black male	32.8	82.0	87.2	90.6	79.7
Hispanic male	37.0	85.8	92.5	92.1	83.2
White female	38.5	90.5	93.7	83.1	82.1
Black female	34.5	72.8	81.5	75.9	71.4
Hispanic female	36.6	73.7	78.0	68.8	67.4
B. Used Alcohol in the Past Year					
White male	36.9	81.9	85.1	69.8	71.0
Black male	25.2	71.4	75.5	61.7	60.6
Hispanic male	30.3	78.9	83.4	72.9	70.6
White female	33.1	81.0	78.4	59.5	63.2
Black female	26.8	63.2	65.8	44.1	49.4
Hispanic female	31.0	63.4	63.0	48.5	52.0
C. Used Alcohol in the Past Month					
White male	17.8	68.2	71.9	57.2	57.5
Black male	15.1	58.4	62.3	49.2	48.2
Hispanic male	16.4	62.6	68.8	59.1	56.1
White female	15.4	57.6	55.6	39.5	42.5
Black female	11.3	44.4	50.0	27.8	32.9
Hispanic female	15.9	42.7	42.2	32.0	34.0

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.6 Percentage Distribution of Days of Alcohol Use in the Past Month, by Demographic Characteristics: 1992**

Demographic Characteristic	(Unweighted <u>N</u> )	Days of Use			
		None	1-4	5-19	20-30
<b>Total</b>	<b>(28,038)</b>	<b>53.8</b>	<b>24.9</b>	<b>14.9</b>	<b>6.4</b>
<b>Sex</b>					
Male	(12,593)	45.6	24.0	20.1	10.2
Female	(15,445)	61.3	25.7	10.2	2.9
<b>Age Group</b>					
12-17 years	(7,056)	86.5	10.6	2.5	0.4
18-25 years	(7,486)	42.0	32.5	21.1	4.4
26-34 years	(7,321)	39.8	31.5	22.4	6.3
≥ 35 years	(6,175)	55.3	23.5	13.2	8.0
<b>Race/Ethnicity<sup>1</sup></b>					
White	(13,745)	51.8	25.2	15.8	7.2
Black	(6,300)	62.3	20.8	12.0	4.9
Hispanic	(6,924)	56.7	27.2	12.8	3.4
<b>Population Density</b>					
Large metro	(20,422)	50.0	27.0	15.6	7.4
Small metro	(4,577)	53.6	23.8	16.4	6.1
Nonmetro	(3,039)	60.7	22.5	11.8	5.0
<b>Region</b>					
Northeast	(4,501)	48.2	27.7	17.9	6.2
North Central	(4,878)	53.4	28.0	13.8	4.8
South	(10,618)	59.8	20.4	13.6	6.3
West	(8,041)	49.2	26.6	15.6	8.6
<b>Adult Education<sup>2</sup></b>					
Less than high school	(4,895)	66.0	19.6	9.2	5.2
High school graduate	(7,058)	51.8	26.3	15.7	6.2
Some college	(5,084)	45.3	30.5	18.3	5.9
College graduate	(3,945)	34.8	30.2	23.1	11.9
<b>Current Employment<sup>3</sup></b>					
Full-time	(11,394)	42.3	29.1	20.6	8.0
Part-time	(2,701)	45.6	29.7	18.1	6.7
Unemployed	(2,079)	46.9	27.6	18.4	7.2
Other <sup>4</sup>	(4,808)	65.4	20.8	8.1	5.7

Note: Only past-month alcohol users who reported the number of days they used alcohol during the past 30 days are included in this table. Thus, the actual unweighted Ns are smaller than appear in Table 1.1 because of differing patterns of nonresponse for the question on days of use. Thus, the prevalence of nonuse ("NONE") is higher here than can be calculated from Table 7.3 because past-month users who failed to report days of alcohol use are effectively treated as nonusers here.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.7 Percentage Reporting Heavy Alcohol Use in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>1.3</b>	<b>11.3</b>	<b>7.4</b>	<b>3.4</b>	<b>5.0</b>
<b>Sex</b>					
Male	2.1	16.2	11.7	6.0	8.1
Female	0.5	6.5	3.1	1.1	2.1
<b>Race/Ethnicity<sup>1</sup></b>					
White	1.4	13.3	7.7	3.3	5.1
Black	0.5	6.1	6.6	4.3	4.5
Hispanic	1.5	7.5	7.4	5.1	5.6
<b>Population Density</b>					
Large metro	1.5	11.3	7.6	3.4	5.1
Small metro	1.3	9.1	6.3	3.4	4.5
Nonmetro	1.1	14.0	8.3	3.3	5.3
<b>Region</b>					
Northeast	0.6	14.5	6.6	2.9	4.9
North Central	1.8	12.1	7.2	3.1	4.8
South	1.3	10.6	7.8	3.2	5.0
West	1.5	8.8	7.5	4.4	5.3
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	9.3	12.2	3.8	5.8
High school graduate	N/A	10.3	9.0	3.2	5.6
Some college	N/A	14.2	4.7	3.4	6.0
College graduate	N/A	9.9	4.5	3.2	4.0
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	10.6	7.7	4.2	6.0
Part-time	N/A	12.6	5.5	2.8	6.2
Unemployed	N/A	14.8	14.6	6.9	11.1
Other <sup>4</sup>	N/A	9.5	2.9	2.0	2.9

Note: Heavy use is defined as drinking five or more drinks per occasion on 5 or more days in the past 30 days.

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.8 Percentage of Those Under 21 and 21 and Older Reporting Alcohol Use and Heavy Alcohol Use in the Past Month, by Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)					
	Under 21 (N = 10,019)		21 and Older (N = 18,470)		Total (N = 28,489)	
	Any Use	Heavy Use	Any Use	Heavy Use	Any Use	Heavy Use
<b>Total</b>	26.7	4.4	50.8	5.1	47.2	5.0
<b>Sex</b>						
Male	29.2	6.0	60.3	8.5	55.4	8.1
Female	24.0	2.7	42.2	2.0	39.6	2.1
<b>Race/Ethnicity<sup>1</sup></b>						
White	28.8	5.3	52.3	5.1	49.1	5.1
Black	22.2	1.2	43.3	5.3	39.1	4.5
Hispanic	23.8	3.4	49.3	6.1	44.2	5.6
<b>Population Density</b>						
Large metro	27.5	4.8	54.5	5.2	50.6	5.1
Small metro	24.8	3.0	52.0	4.8	47.7	4.5
Nonmetro	27.7	5.7	42.7	5.3	40.4	5.3
<b>Region</b>						
Northeast	29.4	6.3	56.2	4.6	52.5	4.9
North Central	27.2	4.6	51.7	4.9	47.9	4.8
South	25.5	4.1	43.9	5.1	41.0	5.0
West	25.7	3.2	56.6	5.7	51.8	5.3
<b>Adult Education<sup>2</sup></b>						
Less than high school	43.5	8.9	34.7	5.5	35.4	5.8
High school graduate	47.9	9.1	49.3	5.3	49.2	5.6
Some college	59.6	14.2	55.1	5.3	55.5	6.0
College graduate	23.7	*	65.7	4.0	65.7	4.0
<b>Current Employment<sup>2</sup></b>						
Full-time	56.2	11.3	58.4	5.8	58.3	6.0
Part-time	50.5	10.4	56.1	5.5	55.3	6.2
Unemployed	53.3	11.6	54.2	11.1	54.1	11.1
Other <sup>3</sup>	41.5	9.4	35.7	2.5	36.0	2.9

Note: Heavy use is defined as drinking five or more drinks per occasion on 5 or more days in the past 30 days.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education and current employment for those "under 21" exclude youth age 12-17 (i.e., only data for adults age 18-20 are included). All other data for those "under 21" include all people age 12-20.

<sup>3</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 7.9 Percentage Reporting Use of Selected Drugs in the Past Month, by Age Group and Alcohol Use in the Past Month: 1992**

Age Group/Drugs Used in the Past Month	Alcohol Used in the Past Month		
	No	Yes	Total
<b>Total</b>	<b>(N=15,847)</b>	<b>(N=12,985)</b>	<b>(N=28,832)</b>
Cigarettes	18.7	34.4	26.2
Marijuana	0.8	8.2	4.4
Drugs other than marijuana	1.0	3.7	2.3
Nonmedical use of any psychotherapeutic <sup>1</sup>	0.7	1.9	1.3
Cocaine	0.1	1.2	0.6
Any illicit drug use <sup>2</sup>	1.6	9.8	5.5
<b>12-17 Years Old</b>	<b>(N=6,103)</b>	<b>(N=1,151)</b>	<b>(N=7,254)</b>
Cigarettes	5.3	32.4	9.6
Marijuana	0.9	21.1	4.0
Drugs other than marijuana	1.7	11.5	3.2
Nonmedical use of any psychotherapeutic	0.8	3.9	1.2
Cocaine	*	1.5	0.3
Any illicit drug use	2.3	26.6	6.1
<b>18-25 Years Old</b>	<b>(N=3,510)</b>	<b>(N=4,211)</b>	<b>(N=7,721)</b>
Cigarettes	20.9	39.5	31.9
Marijuana	2.5	16.8	11.0
Drugs other than marijuana	1.5	7.8	5.2
Nonmedical use of any psychotherapeutic	0.7	3.4	2.3
Cocaine	0.3	2.9	1.8
Any illicit drug use	3.3	19.7	13.0
<b>26-34 Years Old</b>	<b>(N=3,083)</b>	<b>(N=4,433)</b>	<b>(N=7,516)</b>
Cigarettes	25.4	39.0	33.7
Marijuana	2.0	12.1	8.2
Drugs other than marijuana	2.0	4.9	3.8
Nonmedical use of any psychotherapeutic	1.9	2.6	2.4
Cocaine	0.2	2.1	1.4
Any illicit drug use	3.6	14.2	10.1
<b>35 Years or Older</b>	<b>(N=3,151)</b>	<b>(N=3,190)</b>	<b>(N=6,341)</b>
Cigarettes	20.4	31.0	25.3
Marijuana	0.3	3.2	1.6
Drugs other than marijuana	0.4	1.5	0.9
Nonmedical use of any psychotherapeutic	0.4	1.0	0.7
Cocaine	*	0.4	0.2
Any illicit drug use	0.6	4.0	2.2

\*Low precision; no estimate reported.

<sup>1</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>2</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Eight: Cigarettes and Smokeless Tobacco

### Introduction

As reported in Chapter 2, more than seven out of ten Americans 12 years or older in 1992, or 146 million persons, had smoked cigarettes in their lifetime. About one in four, or 54 million, of the surveyed population were current (past 30 days) smokers, including one in three 26- to 34-year-olds, the age group with the highest prevalence of current smoking. The number of current smokers in the NHSDA appeared to ebb slightly, but not significantly, lower than in 1991. Over the longer term, however, there has been a clear and nearly continuous decline in current smoking since it was first measured in the 1974 NHSDA, when about 40% of the surveyed population were current smokers. In other surveys of smoking and health, the downward slope of current smoking among adults extends back to the 1960s.<sup>1</sup>

Men have historically smoked more than women, but smoking rates have decreased much more among men than among women in the past two decades, so that smoking rates in younger male and female age groups are now very similar. Since 1988, a benchmark for detailed NHSDA comparisons,<sup>2</sup> the overall rate of current cigarette use among men decreased from approximately 32% to 28%, but remained nearly steady for women (26% in 1988, 25% in 1992). As in previous surveys, smoking was somewhat more common in the South, and it was substantially more common among those with lower versus higher levels of education. Young whites from 12 to 34 reported more current smoking than their black or Hispanic age-mates, but black men 35 and older smoked the most—43% of them were current smokers.

Smokeless tobacco use was much less popular than cigarette smoking. About one in seven of the surveyed population in 1992, or 30 million persons, reported smokeless tobacco use in their lifetime, and an estimated 7.5 million, or 4%, of the population were current users. Nine out of ten smokeless tobacco users were white males. White males were proportionately twice as likely as black males and six times as likely as Hispanic males to be current users. White males age 18-25 had the highest rates, but black men this age had very low rates. Smokeless tobacco use was about twice as common in the South as in other regions, and this regional difference was especially marked among those age 35 years or older.<sup>3</sup>

### Prevalence of Cigarette Use by Age and Sex

Among the surveyed population of 206 million persons age 12 and older, 7 in 10 or an estimated 146 million had smoked cigarettes in their lifetime (Table 8.1); 3 in 10 or 64 million had smoked in the past year (Table 8.2); 1 in 4 or 54 million had smoked in the past month (Table 8.3); and 1 in 7 or 29 million were current heavy smokers—meaning a pack or more a day in the past month (Table 8.6).<sup>4</sup>

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<sup>1</sup>National Center for Health Statistics, *Health, United States, 1993*, DHHS Publication No. (PHS) 94-1232, May 1994, Hyattsville, MD: US Public Health Service (1994).

<sup>2</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993), pp.3,59.

<sup>3</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates 1992*, Rockville, MD: US Department of Health and Human Services (October 1993), pp.91,97.

<sup>4</sup>This is a conventional definition of heavy smoking and its validity has been confirmed by numerous methodological studies. See: Heatherton, Kozlowski, Frecker, et al., "Measuring the Heaviness of Smoking: Using Self-Reported Time to the First Cigarette of the Day and Number of Cigarettes Smoked Per Day," *British Journal of Addiction* 84:791-800 (1989).

Patterns of smoking differed substantially by age and sex, as they did for use of other substances. The young adults between ages 18 and 34 had the highest rates of smoking cigarettes in the past year (40%) and in the past month (33%); 1 in 3 18- to 34-year-olds were current smokers in contrast to 1 in 10 12- to 17-year-olds and 1 in 4 of the 35 and older age group. The rate of *heavy* smoking was highest (18%) particularly among 26- to 34-year-olds; this rate was 10.6 times greater than among 12-17 year-olds, 1.4 times greater than among 18- to 25-year-olds, and about 1.2 times greater than in the 35 and older age group.

The proportion of *current* smokers who were smoking *heavily* rose dramatically with age.<sup>5</sup> Fewer than one in five of the current teenage smokers (12-17) were smoking heavily, but three in five current smokers in the 35 and older age group were smoking heavily, comprising 18 million of the 29 million heavy smokers. The proportion of *former* smokers (used in lifetime but not in past year) also rose steadily with age: 24% of those 12-17, 37% of those 18-25, 41% of those 26-34, and 51% of those 35 and older. As one moves from younger to older age groups, the middle ground of light and occasional smokers shrinks and the population is increasingly divided between current heavy smokers on the one hand and former smokers or lifetime nonsmokers on the other hand.

The rates of prevalence across age groups are displayed in finer grain in Table 8.4. Within each band of increasing age there was a higher level of reported lifetime cigarette use. This continued up until the 50+ age group. For this group, lifetime use was slightly lower, reflecting among other elements the greater longevity of nonsmokers. The prevalence rates for past-year cigarette use rose steeply through the adolescent age bands, reached a high point among 22- to 25-year-olds, and then very gradually declined. A similar pattern, but declining even more gradually among older age groups, was evident for current smoking.

For the overall surveyed population, males in 1992 had significantly higher rates of lifetime, past-year, and current cigarette use than females. This difference in lifetime use held for all four age categories, but was much more pronounced for the 35 and older age group (87% versus 68%) than younger cohorts; in fact, the male/female difference in lifetime smoking was not statistically significant for 18- to 25-year-olds. Past-year and current smoking were, moreover, virtually identical for adolescent and young adult age groups (12-25), while for the middle and older adults, males had consistently higher smoking rates but only by about five percentage points among past-year users.<sup>6</sup> Heavy smoking, which is most prevalent among smokers age 26 and older, was more common among males (16% versus 12%); there was no difference between the sexes in the prevalence of smoking less than a pack a day (11%).

### Patterns of Smoking by Racial/Ethnic Groups

When age and gender groups were further broken down into racial/ethnic subgroups—white, black, and Hispanic (the race/ethnicity category "other" is excluded from this analysis)—substantial differences emerged in the reported patterns. Whites overall reported significantly greater lifetime use (75%) than

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<sup>5</sup>The Monitoring the Future study, of which the annual High School Seniors survey is one component, found that smoking at heavier levels (daily, half-pack a day or more) was considerably higher among those aged 31-32 than those younger. See: NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), Figure 19.

<sup>6</sup>Other recent studies have also found no significant differences in smoking between adolescent males and females; for example, see: NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary Students*, Rockville, MD: US Department of Health and Human Services (1993), p.59.

blacks (65%), who in turn had slightly greater lifetime use than Hispanics (57%) (Table 8.1). Moreover, whites had the highest proportion of heavy smokers (16%) compared with blacks (10%) and Hispanics (6%). But the distributions of smoking within the age/sex/race subgroups differed in intriguing ways.

For whites, lifetime prevalence changed little across the three adult age groups (74%, 79%, 79%); for Hispanics, lifetime prevalence was also virtually constant across the three adult groups (61%, 61%, and 63%); but for blacks lifetime prevalence rose appreciably across the adult age groups (52%, 65%, 74%). Putting these results in a different perspective, proportionately more Hispanics and appreciably more whites under 25 years old reported ever smoking than their black age-mates (Hispanic-61%, white-74%, black-54%); but in the oldest (35 and older) age group, white/black differences were small (white-79%, black-74%) and black rates exceeded Hispanic rates (Hispanic-63%).

The differences between patterns were sharper when past-year and past-month (current) smoking were considered. For whites, within every age group there was no significant difference between males and females. For blacks also, there were no differences between the sexes in the three younger age groups; but black men 35 years and older were 1.7 times as likely to smoke as black women and had the highest rate of current smoking (three out of seven or 43%) of any age/race/sex subgroup. For Hispanics, the youngest adolescent group reported no significant differences between the sexes, but in each older group the men were current smokers twice as often as the women (Table 8.5).

Quite different racial/ethnic patterns arise when heavy smoking (a pack or more a day during the past month) is distinguished from lighter smoking (Table 8.6). About 16% of whites were heavy smokers in 1992 as compared with 10% of blacks and 5.7% of Hispanics. Multivariate analyses of NHSDA data, simultaneously controlling for demographic, familial, and socioeconomic characteristics, provide further evidence that whites are more likely to be heavy smokers than either blacks or Hispanics.<sup>7</sup>

To synthesize these results: in 1992 the current smoking patterns of white men were virtually identical to those of white women. Adolescent white males in the recent and more distant past were somewhat more likely than white females to try smoking, but were no more likely than white females to become regular smokers. Among young white adults 18-34, more than one in three were current smokers, but above age 35, the proportion of current white smokers dropped to less than one in four. Although the sum of all blacks in 1992 had the same proportion of current smokers as whites, the parts of that sum were quite different. Up to age 35, black females smoked to the same extent as black males. Black adolescents and young adults were much less likely to be current smokers than their white age-mates, but in the 26-34 age group, white and black men and women all smoked at the same rate: one in three were current smokers. Among older black women, much like white men and women, the rate of current smokers fell to one in four; but older black men (35 and older) smoked even more frequently than younger ones.

Hispanic males smoking patterns were much like those of white males up to age 35, although with somewhat fewer current smokers. But current smoking in the older age group went neither lower (as with whites) nor higher (as with blacks). Hispanic women after adolescence had the same pattern across age groups as Hispanic men but at about half the rate of current smoking, one in six, which was the lowest of all age/sex/race subgroups.

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<sup>7</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Race/ethnicity, Socioeconomic Status, and Drug Abuse 1991*, Rockville, MD.: SAMHSA (December 1993), Table 4.3.

A caution is in order in interpreting the self-reports of smoking by young black respondents; some reports in the literature have found a significant amount of underreporting by black adolescents.<sup>8</sup>

### Population Density and Region

Among adolescents 12-17 years old, lifetime, past-year, and current cigarette use were significantly more common in nonmetropolitan areas than large metro areas, with small metro areas in between. This tends to be true in older age groups as well, but most of the differences are nonsignificant. Other surveys have also found that the rate of cigarette use is highest in the farm/country stratum.<sup>9</sup> There are also regional differences, but they are not very marked. Among persons 12-25 years old, the West had lower rates and the North Central area higher rates of current smoking than the South, while over age 25 and overall, by a similar margin, the South had somewhat higher rates than other regions. Heavy smoking was, in the aggregate, more common in the South than in other regions.<sup>10</sup>

### Adult Education and Current Employment

There were strong, consistent relationships between education level and smoking prevalence in the adult age groups. Lifetime, past-year, and current smoking levels declined steadily with rising education levels among 18- to 34-year-olds. The largest difference was among 26- to 34-year-olds: more than one-half of all such individuals who had not completed high school were current smokers, but only one-seventh of the college graduates were current smokers. Among persons 35 years and older, all education levels had similar smoking profiles, with the exception of college graduates, whose current smoking was only half as prevalent as for persons at all other education levels. Overall, college graduates were half as likely as high school noncompleters to be current smokers (16% versus 35%) and a third as likely to be heavy smokers (7% versus 21%).

Current employment status was also related to current smoking status. Unemployed persons were one and one-half times as likely as employed persons to be current smokers (43% versus 30%) or heavy smokers (25% versus 17%). For persons not in the labor force, a heterogeneous group, current smoking was less than or about the same (among 26- to 34-year-olds) as it was for employed persons.

### Use of Cigarettes and Other Drugs in the Past Month

Current smokers at every age were significantly more likely to have also used alcohol and illicit drugs in the past month than were noncurrent smokers or nonsmokers (Table 8.7). This association was strongest for the 12-17 age group, where current smokers were four times more likely than others to have used alcohol and eight times more likely than others to have used illicit drugs in the past month; in the overall sample, these ratios were about 1.5:1 and 4:1, respectively.

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<sup>8</sup>Bauman and Ennett, "Tobacco Use by Black and White Adolescents: The Validity of Self-Reports," *American Journal of Public Health* 84:394-398 (1994).

<sup>9</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1993), p.64.

<sup>10</sup>Other research on cigarette use among young adults has similarly shown that rates of current use were highest in the North Central and Northeast regions. See, e.g., NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary Students*, Rockville, MD: US Department of Health and Human Services (1993), p.63.; NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992, Volume II, College Students and Young Adults*, Rockville, MD: US Department of Health and Human Services (1992), p.73.

## Prevalence of Smokeless Tobacco Use

Smokeless tobacco refers to both snuff and chewing tobacco. The rate of lifetime, past-year, and current smokeless tobacco use has remained unchanged since 1991. Approximately 1 in 7, or 30 million Americans, reported lifetime smokeless tobacco use in 1992. Approximately 1 in 20, or 10 million Americans, used smokeless tobacco in the past year, and about 7.5 million in the past month, a rate of current use that has not changed significantly since 1988.<sup>11</sup>

The overwhelming majority of smokeless tobacco users across all age categories were white males. Over 90% of current smokeless tobacco users were men (7 out of 7.5 million) and most of these men were white (90%).<sup>12</sup> Males age 18-25 had higher rates of smokeless tobacco use on every measure than did other age groups. White men were three to six times more likely to use smokeless tobacco than black or Hispanic men, depending on the age group: black men 18-25 and Hispanic men over 35 had the lowest rates of current use.

Nonmetropolitan areas had double to triple the rates of lifetime, past-year, and current smokeless tobacco use of large metro areas, with small metro areas in between. Overall, current and past-year use was two to four times higher in the South than in any other region, although differences were smaller among younger age groups. Results of other studies concurred with these findings in that prevalence rates for smokeless tobacco were considerable higher for males and in the South.<sup>13</sup> The Northeast had the lowest lifetime, past month, and current use overall and among all age groups.

Overall, there were no significant differences by education level, but college graduates in the 18-25 group were only a third as likely to be current users as persons at the other education levels. Full-time employment was associated with higher rates of smokeless tobacco use, but higher rates of employment among white males in general renders this particular association suspect.

## Conclusion

Cigarette smoking has declined in the population as a whole over the past three decades. There are striking differences among racial and ethnic groups as well as by education level in the prevalence of current smoking. Since heavy cigarette smoking has long-term health consequences and early onset of current smoking has repeatedly been identified as a "gateway" to illicit drug use, these changes, particularly as they affect the youngest cohorts, merit close study for their predictive utility in both domains.

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<sup>11</sup>Office of Applied Studies, SAMHSA, *Preliminary Estimates from the 1992 National Household Survey on Drug Abuse*, Advance Report Number 3, Rockville, MD: SAMHSA (June 1993) p.18.

<sup>12</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates 1992*, Rockville, MD: US Department of Health and Human Services (October 1993), p.97.

<sup>13</sup>NIDA, *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992: Volume I, Secondary Students*, Rockville, MD: US Department of Health and Human Services (1993), pp.45,63.

**Table 8.1 Percentage Reporting Cigarette Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>33.7</b>	<b>68.7</b>	<b>74.8</b>	<b>76.8</b>	<b>71.0</b>
<b>Sex</b>					
Male	37.2	69.7	77.6	86.9	77.4
Female	30.0	67.7	72.0	67.9	65.1
<b>Race/Ethnicity<sup>1</sup></b>					
White	38.0	74.0	78.9	79.2	74.8
Black	21.8	52.0	65.3	73.5	61.3
Hispanic	28.7	61.0	61.3	62.6	57.2
<b>Population Density</b>					
Large metro	29.8	67.6	72.3	75.2	69.4
Small metro	33.4	67.2	75.4	78.5	71.4
Nonmetro	40.4	72.7	79.4	77.5	73.3
<b>Region</b>					
Northeast	28.8	72.5	72.5	73.6	69.4
North Central	34.0	69.7	74.6	75.3	70.1
South	35.8	67.2	77.8	78.0	72.1
West	33.7	67.0	72.0	79.5	71.5
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	73.6	80.0	74.5	75.2
High school graduate	N/A	70.5	77.9	76.9	76.1
Some college	N/A	64.1	74.6	78.6	74.6
College graduate	N/A	66.3	67.4	77.7	74.1
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	73.1	74.6	80.7	78.1
Part-time	N/A	63.3	77.0	76.9	73.0
Unemployed	N/A	72.4	79.2	78.7	77.2
Other <sup>4</sup>	N/A	62.6	71.7	71.5	70.5

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.2 Percentage Reporting Cigarette Use in the Past Year, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>18.2</b>	<b>41.1</b>	<b>38.8</b>	<b>28.8</b>	<b>31.2</b>
<b>Sex</b>					
Male	19.2	42.6	41.3	31.8	33.8
Female	17.1	39.6	36.3	26.1	28.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	21.0	45.6	40.1	28.3	31.9
Black	9.7	24.7	36.9	36.5	31.0
Hispanic	15.1	34.5	31.6	26.4	27.5
<b>Population Density</b>					
Large metro	15.7	39.5	36.9	28.0	30.2
Small metro	18.2	41.0	40.0	29.3	31.7
Nonmetro	22.2	44.1	40.9	29.5	32.6
<b>Region</b>					
Northeast	16.0	43.1	36.7	25.3	28.9
North Central	19.3	43.1	39.9	27.5	30.9
South	18.8	40.6	40.8	31.0	32.9
West	17.6	38.3	36.0	29.8	30.9
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	53.7	56.7	32.9	39.3
High school graduate	N/A	42.4	45.7	28.8	34.6
Some college	N/A	34.6	36.4	32.1	33.6
College graduate	N/A	30.2	20.2	20.8	21.4
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	42.7	37.9	31.2	34.5
Part-time	N/A	35.8	37.9	30.1	33.3
Unemployed	N/A	50.6	51.6	43.8	47.7
Other <sup>4</sup>	N/A	37.8	36.0	23.5	26.3

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.3 Percentage Reporting Cigarette Use in the Past Month, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>9.6</b>	<b>31.9</b>	<b>33.7</b>	<b>25.3</b>	<b>26.2</b>
<b>Sex</b>					
Male	9.6	32.8	35.4	27.6	27.9
Female	9.5	31.1	32.1	23.3	24.6
<b>Race/Ethnicity<sup>1</sup></b>					
White	11.6	35.5	35.3	24.8	26.9
Black	3.2	20.2	33.5	32.5	26.7
Hispanic	7.4	24.1	24.4	23.3	21.5
<b>Population Density</b>					
Large metro	7.2	30.7	32.0	24.1	25.0
Small metro	10.5	32.3	33.6	26.1	26.6
Nonmetro	12.1	33.6	37.8	26.5	27.8
<b>Region</b>					
Northeast	8.2	35.4	32.2	22.7	24.8
North Central	11.3	35.1	35.3	22.9	25.5
South	9.7	31.7	36.1	28.5	28.5
West	8.4	26.2	29.6	25.1	24.4
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	44.8	52.6	29.7	35.1
High school graduate	N/A	34.6	40.4	25.7	30.2
Some college	N/A	24.2	31.8	28.8	28.5
College graduate	N/A	19.4	14.7	16.5	16.3
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	33.8	32.1	27.7	29.7
Part-time	N/A	26.2	33.5	25.6	27.3
Unemployed	N/A	43.7	48.4	40.0	43.3
Other <sup>4</sup>	N/A	27.1	32.9	20.3	22.4

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.4 Percentage Reporting Cigarette Use in Their Lifetime, the Past Year, and the Past Month, by Age: 1992**

Age Group	(Unweighted N)	Time Period		
		Lifetime	Past Year	Past Month
<b>Total</b>	<b>(28,832)</b>	<b>71.0</b>	<b>31.2</b>	<b>26.2</b>
<b>12-17 Years Old</b>	<b>(7,254)</b>	<b>33.7</b>	<b>18.2</b>	<b>9.6</b>
12-13	(2,466)	18.6	8.1	1.9
14-15	(2,350)	35.9	18.5	9.4
16-17	(2,438)	47.9	29.0	18.1
<b>18-25 Years Old</b>	<b>(7,721)</b>	<b>68.7</b>	<b>41.1</b>	<b>31.9</b>
18-21	(3,817)	65.6	40.8	30.5
22-25	(3,904)	71.8	41.4	33.3
<b>26-34 Years Old</b>	<b>(7,516)</b>	<b>74.8</b>	<b>38.8</b>	<b>33.7</b>
26-29	(3,317)	72.3	38.7	33.0
30-34	(4,199)	76.7	38.8	34.3
<b>35 Years and Older</b>	<b>(6,341)</b>	<b>76.8</b>	<b>28.8</b>	<b>25.3</b>
35-39	(1,824)	77.1	36.3	32.1
40-44	(1,383)	79.9	33.7	30.7
45-49	(1,284)	80.6	33.5	30.7
≥50	(1,850)	74.9	23.6	20.1

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.5 Percentage Reporting Cigarette Use in Their Lifetime, the Past Year, and the Past Month, by Age Group, Race/Ethnicity, and Sex: 1992**

Race/Ethnicity <sup>1</sup> and Sex	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
White male	(1,607)	(1,665)	(1,683)	(1,548)	(6,503)
Black male	(944)	(667)	(565)	(487)	(2,663)
Hispanic male	(968)	(949)	(789)	(576)	(3,282)
White female	(1,503)	(1,893)	(2,221)	(1,960)	(7,577)
Black female	(943)	(1,052)	(987)	(866)	(3,848)
Hispanic female	(973)	(1,163)	(1,012)	(718)	(3,866)
<b>A. Used Cigarettes in Their Lifetime</b>					
White male	42.6	72.9	80.6	88.4	80.5
Black male	22.1	53.9	65.2	82.0	64.8
Hispanic male	30.4	68.6	71.1	80.7	68.9
White female	33.1	75.1	77.3	71.0	69.3
Black female	21.6	50.4	65.5	67.0	58.4
Hispanic female	26.9	53.2	50.5	46.1	45.7
<b>B. Used Cigarettes in the Past Year</b>					
White male	22.7	45.8	42.0	30.0	33.5
Black male	9.5	25.4	37.3	47.4	36.0
Hispanic male	15.0	42.2	39.1	34.3	34.2
White female	19.2	45.5	38.2	26.8	30.4
Black female	10.0	24.1	36.6	28.1	26.9
Hispanic female	15.2	26.6	23.4	19.2	20.9
<b>C. Used Cigarettes in the Past Month</b>					
White male	11.5	34.8	36.0	25.9	27.5
Black male	3.2	22.1	34.6	42.6	31.6
Hispanic male	8.5	30.5	30.7	30.7	27.5
White female	11.7	36.3	34.5	23.9	26.2
Black female	3.2	18.5	32.6	24.8	22.6
Hispanic female	6.2	17.5	17.4	16.6	15.5

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.6 Percentage Distribution of Amount of Past-Month Cigarette Use, by Demographic Characteristics: 1992**

Demographic Characteristic	(Unweighted N)	Past-Month Use <sup>1</sup>		
		None	Less Than a Pack a Day	A Pack or More a Day
<b>Total</b>	<b>(28,443)</b>	<b>74.7</b>	<b>11.3</b>	<b>14.0</b>
<b>Sex</b>				
Male	(12,811)	72.9	11.1	16.0
Female	(15,632)	76.4	11.4	12.2
<b>Age Group</b>				
12-17 years	(7,185)	91.1	7.2	1.7
18-25 years	(7,615)	69.1	18.2	12.8
26-34 years	(7,393)	67.2	14.8	18.0
≥ 35 years	(6,250)	75.6	9.2	15.2
<b>Race/Ethnicity<sup>2</sup></b>				
White	(13,894)	74.1	10.1	15.7
Black	(6,424)	73.9	16.2	10.0
Hispanic	(7,048)	79.4	14.9	5.7
<b>Population Density</b>				
Large metro	(20,693)	76.1	12.2	11.7
Small metro	(4,648)	74.0	11.6	14.4
Nonmetro	(3,102)	73.1	9.2	17.7
<b>Region</b>				
Northeast	(4,539)	75.5	10.6	13.8
North Central	(4,960)	75.4	10.6	14.0
South	(10,781)	72.6	11.5	16.0
West	(8,163)	76.8	12.3	10.9
<b>Adult Education<sup>3</sup></b>				
Less than high school	(4,968)	66.0	12.9	21.1
High school graduate	(7,179)	70.7	11.9	17.4
Some collage	(5,137)	72.3	13.6	14.0
College graduate	(3,974)	84.4	8.1	7.5
<b>Current Employment<sup>4</sup></b>				
Full-time	(11,527)	71.2	11.9	16.9
Part-time	(2,747)	73.4	13.6	13.1
Unemployed	(2,115)	57.9	17.3	24.8
Other <sup>5</sup>	(4,869)	78.6	9.6	11.8

**Note:** Only past-month cigarette users who reported the number of cigarettes they smoked per day during the past 30 days are included in this table. Thus, the actual unweighted Ns are smaller than appear in Table 1.1 because of differing patterns of nonresponse for the question on cigarettes per day. Thus, the prevalence of nonuse ("NONE") is higher here than can be calculated from Table 8.3 because past-month users who failed to report cigarettes per day are effectively treated as nonusers here.

<sup>1</sup>Less than a pack a day is defined as averaging 15 cigarettes or fewer per day in the past month. A pack a day or more is defined as averaging 16 or more cigarettes per day in the last month.

<sup>2</sup>The category "other" for Race/Ethnicity is not included.

<sup>3</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N = 21,578).

<sup>4</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N = 21,578).

<sup>5</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.7 Percentage Reporting Use of Selected Drugs in the Past Month, by Age Group and Cigarette Use in the Past Month: 1992**

Age Group/Drugs Used in the Past Month	Cigarette Use in the Past Month		
	No	Yes	Total
<b>Total</b>	<b>(N=21,955)</b>	<b>(N=6,877)</b>	<b>(N=28,832)</b>
Alcohol	42.5	62.8	47.8
Marijuana	2.2	10.5	4.4
Drugs other than marijuana	1.3	5.0	2.3
Nonmedical use of any psychotherapeutic <sup>1</sup>	0.6	3.0	1.3
Cocaine	0.3	1.5	0.6
Any illicit drug use <sup>2</sup>	3.0	12.7	5.5
<b>12-17 Years Old</b>	<b>(N=6,679)</b>	<b>(N=575)</b>	<b>(N=7,254)</b>
Alcohol	11.8	53.3	15.7
Marijuana	2.1	22.1	4.0
Drugs other than marijuana	2.1	13.6	3.2
Nonmedical use of any psychotherapeutic	0.8	5.3	1.2
Cocaine	0.1	1.9	0.3
Any illicit drug use	3.7	28.9	6.1
<b>18-25 Years Old</b>	<b>(N=5,622)</b>	<b>(N=2,099)</b>	<b>(N=7,721)</b>
Alcohol	52.6	73.3	59.2
Marijuana	6.4	20.8	11.0
Drugs other than marijuana	3.1	9.8	5.2
Nonmedical use of any psychotherapeutic	1.3	4.5	2.3
Cocaine	1.0	3.6	1.8
Any illicit drug use	7.8	24.3	13.0
<b>26-34 Years Old</b>	<b>(N=5,123)</b>	<b>(N=2,393)</b>	<b>(N=7,516)</b>
Alcohol	56.4	70.8	61.2
Marijuana	4.2	16.0	8.2
Drugs other than marijuana	2.1	7.0	3.8
Nonmedical use of any psychotherapeutic	1.2	4.6	2.4
Cocaine	0.7	2.7	1.4
Any illicit drug use	5.7	18.7	10.1
<b>35 Years or Older</b>	<b>(N=4,531)</b>	<b>(N=1,810)</b>	<b>(N=6,341)</b>
Alcohol	42.9	56.8	46.5
Marijuana	0.7	4.4	1.6
Drugs other than marijuana	0.5	2.1	0.9
Nonmedical use of any psychotherapeutic	0.3	1.8	0.7
Cocaine	0.1	0.4	0.2
Any illicit drug use	1.1	5.6	2.2

<sup>1</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>2</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.8 Percentage Reporting Smokeless Tobacco Use in Their Lifetime, by Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	10.1	21.7	18.6	12.6	14.7
<b>Sex</b>					
Male	17.5	37.9	33.3	23.8	26.9
Female	2.4	6.1	4.4	2.7	3.4
<b>Race/Ethnicity<sup>1</sup></b>					
White	13.0	27.0	22.1	13.5	16.7
Black	2.5	7.8	8.5	11.9	9.3
Hispanic	3.8	9.1	8.8	4.1	6.1
<b>Population Density</b>					
Large metro	5.7	17.1	14.9	8.1	10.5
Small metro	9.6	20.7	21.1	12.7	15.0
Nonmetro	18.1	31.2	23.3	20.2	22.0
<b>Region</b>					
Northeast	6.6	18.8	14.6	4.6	8.4
North Central	10.1	24.0	19.6	12.0	14.7
South	13.0	23.0	20.5	16.9	18.0
West	8.0	19.8	18.2	13.8	14.9
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	23.0	16.5	14.3	15.8
High school graduate	N/A	22.4	18.3	11.8	14.9
Some college	N/A	21.2	16.2	12.4	15.1
College graduate	N/A	18.7	22.5	12.0	15.2
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	26.6	22.0	15.6	18.8
Part-time	N/A	18.7	12.2	5.0	10.4
Unemployed	N/A	19.8	19.9	10.7	15.6
Other <sup>4</sup>	N/A	15.5	8.2	10.7	10.9

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.9 Percentage Reporting Smokeless Tobacco Use in the Past Year, by Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	5.3	9.2	5.4	3.8	5.0
<b>Sex</b>					
Male	9.6	17.4	10.5	7.4	9.6
Female	0.7	1.3	0.5	0.7	0.7
<b>Race/Ethnicity<sup>1</sup></b>					
White	7.1	11.9	6.5	4.1	5.8
Black	1.0	1.7	2.0	3.5	2.5
Hispanic	1.5	3.0	1.8	0.3	1.3
<b>Population Density</b>					
Large metro	2.8	5.9	2.9	2.6	3.1
Small metro	5.8	10.1	5.3	2.9	4.7
Nonmetro	8.7	13.9	10.8	6.9	8.7
<b>Region</b>					
Northeast	3.9	5.2	3.4	1.1	2.3
North Central	5.0	10.5	5.5	2.1	4.1
South	7.6	10.5	7.5	7.3	7.8
West	2.8	9.2	3.6	2.6	3.7
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	10.4	6.5	4.8	5.8
High school graduate	N/A	9.8	5.4	3.9	5.2
Some college	N/A	9.7	5.2	2.4	4.6
College graduate	N/A	3.3	4.8	3.7	4.0
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	11.1	6.6	5.1	6.3
Part-time	N/A	7.9	2.6	1.7	3.7
Unemployed	N/A	8.0	6.2	3.1	5.2
Other <sup>4</sup>	N/A	7.3	1.6	2.7	3.1

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.10 Percentage Reporting Smokeless Tobacco Use in the Past Month, by Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	2.6	6.0	3.9	3.2	3.7
<b>Sex</b>					
Male	4.8	11.7	7.6	6.2	7.1
Female	0.3	0.4	0.3	0.6	0.5
<b>Race/Ethnicity<sup>1</sup></b>					
White	3.6	8.0	4.7	3.5	4.3
Black	0.4	0.5	1.3	3.1	2.0
Hispanic	0.3	1.4	1.4	0.2	0.7
<b>Population Density</b>					
Large metro	1.0	3.1	2.0	2.0	2.1
Small metro	3.0	6.6	3.9	2.6	3.4
Nonmetro	4.7	10.3	7.9	6.1	6.8
<b>Region</b>					
Northeast	1.1	2.8	2.2	1.1	1.5
North Central	2.7	7.1	3.3	1.8	2.8
South	4.1	7.3	5.8	6.4	6.2
West	1.2	5.2	2.7	1.6	2.3
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	6.2	5.4	4.3	4.7
High school graduate	N/A	6.2	3.9	3.4	3.9
Some college	N/A	6.9	3.9	2.0	3.4
College graduate	N/A	2.1	2.9	2.9	2.8
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	7.7	4.8	4.5	5.0
Part-time	N/A	4.0	1.7	1.5	2.3
Unemployed	N/A	4.2	4.1	1.1	2.7
Other <sup>4</sup>	N/A	5.2	1.0	2.3	2.5

N/A: Not applicable.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted  $N=21,578$ ).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 8.11 Percentage Reporting Smokeless Tobacco Use in Their Lifetime, the Past Year, and the Past Month, by Age Group, Race/Ethnicity, and Sex: 1992**

Race/Ethnicity <sup>1</sup> and Sex	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
White male	(1,607)	(1,665)	(1,683)	(1,548)	(6,503)
Black male	(944)	(667)	(565)	(487)	(2,663)
Hispanic male	(968)	(949)	(789)	(576)	(3,282)
White female	(1,503)	(1,893)	(2,221)	(1,960)	(7,577)
Black female	(943)	(1,052)	(987)	(866)	(3,848)
Hispanic female	(973)	(1,163)	(1,012)	(718)	(3,866)
<b>A. Used Smokeless Tobacco in Their Lifetime</b>					
White male	22.5	46.9	39.4	25.9	30.8
Black male	4.2	14.0	14.0	19.8	15.3
Hispanic male	6.4	16.2	15.9	6.9	10.8
White female	3.0	7.6	4.9	2.3	3.5
Black female	0.9	2.5	3.8	5.9	4.3
Hispanic female	1.0	1.8	1.0	1.5	1.4
<b>B. Used Smokeless Tobacco in the Past Year</b>					
White male	12.8	22.7	12.7	8.1	11.3
Black male	1.8	2.9	3.4	5.1	3.9
Hispanic male	2.7	5.3	3.3	0.5	2.4
White female	1.0	1.4	0.4	0.5	0.7
Black female	0.1	0.6	0.8	2.2	1.4
Hispanic female	0.2	0.6	0.2	0.2	0.3
<b>C. Used Smokeless Tobacco in the Past Month</b>					
White male	6.6	15.8	9.3	6.8	8.4
Black male	0.8	0.7	2.4	4.8	3.0
Hispanic male	0.6	2.4	2.6	0.2	1.3
White female	0.4	0.5	0.3	0.5	0.5
Black female	0.1	0.4	0.3	1.8	1.1
Hispanic female	*	0.3	0.1	0.2	0.2

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Nine: Problems Associated with Alcohol, Tobacco, and Illicit Drug Use

### Introduction

The use of illicit drugs, alcohol, or tobacco can have a variety of social, physical, and psychological consequences. These drugs may constitute problems for the user and others, which is the principal reason for the legal prohibitions and regulatory controls that have been applied to such substances over the years. The 1992 NHSDA asked respondents who had ever used any of these substances three series of questions about the potential consequences of use, each series drawn from clinical research questionnaires and covering the past year. The series were:

- Eleven general problem items concerning social relations, mental performance, motivation, and health status
- Six behavioral problems that are specifically characteristic of "drug dependence" or addiction
- Eighteen behavioral or psychological experiences that specifically relate to drinking alcohol

Approximately one-fifth of the survey respondents had never used any of the surveyed substances and were instructed to skip these questions. An additional tenth of the sample chose to skip these questions although they had at some time used at least one of the substances. These respondents were assumed in the tables reported here to have had no substance-associated problems in the past year. This is probably the right assumption for most cases; but in view of these exclusions, the data here should be interpreted with some qualification; we would consider these to be good to somewhat conservative estimates of the respective problems (see footnotes to individual tables for further specification).

About 468,000 cocaine users, 766,000 marijuana users, 4.3 million alcohol drinkers, and 1.4 million cigarette smokers reported three or more problems associated with the respective drug in the past year. (These groups are not mutually exclusive; the overlap among problem users has not yet been evaluated). Most of the cigarette problems were health problems; most of the other substance problems were psychological or social, such as anxiety or depression and fights or arguments.

Among past-year users, about 1.5 million cocaine users, 6 million marijuana users, 36 million alcohol drinkers, and 51 million cigarette smokers reported at least one sign of drug dependence associated with the respective drug. Among current users of each substance, the percentage exhibiting any sign of dependence was about the same for marijuana and cocaine (54% and 58% respectively). The proportion was higher for heavy (not merely current) users of alcohol (about 70%) and cigarettes (about 90%). For each substance, the dependent percentage was nearly the same for different age groups, with a mild tendency for the proportion dependent to rise with age for heavy drinkers and fall with age for heavy smokers. Drinkers who were very often drunk reported drinking-related problems two to three times as often as other drinkers.

### General Problems Attributed to Illicit Drugs, Alcohol, or Cigarettes

Respondents were asked whether they had experienced each of the eleven general problem types in the past year that might be associated with illicit drug, alcohol, or tobacco use. They were then asked to associate the specific relevant substance with any problem they had experienced. About 1 in 8 respondents

(12% or more than 24 million individuals) reported experiencing at least one of the eleven substance-related problems in the past year (Table 9.1). No single item was affirmed by more than 5% of the overall sample, but the most frequently reported problems (each at about 4.5%) were a logically consistent triad: arguments or fights with family and friends, difficulty thinking clearly, and irritability. The item reported least often of the eleven (by .4% or about 835,000 individuals) was a need for emergency medical help. About 4.5% of respondents or more than 9.3 million individuals reported three or more problems.

The proportion reporting any problems varied notably by age group in a pattern very similar to the relative age distributions of past-year illicit drug use or of past-month heavy alcohol use. About 1 in 4 of the 18- to 25-year-olds reported at least one problem; 1 in 6 of the 26- to 34-year-olds, 1 in 10 of the 12- to 17-year-olds, and 1 in 14 of those 35 and older. The reporting of two, three, or more problems retained virtually the same relative age-distribution but with progressively fewer at each level; for example, three or more problems were reported by about 1 in 11 of the 18- to 25-year-olds and 1 in 37 of those 35 and older.

Table 9.2 shows respondent attributions of problems to the four most prevalent substances—marijuana, cocaine, alcohol, and cigarettes—as a proportion of all the respondents who had reported past-year use of these substances. Problems were reported proportionately most often by the smallest group, the 5 million past-year cocaine users, one-fifth of whom reported at least one problem and one-tenth of whom, or *about 468,000 cocaine users, reported three or more problems associated with cocaine in the past year*. The three leading problems were psychological: anxiety (10.6%), depression/lack of interest in things (9.4%), and difficulty thinking clearly (8%).

Somewhat fewer proportionately of the 17 million past-year marijuana users reported problems. About 1 in 7 reported any problems and 1 in 23, or *about 766,000 marijuana users, reported three or more problems associated with marijuana in the past year*. The two leading problems were difficulty thinking clearly (8.1%) and depression/lack of interest in things (5.1%). The third leading marijuana problem, lower work/school productivity (3.4%), was actually more frequent, relatively speaking, among cocaine users (4.4%), but lower in relative rank among the eleven cocaine problems.

About one-ninth of the 133 million past-year alcohol users reported any alcohol-related problems, and about 1 in 30, or *4.2 million alcohol users, reported three or more problems associated with alcohol in the past year*. The leading problems were fights or arguments with family or friends (5%), difficulty thinking clearly (4.7%), and irritability (3.7%), all of which were reported proportionately at least as often by cocaine users.

Finally, of the 64 million cigarette smokers, about 1 in 11 reported any problems and 1 in 45, or *1.4 million cigarette smokers, reported three or more problems associated with cigarettes in the past year*. The leading problems were health problems, reported by 4.5% or 3.9 million smokers—a much greater number and proportion than for any other substance—and nerves/anxiety (4%).

### Components of Dependence

Respondents were asked whether they had in the past year experienced each of six behavioral or psychological problems that are typical of drug dependence: trying to cut down on use, failed attempt to cut down, needing a larger amount to get the same effects or to get high, using daily or almost daily for at least two weeks in a row, feeling withdrawal symptoms, or feeling the need for the drug. Any one

of these items is considered a warning sign of dependence. Tables 9.3 to 9.6 report the responses for each item and for any of the above items by age group among past-year users of the four most prevalent substances.

Among past-year marijuana users, about one-third, or *6 million marijuana users*, reported at least one sign of dependence. As reported in Table 9.3, the proportion reporting any sign of marijuana dependence among the total sample varied significantly by age group. However, it did so in nearly exact proportion with the corresponding variation in the rate of past-year marijuana use. The proportion of current users who reported any sign of dependence, about five out of nine (54%), did not change significantly from one age group to the next. The most common dependence-type problems reported for marijuana were "tried to cut down" (39%); the least common were withdrawal symptoms (5.4%).

Among past-year cocaine users, about one-third, or *1.5 million cocaine users*, reported at least one sign of dependence. As with marijuana, there was significant variation by age group, which corresponded with age-group variation in past-year cocaine use (Table 9.4). The percentage of current users reporting at least one sign of dependence (58%) was very similar to that for marijuana (54%) and did not vary significantly by age, although the numbers in the older and younger age groups were too small for statistical comparison. The profile of dependence problems for cocaine was similar to that for marijuana but at higher individual item rates: the most common problems were "tried to cut down" (51%), the least common were withdrawal symptoms (16%).

Among past-year alcohol drinkers, about one-fourth, or *36 million drinkers*, reported at least one sign of dependence. The variation by age group was significant and similar to the profile of variation in past-year use of alcohol (Table 9.5). However, in contrast to marijuana and cocaine, the proportion of past-year users reporting dependence *declined* with age, from more than one in three (35%) of the 18- to 25-year-olds to less than one in four (24%) of those 35 and older.

Owing to the high prevalence of current alcohol use in the population as a whole (11 times greater than marijuana and 75 times greater than cocaine), the third panel of Table 9.5 reports signs of dependence not for all current drinkers but only for those who had five or more drinks on at least five occasions in the past month—a measure often used in surveys to distinguish "heavy drinkers." The number of heavy drinkers is in the same range as the number of current marijuana users. About seven-tenths (69%) of these heavy drinkers reported signs of dependence, with the proportion significantly *increased* for the 35 and older group (76%) compared with the 18- to 25-year-olds (63%). This reversed the pattern of declining dependence with age observed when past-year use was the denominator.

The most common and least common dependence items were "tried to cut down" (46%) and withdrawal symptoms (7.7%). These were the same as for cocaine and marijuana. But two other dependence items were much higher among the 35 and older heavy drinkers than among their 18- to 25-year-old—and other—counterparts: "used every day" (60% versus 32%) and "needed the drug" (36% versus 16%). The increase in the items accounted for the higher dependence rate in the 35 and older age group.

Among past-year cigarette smokers, about four out of five, or *51 million smokers*, reported at least one sign of dependence (Table 9.6). The variation by age group was significant and similar to the profile of variation in past-year use of cigarettes. However, in contrast to the other substances, the proportion of past-year smokers reporting dependence *increased* with age, from just under two-thirds (66%) to more than four-fifths (83%) of those 35 and older. The denominator for the third panel of Table 9.6 is "those who currently smoke about a pack or more a day," a conventional definition of "heavy smokers."

Relative to this denominator, the percentage reporting any dependence symptom *declined* from 92% for 18- to 25-year-olds to 87% for the 35 and older group. Every dependence item decreased by a comparable amount. The most common item for smoking was "tried to cut down" (62%); the least common was "needed larger amounts" (15%), a departure from other substances. These small but intriguing differences between the age and item profiles of cigarette dependence versus dependence on alcohol and other substances merit future research.

### **Negative Drinking Experiences**

The NHSDA asks drinkers to respond to an eighteen-item inventory of negative experiences that may have been associated with drinking during the past year. The items include the individual's own behavior (e.g., aggressive or cross while drinking, tossed down drinks fast to get effects), evaluations of that behavior (afraid I might be or become an alcoholic), other's reaction to that behavior (e.g., friend told me I should cut down).

The percentage of all past-year drinkers who reported any of the eighteen problems declined with age, from 1 in 2 among 12- to 17-year-olds and 18- to 25-year-olds, to 1 in 6 among those 35 and older (Table 9.7). A virtually identical pattern occurred for reporting of three or more problems, declining from 1 in 4 in younger age groups to 1 in 14 in the older age group. The item distributions also changed with age. The most common items reported in the two younger age groups (12-17 and 18-25) were "Tossed down drinks fast to get effect" (22% for both groups) and "Unable to remember what happened" (21%, 22%). In the older age groups (26-34 and 35 and older), the most common item was "got high or tight while drinking alone" (13%, 7.2%).

Getting drunk was a key correlate for developing these type of problems. Among drinkers who were drunk more than twice a month during the past year, 4 out of 5 reported any problems and two-thirds reported three or more; the numbers were appreciably lower, 5 out of 9 and one-fourth, respectively, for those who were drunk less often than twice a month. Of those who were not drunk at all in the past year, the corresponding proportions were 1 in 10 with any problems and 1 in 50 with three or more.

**Table 9.1 Percentage of All Respondents Reporting Past-Year Problems Resulting From Their Use of Illicit Drugs, Alcohol, or Cigarettes, by Age Group: 1992**

Problem Associated with Use During Past Year <sup>1</sup>	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
Became depressed or lost interest in things	3.0	7.0	5.0	2.2	3.5
Had arguments or fights with family or friends	4.6	10.8	7.1	2.6	4.7
Felt completely alone and isolated	2.0	4.1	3.1	1.3	2.1
Felt very nervous and anxious	3.7	6.5	5.8	2.6	3.8
Had health problems	2.0	3.8	3.0	2.9	2.9
Found it difficult to think clearly	4.6	11.0	6.9	2.4	4.6
Felt irritable and upset	3.2	8.9	7.1	2.7	4.4
Got less work done than usual at school or on the job	2.3	5.2	3.4	1.1	2.2
Felt suspicious and mistrustful of people	2.0	4.3	2.5	0.9	1.8
Found it harder to handle my problems	1.7	3.9	2.8	1.0	1.8
Had to get emergency medical help	0.4	0.5	0.5	0.4	0.4
Any of the above problems	10.4	24.4	17.0	7.6	11.9
Two or more of the above problems	5.8	14.9	10.4	4.3	7.1
Three or more of the above problems	3.9	9.2	6.6	2.7	4.5

<sup>1</sup>Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.2 Percentage of Past-Year Users of Marijuana, Cocaine, Alcohol, and Cigarettes Who Attributed Past-Year Problems to Those Substances: 1992**

Problem Associated with Use During Past Year <sup>1</sup> (Unweighted N)	Drug Used in the Past Year			
	Marijuana (3,511)	Cocaine (1,061)	Alcohol (17,799)	Cigarettes (8,651)
Became depressed or lost interest in things	5.1	9.4	3.1	1.4
Had arguments or fights with family or friends	2.6	5.2	5.0	1.6
Felt completely alone and isolated	2.5	5.4	1.7	0.4
Felt very nervous and anxious	3.3	10.6	1.8	4.0
Had health problems	1.0	1.6	0.9	4.5
Found it difficult to think clearly	8.1	8.0	4.7	0.5
Felt irritable and upset	2.3	5.8	3.7	3.0
Got less work done than usual at school or on the job	3.4	4.4	2.0	0.6
Felt suspicious and mistrustful of people	3.3	7.1	1.2	0.2
Found it harder to handle my problems	2.0	6.0	1.6	0.3
Had to get emergency medical help	0.3	0.6	0.2	0.1
Any of the above problems	13.7	18.9	10.8	9.0
Two or more of the above problems	7.9	13.5	5.8	3.9
Three or more of the above problems	4.4	9.4	3.2	2.2

<sup>1</sup>Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.3 Percentage Reporting Components of Dependence in the Past Year Attributed to Use of Marijuana for the Total Sample, Those Who Used at Least Once in the Past Year, and Those Who Used Once a Month or More Often in the Past Year, by Age Group: 1992**

Problems in the Past Year Attributed to Marijuana Use <sup>1</sup>	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
Tried to cut down	2.9	6.2	4.2	0.6	2.3
Tried and failed	0.9	1.4	0.9	0.1	0.5
Larger amounts	0.9	1.8	0.6	0.2	0.6
Every day	0.8	3.4	2.2	0.4	1.2
Needed, dependent	0.7	1.9	1.3	0.2	0.7
Withdrawal symptoms	0.5	0.9	0.3	0.1	0.3
Any of the above problems	3.4	8.0	5.4	0.9	2.9
<b>B. Used Marijuana at Least Once in the Past Year</b>					
(Unweighted N)	(603)	(1,531)	(1,022)	(355)	(3,511)
Tried to cut down	36.1	27.3	29.0	19.7	26.9
Tried and failed	11.3	6.0	6.6	2.4	5.9
Larger amounts	11.1	8.2	4.3	6.6	6.9
Every day	9.6	15.1	15.3	11.8	13.9
Needed, dependent	8.4	8.6	9.0	5.7	8.1
Withdrawal symptoms	6.5	3.9	2.4	2.1	3.3
Any of the above problems	41.4	35.3	37.5	26.9	34.7
<b>C. Used Marijuana Once a Month or More Often in the Past Year</b>					
(Unweighted N)	(298)	(775)	(531)	(165)	(1,769)
Tried to cut down	49.6	36.9	41.2	*	39.0
Tried and failed	18.3	11.1	11.5	2.8	10.1
Larger amounts	19.3	16.2	7.6	*	12.8
Every day	18.9	30.8	27.9	*	27.2
Needed, dependent	15.3	17.1	15.9	10.1	15.0
Withdrawal symptoms	10.9	7.9	3.5	*	5.4
Any of the above problems	57.2	53.4	57.0	*	54.1

**Note:** Questions asked were: (1) Have you ever tried to cut down on your use of any of these drugs? (2) Circle the number next to each drug for which you need larger amounts to get the same effect or for which you can no longer get high on the amount you used before. (3) Circle the number next to each drug you have ever used every day or almost daily for two or more weeks in a row. (4) Circle the number next to each drug you felt you needed or were dependent on. (5) Circle the number next to each drug for which you've had withdrawal symptoms; that is, you felt sick because you stopped or cut down on your use of it.

\* Low precision; no estimate reported.

<sup>1</sup> Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.4 Percentage Reporting Components of Dependence in the Past Year Attributed to Cocaine Use for the Total Sample, Those Who Used at Least Once in the Past Year, and Those Who Used Once a Month or More Often in the Past Year, by Age Group: 1992**

Problems in the Past Year Attributed to Cocaine Use <sup>1</sup>	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
Tried to cut down	0.4	1.9	1.5	0.2	0.7
Tried and failed	0.1	0.5	0.3	0.1	0.2
Larger amounts	0.1	0.8	0.5	0.1	0.2
Every day	0.1	0.6	0.4	*	0.2
Needed, dependent	0.1	0.7	0.4	0.1	0.2
Withdrawal symptoms	0.2	0.7	0.3	*	0.2
Any of the above problems	0.5	2.1	1.7	0.2	0.7
<b>B. Used Cocaine at Least Once in the Past Year</b>					
(Unweighted N)	(98)	(445)	(395)	(123)	(1,061)
Tried to cut down	*	30.1	31.6	17.9	28.2
Tried and failed	*	7.9	5.8	*	6.9
Larger amounts	*	11.9	10.4	5.7	9.7
Every day	*	9.2	7.3	3.8	7.5
Needed, dependent	*	11.8	7.8	*	9.2
Withdrawal symptoms	*	11.6	5.3	*	7.5
Any of the above problems	*	33.4	33.8	19.9	31.0
<b>C. Used Cocaine Once a Month or More Often in the Past Year</b>					
(Unweighted N)	(28)	(150)	(165)	(40)	(383)
Tried to cut down	*	*	*	*	50.7
Tried and failed	*	17.6	12.3	*	16.6
Larger amounts	*	26.2	*	*	24.0
Every day	*	*	*	*	21.5
Needed, dependent	*	*	*	*	24.2
Withdrawal symptoms	*	*	9.3	*	15.5
Any of the above problems	*	61.6	54.3	*	57.7

**Note:** Questions asked were: (1) Have you ever tried to cut down on your use of any of these drugs? (2) Circle the number next to each drug for which you need larger amounts to get the same effect or for which you can no longer get high on the amount you used before. (3) Circle the number next to each drug you have ever used every day or almost daily for two or more weeks in a row. (4) Circle the number next to each drug you felt you needed or were dependent on. (5) Circle the number next to each drug for which you've had withdrawal symptoms; that is, you felt sick because you stopped or cut down on your use of it.

\* Low precision; no estimate reported.

<sup>1</sup> Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.5 Percentage Reporting Components of Dependence in the Past Year Attributed to Alcohol Use for the Total Sample, Past-Year Users, and Those Who Had Five or More Drinks on the Same Occasion on 5 or More of the Past 30 Days, by Age Group: 1992**

Problems in the Past Year Attributed to Alcohol Use <sup>1</sup>	Age Group (Years)				
	12-17	18-25	26-34	≥ 35	Total
<b>A. Total Sample</b>					
Tried to cut down	9.2	22.9	19.3	10.6	13.8
Tried and failed	2.8	6.8	5.4	3.7	4.4
Larger amounts	3.5	7.7	3.4	1.9	3.1
Every day	1.4	7.1	7.2	7.5	6.8
Needed, dependent	2.0	4.5	4.6	3.5	3.7
Withdrawal symptoms	1.0	2.6	2.0	1.3	1.6
Any of the above problems	10.5	27.5	22.9	14.8	17.6
<b>B. Any Alcohol Use in the Past Year</b>					
(Unweighted N)	(2,264)	(5,591)	(5,718)	(4,226)	(17,799)
Tried to cut down	28.2	29.5	24.5	17.0	21.3
Tried and failed	8.7	8.7	6.8	5.9	6.7
Larger amounts	10.7	9.9	4.3	3.0	4.8
Every day	4.4	9.2	9.2	12.0	10.5
Needed, dependent	6.0	5.8	5.9	5.7	5.8
Withdrawal symptoms	3.1	3.3	2.5	2.1	2.5
Any of the above problems	32.2	35.4	29.0	23.7	27.2
<b>C. Five or More Drinks on Each of 5 or More Occasions in the Past 30 Days</b>					
(Unweighted N)	(83)	(610)	(490)	(284)	(1,467)
Tried to cut down	*	42.7	47.5	48.9	46.5
Tried and failed	*	19.4	19.6	21.3	20.5
Larger amounts	*	28.3	16.1	13.5	19.9
Every day	*	32.0	36.9	60.1	43.8
Needed, dependent	9.6	15.6	25.7	36.3	26.3
Withdrawal symptoms	*	8.0	7.5	8.0	7.7
Any of the above problems	*	62.9	66.3	76.2	69.3

**Note:** Questions asked were: (1) Have you ever tried to cut down on your use of any of these drugs? (2) Circle the number next to each drug for which you need larger amounts to get the same effect or for which you can no longer get high on the amount you used before. (3) Circle the number next to each drug you have ever used every day or almost daily for two or more weeks in a row. (4) Circle the number next to each drug you felt you needed or were dependent on. (5) Circle the number next to each drug for which you've had withdrawal symptoms; that is, you felt sick because you stopped or cut down on your use of it.

\* Low precision; no estimate reported.

<sup>1</sup> Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.6 Percentage Reporting Components of Dependence in the Past Year Attributed to Cigarette Use for the Total Sample, Past-Year Users, and Those Who Currently Smoke a Pack or More a Day, by Age Group: 1992**

Problems in the Past Year Attributed to Cigarette Use <sup>1</sup>	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>A. Total Sample</b>					
Tried to cut down	10.2	23.9	24.7	17.3	18.9
Tried and failed	6.1	15.7	17.1	11.5	12.6
Larger amounts	3.2	5.4	4.6	3.6	4.0
Every day	7.7	26.0	27.8	21.3	21.8
Needed, dependent	6.6	22.8	24.8	18.7	19.2
Withdrawal symptoms	3.4	9.1	9.9	6.5	7.2
Any of the above problems	12.0	30.6	31.7	23.8	25.0
<b>B. Smoked Cigarettes at Least Once in the Past Year</b>					
(Unweighted N)	(1,129)	(2,711)	(2,782)	(2,029)	(8,651)
Tried to cut down	56.3	58.1	63.8	60.0	60.3
Tried and failed	33.7	38.2	44.1	40.0	40.2
Larger amounts	17.8	13.3	11.9	12.3	12.7
Every day	42.2	63.3	71.6	73.9	69.6
Needed, dependent	36.1	55.6	64.0	65.0	61.4
Withdrawal symptoms	18.5	22.1	25.5	22.6	22.9
Any of the above problems	65.8	74.4	81.8	82.9	80.1
<b>C. Currently Smoke about a Pack or More Per Day</b>					
(Unweighted N)	(96)	(698)	(1,039)	(959)	(2,792)
Tried to cut down	*	65.8	65.1	59.7	61.9
Tried and failed	*	55.7	54.3	46.3	49.6
Larger amounts	*	18.2	17.4	12.2	14.6
Every day	*	90.1	86.3	82.7	84.5
Needed, dependent	*	78.3	81.7	75.4	77.3
Withdrawal symptoms	*	33.6	32.9	25.3	28.3
Any of the above problems	*	92.2	89.8	87.4	88.6

Note: Questions asked were: (1) Have you ever tried to cut down on your use of any of these drugs? (2) Circle the number next to each drug for which you need larger amounts to get the same effect or for which you can no longer get high on the amount you used before. (3) Circle the number next to each drug you have ever used every day or almost daily for two or more weeks in a row. (4) Circle the number next to each drug you felt you needed or were dependent on. (5) Circle the number next to each drug for which you've had withdrawal symptoms; that is, you felt sick because you stopped or cut down on your use of it.

\* Low precision; no estimate reported.

<sup>1</sup> Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.7 Percentage of Past-Year Drinkers Reporting Problems in the Past Year Associated with Their Drinking, by Age Group: 1992**

Problems Associated With Drinking During the Past Year <sup>1</sup> (Unweighted <u>N</u> )	Age Group (Years)				Total (17,799)
	12-17 (2,264)	18-25 (5,591)	26-34 (5,718)	≥ 35 (4,226)	
Aggressive or cross while drinking	13.2	20.6	12.5	5.8	10.1
Heated argument while drinking	12.1	19.5	10.9	4.3	8.7
Stayed away from work or school	5.5	10.0	4.4	1.3	3.6
High or tight on job or at school	9.0	8.4	3.6	1.1	3.2
Lost or nearly lost job	0.9	1.3	0.7	0.4	0.6
Partner told me I should cut down	8.7	11.2	8.3	6.3	7.7
Relative told me I should cut down	7.1	8.7	6.4	3.2	5.0
Friend told me I should cut down	6.3	4.9	3.6	2.1	3.1
Tossed down drinks fast to get effect	22.5	22.3	10.2	3.6	9.1
Afraid I might be or become alcoholic	11.5	9.9	7.3	4.5	6.4
Stayed drunk for more than one day	4.4	7.0	3.2	1.3	2.8
Difficult for me to stop drinking	8.9	9.8	6.1	2.5	4.8
Unable to remember what happened	21.4	22.0	11.4	4.7	9.9
Quick drink when no one was looking	20.2	5.0	3.1	2.4	3.9
Drink first thing in morning	1.6	2.3	2.0	1.3	1.6
Hands shook after drinking day before	3.5	5.9	3.4	1.8	2.9
Got high or tight while drinking alone	9.6	13.4	13.3	7.2	9.7
Keep on drinking after promising myself not to	7.7	8.0	6.2	3.9	5.3
Any of the above problems	49.9	49.0	32.4	16.6	27.2
Three or more of the above problems	24.0	26.7	15.2	7.3	13.1

Note: Only respondents reporting having at least one drink in the past 12 months are included in this table.

<sup>1</sup>Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 9.8 Percentage of Past-Year Drinkers Reporting Problems in the Past Year Associated with Their Drinking, by Frequency of Being Drunk: 1992**

Problems Associated With Drinking During the Past Year <sup>2</sup> (Unweighted N)	Frequency of Being Drunk in the Past Year <sup>1</sup>		
	More Than Twice a Month (1,527)	Twice a Month or Less Often (5,747)	None (9,096)
Aggressive or cross while drinking	40.9	19.7	2.8
Heated argument while drinking	37.0	18.5	1.5
Stayed away from work or school	20.2	7.0	0.5
High or tight on job or at school	19.1	5.8	0.4
Lost or nearly lost job	5.4	0.6	0.1
Partner told me I should cut down	36.1	12.9	2.6
Relative told me I should cut down	29.4	7.9	1.2
Friend told me I should cut down	18.2	4.6	0.8
Tossed down drinks fast to get effect	40.5	19.7	1.5
Afraid I might be or become alcoholic	30.8	10.9	1.8
Stayed drunk for more than one day	24.3	3.1	0.2
Difficult for me to stop drinking	31.6	8.2	0.5
Unable to remember what happened	48.1	20.6	1.4
Quick drink when no one was looking	14.8	6.4	1.6
Drink first thing in morning	11.7	2.4	0.2
Hands shook after drinking day before	19.1	4.8	0.3
Got high or tight while drinking alone	44.1	19.1	2.3
Keep on drinking after promising myself not to	29.5	8.9	1.2
<b>Any of the above problems</b>	<b>78.7</b>	<b>55.8</b>	<b>10.2</b>
<b>Three or more of the above problems</b>	<b>64.6</b>	<b>26.4</b>	<b>2.1</b>

Note: Only respondents reporting having at least one drink in the past 12 months and who reported their frequency of being drunk in the past year are included in this table.

<sup>1</sup>More Than Twice a Month includes respondents who reported getting "very high or drunk on alcohol" 25 or more days in the past 12 months. Twice a Month or Less Often includes respondents who reported getting "very high or drunk on alcohol" at least once but no more than 24 days in the past 12 months.

<sup>2</sup>Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Ten: Drug Use Patterns

### Introduction

The preceding chapters were concerned primarily with the use of individual drugs and problems associated with their use. However, as several tables in this report make clear (see Tables 3.8, 7.9, and 8.7), the use of one type of drug is often associated with the use of other drugs.<sup>1</sup> Moreover, drug use reflects not only a conscious decision on the part of the user to take the substance, but also opportunities to use. Although alcohol and tobacco are widely available to adults in the United States, illicit substances are not as accessible. Therefore, Table 10.4 provides information on opportunities to use and actual use of several illicit drugs among respondents. Not surprisingly, the illicit substances that yielded the highest percentage of lifetime opportunities for use were also the most commonly used.

This chapter also furnishes important data on age at first use and lifetime needle use among the surveyed population. Consistent with previous reports,<sup>2</sup> cigarettes, alcohol, and inhalants tend to be first used at a relatively early age; while cocaine and heroin are usually initiated at a later age. Finally, drug use with needles continues to be an important public health and policy issue. The well-described link between needle use and HIV infection suggests that continued surveillance of national trends is essential.<sup>3</sup> Although the present survey underrepresents subgroups in the population whose members are most likely to inject drugs, the data provide important baseline information on needle use in the United States.

### Multiple Drug Use

In 1992, approximately 84% of the persons represented in the survey reported use of alcohol and/or illicit drugs in their lifetime.<sup>4</sup> Nearly half of the surveyed population reported that they had only ever used alcohol, one-third (36%) reported use of both alcohol and illicit drugs, and less than 1%, most of them adolescents or older misusers of psychotherapeutics, reported use of illicit drugs only (see Table 10.1). Alcohol use only was the most common pattern among respondents in the youngest and oldest age groups, while the majority of 18- to 34-year-olds had used both alcohol and illicit drugs in their lifetime.

During the past year and currently, alcohol use only was the most common pattern by far among those who reported any drug use (see Tables 10.2 and 10.3). About 12% of the 12-17 age group and 43% of the surveyed population as a whole were current drinkers only, while about 3.8% were using two or more substances currently. The rate of using alcohol and at least one illicit drug in the past month was

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<sup>1</sup>Kandel and Maloff, "Commonalities in Drug Use: A Sociological Perspective," in Levison, Gerstein, and Maloff (eds.), *Commonalities in Substance Abuse and Habitual Behavior*, Lexington, MA: Lexington Books, pp.3-27 (1983); Kleinman, Wish, Deren, and Rainone, "Multiple Drug Use: Asymptomatic Behavior," *Journal of Psychoactive Drugs* 18:77-86 (1986).

<sup>2</sup>Cf. NIDA, *National Household Survey on Drug Abuse: Main Findings 1988*, Rockville, MD: US Department of Health and Human Services (1990), Table 10.6; NIDA, *National Household Survey on Drug Abuse: Main Findings 1990*, Rockville, MD: US Department of Health and Human Services (1991), Table 10.5; Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Main Findings 1991*, Rockville, MD: US Department of Health and Human Services (1993), Table 10.5.

<sup>3</sup>Des Jarlais and Friedman, "AIDS and the Use of Injected Drugs," *Scientific American* 270:82-88 (1994); Turner, Miller, and Moses (eds.), *AIDS: Sexual Behavior and Intravenous Drug Use*, Washington, DC: National Academy Press (1989).

<sup>4</sup>Tobacco use was not included in these tables.

higher in the 18-25 and 26-34 age groups (12%, 9%) than in the 12-17 and 35 and older groups (4.2%, 1.9%). The most common pattern of multiple drug use (currently or in the past year) was alcohol and marijuana only, accounting for more than half the multiple use patterns. Among those who reported only illicit drug use, marijuana was the most commonly reported drug.

### Opportunity to Use and Actual Use of Drugs

Table 10.4 provides information on the percentage of respondents who reported ever having at least one opportunity to use certain drugs ("had a chance to try"), and the percentage of respondents who had ever used the drugs. Half of the surveyed population reported that they had ever had an opportunity to use marijuana or hashish; approximately 1 in 4 reported an opportunity to use cocaine; 1 in 8 to use hallucinogens; and 1 in 20 to use heroin. The middle adult groups reported proportionally more opportunity to use these substances than the younger and older groups. The middle groups were also more likely to have used these opportunities to try the respective illicit drugs. Overall, about two-thirds of those with one or more chances to try marijuana or hallucinogens ever did so; the comparable figures for cocaine and heroin were one-half and one-fifth, respectively.

### Age at First Use

Table 10.5 presents data on age at first use of cigarettes, alcohol, and other drugs. As reflected in a substantial body of literature, drug use among respondents tended to begin with cigarette use, followed by inhalants, alcohol, and marijuana. Among those who used other illicit substances, hallucinogens, heroin, and cocaine use were usually initiated at a later age.<sup>5</sup> In the middle adult age groups (18-34), cigarette use for example was typically initiated around age 14, followed by marijuana, inhalants, and alcohol at around age 15 or 16, and finally cocaine, hallucinogens, and heroin between the ages of 17 and 21.

The average ages of initiation rise in older age groups as the later initiators are added to the base. There could also be changes in average age of initiation in successive birth cohorts. A comparison with data from a somewhat earlier Household Survey reveals very little change in reported age of initiation for any drug in the three younger age groups. In 1988 adults age 18-25 reported that they had first used cigarettes at a mean age of 13.5 years versus 13.8 years in the 1992 survey; for alcohol the figures were 15.4 versus 15.3 years; for cocaine 18 years versus 17.6 years.<sup>6</sup> However, a more extended time series or different type of analysis is needed to estimate cohort differences.

### Needle Use

Approximately three million (1.5%) of the 206 million persons represented in 1992 reported drug use with needles in their lifetime.<sup>7</sup> As reported in Table 10.6, needle use was significantly higher among the middle adult groups than among those 12-17 or 35 and older. Moreover, among the adult groups, needle use was significantly higher among males than among females. Whites 18-25 years of age

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<sup>5</sup>See also: Yamaguchi and Kandel, "Patterns of Drug Use from Adolescence to Young Adulthood: II. Sequences of Progression," *American Journal of Public Health* 74:668-672 (1984); Kandel and Yamaguchi, "From Beer to Crack: Developmental Patterns of Drug Involvement," *American Journal of Public Health* 83:851-855 (1993).

<sup>6</sup>NIDA, *National Household Survey on Drug Abuse: Main Findings 1988*, Rockville, MD: US Department of Health and Human Services (1990), Table 10.6.

<sup>7</sup>Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Population Estimates, 1992*, Rockville, MD: US Department of Health and Human Services (October 1993).

reported significantly higher lifetime needle use than either blacks or Hispanics within the same age group. Regional differences were limited to the older adult groups and were not consistent. Needle use was significantly higher in the West than in the South or Northeast among those 35 and older, and in the South compared with the North Central region among those age 26-34. Needle use was most common among those who had not graduated from high school, and among persons who were unemployed.

## Conclusion

A majority of drug users reported only alcohol use, and most illicit drug users reported that they had used alcohol as well over their lifetime, used it within the previous year, and were using it currently. The data on age at initiation continued to demonstrate ordering by drug. The substances initiated first were typically cigarettes, alcohol, and inhalants. These were followed by marijuana, hallucinogens, psychotherapeutics, cocaine, and heroin. Finally, lifetime needle use continued to be relatively more common among males, those with less education, and the unemployed.<sup>8</sup> This parallels the general finding in previous chapters that current illicit substance use was relatively more common within these demographic subgroups.

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<sup>8</sup>Cf. NIDA, *National Household Survey on Drug Abuse: Main Findings 1988*, Rockville, MD: US Department of Health and Human Services (1990), Table 10.7; NIDA, *National Household Survey on Drug Abuse: Main Findings 1990*, Rockville, MD: US Department of Health and Human Services (1991), Table 10.6; Office of Applied Studies, SAMHSA, *National Household Survey on Drug Abuse: Main Findings 1991*, Rockville, MD: US Department of Health and Human Services (1993), Table 10.6.

**Table 10.1 Percentage Reporting Types of Drug Use in Their Lifetime, by Age Group: 1992**

Types of Use	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
Alcohol Only	25.8	35.6	31.3	59.3	47.5
Illicit Drugs <sup>1</sup> Only	2.9	1.0	0.4	0.3	0.7
Marijuana only	0.5	0.3	0.2	*	0.2
Psychotherapeutics <sup>2</sup> only	1.1	0.3	0.1	0.3	0.3
Other drugs and drug combinations	1.3	0.4	0.2	*	0.2
Alcohol and Illicit Drugs	13.5	50.7	60.4	27.7	35.5
Alcohol & marijuana only	5.3	22.6	26.3	13.9	16.5
Alcohol & psychotherapeutics only	1.3	1.4	1.2	2.5	2.0
Alcohol & other drugs and drug combinations	6.9	26.7	32.9	11.2	16.9
Used Only 1 Substance <sup>3</sup>	28.5	36.4	31.6	59.6	48.1
Used 2 Substances	8.2	25.3	28.5	16.8	19.3
Used 3 or More Substances	5.6	25.6	32.1	10.9	16.3

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>A "substance" is defined as any one of the following types of drugs: alcohol, marijuana, hallucinogens, cocaine, heroin, inhalants, and nonmedical use of prescription-type psychotherapeutics.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 10.2 Percentage Reporting Types of Drug Use in the Past Year, by Age Group: 1992**

Types of Use	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
Alcohol Only	22.5	52.0	61.4	58.0	54.3
Illicit Drugs <sup>1</sup> Only	1.7	0.8	0.7	0.5	0.7
Marijuana only	0.3	0.4	0.3	*	0.2
Psychotherapeutics <sup>2</sup> only	0.8	0.3	0.3	0.3	0.4
Other drugs and drug combinations	0.6	0.2	0.1	0.1	0.2
Alcohol and Illicit Drugs	10.0	25.6	17.6	4.6	10.4
Alcohol & marijuana only	4.6	12.4	8.1	2.0	4.8
Alcohol & psychotherapeutics only	0.8	2.3	2.1	1.1	1.4
Alcohol & other drugs and drug combinations	4.6	11.0	7.4	1.5	4.2
Used Only 1 Substance <sup>3</sup>	24.1	52.8	62.0	58.4	54.9
Used 2 Substances	6.4	15.4	11.6	3.4	6.8
Used 3 or More Substances	3.7	10.2	6.1	1.3	3.6

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>A "substance" is defined as any one of the following types of drugs: alcohol, marijuana, hallucinogens, cocaine, heroin, inhalants, and nonmedical use of prescription-type psychotherapeutics.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 10.3 Percentage Reporting Types of Drug Use in the Past Month, by Age Group: 1992**

Types of Use	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Alcohol Only</b>	11.5	47.5	52.6	44.6	43.1
<b>Illicit Drugs<sup>1</sup> Only</b>	2.0	1.4	1.4	0.3	0.8
Marijuana only	0.5	0.7	0.6	0.1	0.3
Psychotherapeutics <sup>2</sup> only	0.5	0.1	0.6	0.2	0.3
Other drugs and drug combinations	0.9	0.5	0.2	0.1	0.2
<b>Alcohol and Illicit Drugs</b>	4.2	11.7	8.7	1.9	4.7
Alcohol & marijuana only	2.4	7.1	5.7	1.2	2.9
Alcohol & psychotherapeutics only	0.2	0.9	0.6	0.3	0.4
Alcohol & other drugs and drug combinations	1.6	3.7	2.4	0.4	1.4
<b>Used Only 1 Substance<sup>3</sup></b>	13.3	48.6	53.8	44.9	43.9
<b>Used 2 Substances</b>	3.3	9.0	7.0	1.6	3.8
<b>Used 3 or More Substances</b>	1.1	3.0	1.9	0.3	1.0

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>3</sup>A "substance" is defined as any one of the following types of drugs: alcohol, marijuana, hallucinogens, cocaine, heroin, inhalants, and nonmedical use of prescription-type psychotherapeutics.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 10.4 Percentage Reporting Opportunity and Lifetime Use of Selected Drugs, by Age Group: 1992**

Illicit Drugs	Age Group (Years)				Percent	Total (Unweighted N)
	12-17	18-25	26-34	≥ 35		
<b>Marijuana/Hashish</b>						
Chance to use	30.1	70.9	77.0	40.0	50.1	(28,699)
Ever used	10.6	48.1	58.6	24.8	32.8	(28,832)
<b>Hallucinogens</b>						
Chance to use	6.6	20.0	22.6	8.7	12.7	(27,686)
Ever used	2.6	13.4	15.6	5.2	8.0	(28,832)
<b>Cocaine</b>						
Chance to use	9.1	34.7	44.5	15.0	22.6	(28,601)
Ever used	1.7	15.8	25.2	6.9	11.0	(28,832)
<b>Heroin</b>						
Chance to use	3.2	5.9	6.3	4.2	4.7	(28,403)
Ever used	0.2	1.3	1.6	0.7	0.9	(28,832)

**Note:** Questions about chance to use were not asked for inhalants, psychotherapeutics, cigarettes, or alcohol.

The unweighted Ns for each age group are smaller than those shown in Table 1.1 because the patterns of nonresponse to the chance-to-use questions differed across age groups. There are no missing data for the ever-used category because item nonresponse was eliminated through statistical imputation.

**Source:** Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 10.5 Average Age at First Use of Cigarettes, Alcohol, and Other Drugs, by Age Group: 1992**

Drugs	Age Group (Years)				Total	
	12-17	18-25	26-34	≥ 35	All Ages	(Unweighted N)
Cigarettes	11.7	13.8	14.2	15.6	14.9	(16,395)
Alcohol	13.0	15.3	16.1	18.2	17.1	(20,847)
Marijuana/hashish	13.8	15.6	16.2	22.7	18.8	(9,886)
Inhalants	12.3	15.3	17.0	18.2	16.2	(1,752)
Cocaine	14.3	17.6	20.1	25.5	21.5	(3,579)
Hallucinogens	14.5	17.1	17.8	20.1	18.4	(2,474)
Heroin	13.2	17.1	20.6	21.8	20.3	(281)
Nonmedical use of psychotherapeutic drugs	13.0	16.9	18.9	25.8	21.4	(2,967)
Stimulants	14.1	16.1	17.9	21.2	19.1	(1,529)
Sedatives	11.9	16.7	17.3	21.0	18.7	(830)
Tranquilizers	13.2	17.6	19.2	28.2	22.7	(1,235)
Analgesics	13.0	17.5	20.4	28.4	22.3	(1,458)

**Note:** Entries are the average (mean) ages of first use of the drugs among those who have used the drug.

**Source:** Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 10.6 Percentage Reporting Drug Use with Needles in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	0.3	2.3	2.8	1.0	1.5
<b>Sex</b>					
Male	0.4	3.2	3.8	1.5	2.1
Female	0.3	1.4	1.9	0.6	0.9
<b>Race/Ethnicity<sup>1</sup></b>					
White	0.3	2.6	3.2	0.9	1.5
Black	0.2	1.2	2.1	2.1	1.7
Hispanic	0.7	1.3	1.4	0.6	0.9
<b>Population Density</b>					
Large metro	0.4	2.6	2.5	0.9	1.4
Small metro	0.5	1.7	3.0	1.2	1.5
Nonmetro	*	2.3	3.3	0.9	1.4
<b>Region</b>					
Northeast	*	1.4	2.5	0.4	0.9
North Central	*	2.1	1.7	1.2	1.3
South	0.5	2.5	3.7	0.7	1.5
West	0.4	2.9	2.9	1.9	2.1
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	5.1	5.2	1.2	2.3
High school graduate	N/A	2.1	3.7	0.8	1.6
Some college	N/A	1.3	1.7	1.0	1.2
College graduate	N/A	*	1.2	1.1	1.1
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	1.9	2.6	1.2	1.7
Part-time	N/A	2.6	1.7	1.2	1.7
Unemployed	N/A	5.5	6.5	2.7	4.5
Other <sup>4</sup>	N/A	0.9	2.4	0.6	0.8

Note: Needle use is derived from specific questions about use of cocaine, heroin, or amphetamines with a needle, and from general questions about needle use with other drugs. The 1991 and 1992 estimates are based on a more extensive set of questions about needle use available in the 1991 and 1992 NHSDA and are not comparable to those published in the 1988 Main Findings report.

N/A: Not applicable.

\*Low precision; no estimate reported.

<sup>1</sup>The category "other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>3</sup>Data on current employment are not applicable for youth age 12-17. Total refers to adults age 18 and older (unweighted N=21,578).

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

## Chapter Eleven: Special Topics

### Introduction

This chapter covers four topics: (a) perceived risks associated with the use of illicit drugs, alcohol, or cigarettes; (b) relations of drug use and drug problems to family income, health insurance, and welfare assistance; (c) participation in drug and alcohol abuse treatment; and (d) prevalence of use of anabolic steroids and "ice," two drugs that have received increased attention in recent years.

### Perceived Harmfulness of Drugs

Respondents were asked to assess the extent to which people risk harming themselves physically and in other ways when they use various illicit drugs (marijuana, cocaine, PCP, heroin), alcohol, cigarettes, and anabolic steroids (Table 11.1). Respondents generally believed that regular use of alcohol at the level of one or two drinks daily was much less risky than regular use of tobacco, marijuana, steroids, or any other illicit drug. More than 94% of the surveyed population perceived "great risk" from regular use of cocaine, PCP, or heroin. Between 76% and 82% perceived "great risk" from trying any of these drugs once or twice. Trying marijuana once or twice, and having one or two alcoholic drinks nearly every day, were perceived as entailing "great risk" by about one-third of the surveyed population. About 66% of the surveyed population felt that occasional use of anabolic steroids posed great risk, and about 88% felt that regular use posed great risk.

The percentage associating great risk with most patterns of drug use increased with age. Adults age 35 and older were generally most likely and adolescents age 12-17 least likely to perceive great risk from each pattern of drug use. The primary exception was marijuana: the 12-17 and 35 and older age groups perceived regular use of marijuana as entailing great risk at almost the same rates—83% and 82%, respectively—while the 18- to 25-year-olds and the 26- to 34-year-olds perceived great risk less frequently—69% and 68%, respectively. The age differences were patterned the same way for lower levels of marijuana smoking. Having three or more drinks once or twice a week was also of higher concern to adolescents than to the 18-34 age group.

### Drug Use, by Family Income, Health Insurance Status, and Welfare Assistance

This section separately examines the relationships of selected drug use to total family income, health insurance status, and welfare assistance. Since the three socioeconomic characteristics were highly intercorrelated, more complex multivariate analyses should be conducted to isolate the separate and combined effects of each characteristic.

Table 11.2 breaks down the rates of past-year illicit drug use, marijuana use, and cocaine use by total family income and health insurance status for each age group and for the overall surveyed population. The aggregate or overall result was that the use of any illicit drug—and cocaine and marijuana use specifically—was highest in the lowest income group and declined in two significant steps with rising income. About 13% of the group with an annual total family income of less than \$9,000 reported any illicit drug use in the past year; 11% of those with incomes of \$9,000-\$39,999 and about 10% of those with incomes of \$40,000 or more reported such use. This three-step inverse relationship did not hold for all age groups. It applied perfectly to the 26-34 group for any illicit drug and for cocaine. But in the

younger age groups, the low-income group usually had the highest drug use but the step increase with age was inconsistent or missing. In the 35 and older age group, the income-drug use relationship appeared curvilinear with higher rates in the middle incomes.

Persons without health insurance were twice as likely to have used any illicit drug, marijuana, or cocaine in the past year as were persons with health insurance. For example, about 18% of those without health insurance and only about 10% of those with health insurance reported using illegal drugs in the past year. The same pattern appeared within every age group except 12-17, where the differences were not statistically significant.

Table 11.3 reports the percentages of past-year users of marijuana, cocaine, alcohol, and cigarettes who attributed one or more of eleven problems during the past year to the use of those substances. The problems include feelings of anxiety or depression, problems with family or friends, and decreased productivity at work or at school. (See Table 9.1 for a complete list). The results are reported separately for respondents with and without health insurance. Respondents with missing data on problems are coded as not having problems.

The percentage of past-year substance users who attributed at least one problem during the past year to the substance they used ranged from 7.9% among cigarette smokers without health insurance to 27% among cocaine users without health insurance. The estimated percentage of users attributing one or more problems to the substance they used was higher among users of cocaine, marijuana, and alcohol than among users of cigarettes; however, differences among substances were not tested for statistical significance. Cocaine and alcohol users without health insurance were significantly more likely to attribute one, two, three or more problems to the substance they used than were users with health insurance. Marijuana users showed small differences in the same direction and cigarette smokers in the reverse direction, but neither set of results reached statistical significance.

Table 11.4 examines the relationships of past-year illicit drug use, marijuana use, and cocaine use to past year receipt of welfare assistance in the family. In the total surveyed population and within each age group, the small percentage of respondents whose families received welfare assistance during the past month were about twice as likely to report use of any illicit drug, marijuana, or cocaine in the past year as were respondents whose families did not receive welfare assistance. In the total surveyed population, 23% of respondents whose families received welfare assistance used an illicit drug versus 11% of respondents whose families did not receive such assistance. The welfare/non-welfare differences in illicit drug use was at a 3:1 ratio (higher for marijuana and cocaine) in the 35 and older age group, more than 3:2 in the 26-34, and much less pronounced and not statistically significant in the lower age groups.

### **Prevalence of Drug and Alcohol Abuse Treatment**

About 1.3% of the surveyed population age 12 and over, about 2.7 million individuals, received some type of substance abuse treatment in the past year (Table 11.5). About .7% received treatment for drug abuse and about .9% received treatment for alcohol abuse.<sup>1</sup> Both types of treatment were significantly more common in the 18-25 and 26-34 age groups than in the younger or older age groups. For example, 2.5% of persons age 18-25 and 2.4% of those age 26-34 received some form of substance abuse treatment

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<sup>1</sup>The percentages receiving substance abuse treatment may include people receiving treatment for conditions related to drug and/or alcohol abuse, as well as those in treatment to stop drug and/or alcohol use.

in the past year, and both of these percentages were significantly higher than the corresponding percentages of persons age 12-17 (1.2%) and 35 and older (.7%). These findings correspond to the higher levels of past-year drug and alcohol use in the middle age groups.

Males were twice as likely as females (1.7% versus .9%) to have received alcohol or drug treatment during the past year. Most differences by race/ethnicity, however, were not statistically significant. The sole exception was that the percentage of whites receiving alcohol abuse treatment (1%) was significantly higher than among blacks (.6%). Differences in the percentage receiving treatment by population density and region were also generally not statistically significant, the exception being that the percentage receiving drug abuse treatment was significantly higher among residents of large metro areas (.8%) than among residents of nonmetro areas (.5%).

Table 11.6 shows that past-year users of cocaine were treated at higher rates than past-year users of marijuana (13% and 4.3%, respectively). For both drugs, the percentage receiving treatment for drug abuse increased with the individual rate of drug use. Among past-year marijuana users, the percentage receiving treatment for drug abuse increased from 2.1% among those who used less than monthly to 6.9% among those who used at least weekly. Among past-year cocaine users, the percentage receiving treatment increased from about 9.8% among those who used less than once a month to about 25% among those who used at least weekly.

Table 11.7 shows that about 1.1% of past-year users of alcohol received treatment for alcohol abuse during the past year. The proportion receiving treatment for alcohol abuse increased from .7% among those who used alcohol less than once a month to 2.1% among those who used alcohol daily or more often.

#### **Prevalence of Anabolic Steroid and "Ice" Use**

About .3% of the surveyed population age 12 and older in 1992 had ever used anabolic steroids, and .4% had used "ice," a smokable form of methamphetamine (Table 11.8). The percentages reporting lifetime steroid and lifetime ice use were higher in the 18-34 age groups than in the 12-17 and 35 and older age groups, although the differences were of marginal significance. Lifetime steroid use was much higher among males than among females. Differences by race/ethnicity and population density in Table 11.8 were generally not statistically significant, except that blacks were significantly less likely to have used anabolic steroids than whites.

**Table 11.1 Percentage Reporting Perceptions of Great Risk of Using Illicit Drugs, Alcohol, or Cigarettes, by Age Group: 1992**

Risk Behavior	Age Group (Years)				Total	
	12-17	18-25	26-34	≥ 35	Percent	(Unweighted N)
<b>Marijuana</b>						
Smoke once or twice	35.9	22.0	23.7	43.2	35.9	(28,617)
Smoke occasionally	49.8	31.8	31.2	51.6	44.9	(28,530)
Smoke regularly	83.0	68.8	68.0	82.0	77.7	(28,566)
<b>Cocaine</b>						
Try once or twice	53.9	57.9	59.8	76.3	68.4	(28,614)
Use occasionally	75.3	77.8	75.9	86.6	82.2	(28,603)
Use regularly	92.1	94.5	95.7	97.7	96.3	(28,596)
Use "crack" occasionally	76.3	87.0	90.1	92.7	89.8	(28,577)
<b>PCP</b>						
Try once or twice	47.8	59.3	68.5	80.3	71.9	(28,226)
Use regularly	86.7	92.2	94.8	97.1	94.9	(28,225)
<b>Heroin</b>						
Try once or twice	49.8	65.0	74.3	82.3	75.2	(28,539)
Use regularly	89.2	95.0	97.1	98.2	96.6	(28,540)
<b>Anabolic Steroids</b>						
Use occasionally	50.0	52.9	62.2	72.6	65.6	(28,383)
Use regularly	81.5	81.5	86.0	91.1	87.9	(28,258)
<b>Alcohol</b>						
One or two drinks nearly every day	26.7	24.7	27.9	32.8	30.2	(28,598)
Four or five drinks nearly every day	61.2	64.1	66.9	76.2	71.3	(28,658)
Five or more drinks once or twice a week	58.4	50.8	54.0	67.5	61.8	(28,554)
<b>Cigarettes</b>						
Smoke one or more packs per day	48.7	58.0	64.3	68.2	64.1	(28,671)

**Note:** Question asked was: How much do you think people risk harming themselves physically and in other ways, when they do each of the following activities? Response choices were for each of 17 activities: (1) no risk, (2) slight risk, (3) moderate risk, and (4) great risk.

The unweighted Ns for each age group are smaller than those shown in Table 1.1 because of differing patterns of nonresponse to the risk questions across age groups.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.2 Percentage Reporting Any Illicit Drug Use, Marijuana Use, and Cocaine Use in the Past Year, by Age Group, Total Family Income, and Health Insurance Status: 1992**

Health Insurance Status/ Total Family Income	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
<b>Total Family Income</b>					
Less than \$9,000	(1,079)	(1,453)	(940)	(826)	(4,298)
\$9,000 - \$19,999	(1,623)	(2,120)	(1,814)	(1,406)	(6,963)
\$20,000 - \$39,999	(2,325)	(2,231)	(2,591)	(1,881)	(9,028)
\$40,000 - \$74,999	(1,878)	(1,478)	(1,766)	(1,625)	(6,747)
\$75,000 or more	(349)	(439)	(405)	(603)	(1,796)
<b>Health Insurance Status</b>					
With health insurance	(5,883)	(5,310)	(5,764)	(5,369)	(22,326)
Without health insurance	(1,371)	(2,411)	(1,752)	(972)	(6,506)
<b>A. Any Illicit Drug Use in the Past Year</b>					
<b>Total Family Income</b>					
Less than \$9,000	15.4	31.2	24.4	3.4	13.3
\$9,000 - \$19,999	9.4	26.1	20.3	4.4	11.2
\$20,000 - \$39,999	11.7	23.9	18.1	5.7	11.3
\$40,000 - \$74,999	11.6	25.4	15.4	5.8	10.4
\$75,000 or more	13.0	29.0	15.8	4.8	9.4
<b>Health Insurance Status</b>					
With health insurance	12.0	25.2	16.9	4.7	9.9
Without health insurance	10.5	29.7	24.2	8.7	18.4
<b>B. Used Marijuana in the Past Year</b>					
<b>Total Family Income</b>					
Less than \$9,000	10.2	26.8	19.4	2.4	10.6
\$9,000 - \$19,999	6.4	22.6	16.9	3.2	9.1
\$20,000 - \$39,999	8.2	19.8	13.6	4.0	8.4
\$40,000 - \$74,999	8.3	22.0	11.8	3.2	7.4
\$75,000 or more	7.6	26.4	13.7	2.6	7.0
<b>Health Insurance Status</b>					
With health insurance	8.2	21.4	12.9	3.0	7.3
Without health insurance	7.6	26.0	20.5	6.4	15.3
<b>C. Used Cocaine in the Past Year</b>					
<b>Total Family Income</b>					
Less than \$9,000	2.1	7.2	8.9	0.8	3.4
\$9,000 - \$19,999	1.0	5.6	5.7	0.9	2.5
\$20,000 - \$39,999	1.3	7.0	5.0	1.3	2.8
\$40,000 - \$74,999	0.4	4.4	3.5	0.7	1.6
\$75,000 or more	1.6	9.8	1.4	0.6	1.7
<b>Health Insurance Status</b>					
With health insurance	1.1	5.2	4.2	0.9	2.0
Without health insurance	1.4	9.1	7.8	1.6	5.1

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.3 Percentage of Past-Year Users of Marijuana, Cocaine, Alcohol, or Cigarettes Who Attributed Past-Year Problems to Those Substances, by Private Health Insurance Status: 1992**

Health Insurance Status	Substances Used in the Past Year			
	Marijuana	Cocaine	Alcohol	Cigarettes
	(Unweighted N)			
With Health Insurance	(2,521)	(679)	(13,857)	(6,359)
Without Health Insurance	(990)	(382)	(3,942)	(2,292)
	<b>A. Any Problem<sup>1,2</sup></b>			
With Health Insurance	13.0	15.6	9.7	9.3
Without Health Insurance	15.8	26.6	16.9	7.9
	<b>B. Two or More Problems</b>			
With Health Insurance	7.2	10.9	5.0	4.1
Without Health Insurance	9.8	19.6	10.5	3.2
	<b>C. Three or More Problems</b>			
With Health Insurance	4.1	7.7	2.7	2.4
Without Health Insurance	5.5	13.4	6.3	1.3

<sup>1</sup>Respondents were asked whether they had experienced each of 11 problems in the past year because of their use of alcohol, cigarettes, or other drugs and were then asked to identify the specific drugs that caused each problem. The problems include feelings of anxiety or depression, problems with family or friends, and decreased productivity at work or school. (See Table 9.1 for a complete list of problems.)

<sup>2</sup>Respondents with missing data on problems are coded as not having problems.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.4 Percentage Reporting Any Illicit Drug Use, Marijuana Use, and Cocaine Use in the Past Year, by Age Group, and Receipt of Welfare Assistance: 1992**

Receipt of Welfare Assistance	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
(Unweighted N)					
<b>Welfare Assistance</b>					
Do receive	(858)	(872)	(693)	(377)	(2,800)
Do not receive	(6,396)	(6,849)	(6,823)	(5,964)	(26,032)
<b>A. Any Illicit Drug Use in the Past Year</b>					
<b>Welfare Assistance</b>					
Do receive	14.8	30.7	29.2	16.2	22.7
Do not receive	11.4	26.0	17.5	4.8	10.5
<b>B. Used Marijuana in the Past Year</b>					
<b>Welfare Assistance</b>					
Do receive	10.4	26.6	23.2	13.1	18.4
Do not receive	7.9	22.3	13.7	3.0	7.9
<b>C. Used Cocaine in the Past Year</b>					
<b>Welfare Assistance</b>					
Do receive	1.9	8.4	9.4	5.8	6.6
Do not receive	1.0	6.1	4.6	0.8	2.2

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.5 Percentage Reporting Having Received Treatment in the Past Year for Drug or Alcohol Abuse, by Demographic Characteristics: 1992**

Demographic Characteristic	Received			(Unweighted N)
	Drug Abuse Treatment <sup>1</sup>	Alcohol Abuse Treatment <sup>2</sup>	Any Substance Abuse Treatment <sup>3</sup>	
<b>Total</b>	<b>0.7</b>	<b>0.9</b>	<b>1.3</b>	<b>(28,800)</b>
<b>Number Receiving (Thousands)</b>	<b>1,505</b>	<b>1,889</b>	<b>2,686</b>	<b>(28,800)</b>
<b>Age</b>				
12-17	0.7	0.9	1.2	(7,251)
18-25	1.5	1.6	2.5	(7,711)
26-34	1.4	1.8	2.4	(7,502)
≥ 35	0.3	0.5	0.7	(6,336)
<b>Sex</b>				
Male	0.9	1.3	1.7	(12,970)
Female	0.6	0.6	0.9	(15,830)
<b>Race/Ethnicity<sup>4</sup></b>				
White	0.7	1.0	1.4	(14,064)
Black	0.9	0.6	1.1	(6,502)
Hispanic	0.9	0.9	1.4	(7,142)
<b>Population Density</b>				
Large metro	0.8	1.0	1.4	(20,954)
Small metro	0.8	0.9	1.3	(4,701)
Nonmetro	0.5	0.9	1.1	(3,145)
<b>Region</b>				
Northeast	1.0	0.9	1.3	(4,572)
North Central	0.6	1.1	1.4	(5,037)
South	0.6	0.8	1.1	(10,918)
West	0.8	0.9	1.4	(8,273)

**Note:** The unweighted Ns for alcohol abuse treatment and drug abuse treatment are slightly smaller than those shown for any substance abuse treatment because of differing patterns of nonresponse across the demographic groups.

<sup>1</sup>This category may include some individuals who have also received alcohol abuse treatment.

<sup>2</sup>This category may include some individuals who have also received other drug abuse treatment.

<sup>3</sup>This category includes individuals who have received alcohol abuse treatment, drug abuse treatment, or both.

<sup>4</sup>The category "other" for Race/Ethnicity is not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.6 Percentage of Past-Year Users of Marijuana or Cocaine Who Received Treatment in the Past Year for Drug Abuse, by Frequency of Drug Use: 1992**

Frequency of Drug Use	Percentage Receiving Treatment <sup>1</sup>	(Unweighted N)
<b>A. Used Marijuana in the Past Year</b>		
<b>Total</b>	<b>4.3</b>	<b>(3,499)</b>
<b>Number Receiving Treatment (Thousands)</b>	<b>755</b>	<b>(3,499)</b>
<b>Frequency Used in Past Year</b>		
Less than monthly	2.1	(1,735)
Monthly or more often	6.6	(1,764)
Weekly or more often	6.9	(1,031)
<b>B. Used Cocaine in the Past Year</b>		
<b>Total</b>	<b>12.7</b>	<b>(1,057)</b>
<b>Number Receiving Treatment (Thousands)</b>	<b>631</b>	<b>(1,057)</b>
<b>Frequency Used in Past Year</b>		
Less than monthly	9.8	(676)
Monthly or more often	19.4	(381)
Weekly or more often	25.0	(155)

<sup>1</sup>The percentage receiving drug abuse treatment may include people receiving treatment related to drug abuse, as well as to those in treatment to stop drug use. This category may also include some individuals who have also received alcohol abuse treatment.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.7 Percentage of Past-Year Users of Alcohol Who Received Treatment in the Past Year for Alcohol Abuse, by Frequency of Alcohol Use: 1992**

Frequency of Alcohol Use	Percentage Receiving Treatment <sup>1</sup>	(Unweighted N)
<b>Total</b>	<b>1.1</b>	<b>(17,732)</b>
<b>Number Receiving Treatment (Thousands)</b>	<b>1,469</b>	<b>(17,732)</b>
<b>Frequency Used in Past Year</b>		
Less than monthly	0.7	(7,315)
Monthly or more often	1.4	(10,417)
Weekly or more often	1.8	(5,198)
Daily or more often	2.1	(1,815)

<sup>1</sup>The percentage receiving alcohol abuse treatment may include people receiving treatment related to alcohol abuse, as well as to those in treatment to stop alcohol use. This category may also include some individuals who have also received drug abuse treatment.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 11.8 Percentage Reporting Anabolic Steroid and Ice Use in Their Lifetime, by Age Group and Demographic Characteristics: 1992**

Demographic Characteristic	Use in Lifetime	
	Anabolic Steroids	Ice <sup>2</sup>
<b>Total</b>	<b>0.3</b>	<b>0.4</b>
<b>Number of Users (Thousands)</b>	<b>685</b>	<b>836</b>
<b>Age</b>		
12-17	0.3	0.3
18-25	0.7	0.9
26-34	0.6	0.5
≥ 35	0.2	0.3
<b>Sex</b>		
Male	0.6	0.5
Female	0.1	0.3
<b>Race/Ethnicity<sup>1</sup></b>		
White	0.4	0.4
Black	0.2	0.5
Hispanic	0.4	0.7
<b>Population Density</b>		
Large metro	0.3	0.5
Small metro	0.5	0.4
Nonmetro	0.2	0.2
<b>Region</b>		
Northeast	0.3	0.3
North Central	0.1	0.2
South	0.4	0.4
West	0.4	0.7

## Chapter Twelve: Oversampled Metropolitan Areas

### Introduction

Before 1991 the NHSDA was designed to provide reasonably precise estimates of drug prevalence not only for the nation as a whole but also for the four main regions of the continental United States, as defined by the Bureau of the Census: Northeast, North Central, South, and West. In 1991 the NHSDA sample design was revised, and six large metropolitan statistical areas (MSAs) were oversampled—Chicago, Denver, Los Angeles, Miami, New York, and Washington, DC—so that NHSDA could develop separate estimates of drug use for each of these MSAs, for various demographic subgroups residing in each of them, and for census tracts of low socioeconomic status within each of them. The selected MSAs were also sites of local drug-epidemiologic data collections in jails, emergency rooms, and morgues (the Drug Use Forecasting and Drug Abuse Warning Network systems; see Chapter 1). The NHSDA oversamples would therefore permit detailed comparison and synthesis of trends in the different data systems on a city-by-city basis.

The same six MSAs were oversampled in the 1992 NHSDA. The scope of the MSA samples is summarized in Table 12.1, which shows the distribution of respondents in the six oversampled MSAs by the familiar demographic categories of age, sex, race/ethnicity, highest education received, and current employment status. An additional demographic category was developed specifically for these MSAs: the socioeconomic status of the area where the respondent resided, as measured by median housing values and rents. Of the 28,832 people interviewed for the 1992 NHSDA, 15,803 (54%) were drawn from the six oversampled MSAs.

For this chapter, the six MSAs were compared with one another on overall rates of licit and illicit drug use, prevalence of illicit use within demographic subgroups, and rates of licit and illicit use in low-SES urbanized areas versus other areas, with "low-SES" defined as the third of the population segments in the MSA's urbanized areas that had the lowest median housing values and rents. We found that rates of use were consistently higher in Denver and generally lower in Miami than in the other MSAs, and that socioeconomic areas differed most consistently with regard to alcohol use, which was less prevalent in the low-SES areas than the other areas.

### Use of Illicit Drugs

Tables 12.2, 12.3, and 12.4 report the lifetime, past-year, and current (past-month) use of licit and illicit drugs in the six oversampled MSAs, in all large MSAs, and in the total surveyed population. As stated above, among the six oversampled MSAs lifetime use of illicit drugs was significantly higher in Denver and significantly lower in Miami than in any of the other sites. About half (49%) of the surveyed population in Denver and one-fourth (23%) of the surveyed population in Miami had used an illicit drug at least once during their lifetime. The national population was midway between these two figures (36%), and all of the other MSAs were closer to this midpoint than to Denver or Miami.

The rank ordering of specific illicit drug types in each MSA by the extent of lifetime prevalence mirrored the ordering in the country as a whole. In every MSA, marijuana was the most frequently reported illicit drug (from 46% ever used in Denver to 20% in Miami) and heroin the least frequent (from 1.6% in Denver to 0.4% in Miami). Denver's elevated rate of drug use extended to virtually every specific drug type. However, Washington approached Denver and significantly exceeded the other MSAs in its reported use of crack, inhalants, hallucinogens, and tranquilizers.

The extreme positions of Denver and Miami with respect to any lifetime illicit drug use appeared in the past-year and current use measures as well, with the same approximate 2:1 ratios appearing on these items as on the lifetime measures. With respect to specific drug types, past-year and current marijuana use were significantly more prevalent in Denver (14% and 7.3%) than anywhere else, while for other drugs the elevation of prevalence in Denver (and, for some drugs, Washington) was present but not always significant vis-a-vis every other MSA.

### Use of Licit Drugs

The results for licit drugs were similar to those for illicit drugs. Denver residents reported significantly higher lifetime prevalence of alcohol, cigarettes, and smokeless tobacco (90%, 76%, and 18%, respectively) than did residents of the other five oversampled MSAs, while Miami residents reported significantly lower lifetime prevalence of alcohol and cigarettes (70% and 47%) than was reported in the other five MSAs. Denver residents reported significantly higher past-year and current alcohol use than residents of four out of five other MSAs, and Denver also led the MSAs in smokeless tobacco use, even though it trailed the national average. Chicago and Denver residents reported similar rates of current and past-year cigarette smoking, which were virtually identical to national levels and higher than in the other oversampled MSAs.

### Demographic Characteristics

Table 12.5 shows reported past-year illicit drug use by various demographic and socioeconomic subgroups in the six oversampled MSAs. In all but one demographic subgroup, more Denver residents reported past-year drug use than residents of the other MSAs or than the national population (for comparable data, see Table 2.15). That exceptional subgroup was the educational category of "some college" experience, and this exception is probably due to sampling variability.

Generally, in Denver and elsewhere, the subgroup differences were in line with those observed nationally: for example, highest drug use in the 18-25 age group and lowest in the 35-and-older group; appreciably higher use by males; high use among the unemployed. There were, however, some variations that may help to illuminate the MSA results and point a path for further analyses. In particular, Miami's low overall prevalence rate was attributable entirely to its black and Hispanic subgroups, which reported drug use appreciably below their national averages. Moreover, males in Miami did not have significantly higher drug use than females, nor did the 18-25 age group report as elevated a rate as elsewhere.

### Drug Use by Socioeconomic Status of the Areas in the Six MSAs

Tables 12.6, 12.7, and 12.8 report the lifetime, past-year, and past-month use of illicit and licit drugs for the low socioeconomic status (SES) urbanized areas versus other areas of each oversampled MSA. For the illicit drugs, lifetime use was lower in the low-SES area of every MSA; but only in Los Angeles and Miami were these differences wide enough to reach statistical significance (25% versus 34%, 18% versus 26%). The specific differences were in marijuana, cocaine (significant in Los Angeles only), inhalants, hallucinogens, and the combined psychotherapeutics category—all of the main categories except heroin. In contrast, *current* illicit drug use tended to be higher in the low-SES areas in every MSA. None of these differences reached statistical significance, except that current use of marijuana and cocaine in Denver and cocaine in New York were significantly higher in the low-SES areas.

There were more universal differences for one of the licit drugs. Alcohol use was significantly higher outside of the low-SES areas in all but one MSA on every period measure—lifetime, past-year, and current use. (A different city fell slightly below the significance threshold for each measure.) Cigarette smoking was more complex. There were proportionately fewer lifetime users in the low-SES areas in all MSAs, although significantly so in only three of the six. However, in the two MSAs where there was a significant difference in *current* use (Chicago and Denver), the low-SES areas actually had proportionately more current smokers.

### Conclusion

The oversampled cities provide important analytical opportunities that are only hinted at in the data reported here. There were distinct and fairly thoroughgoing differences among MSAs. These may have reflected more general regional differences, for example, between the higher-prevalence West (Denver) and the lower-prevalence South (Miami), or they may have been quite particular to the local MSA populations, in ways that have not been well explored. The differences between low-SES urbanized areas and other areas were less dramatic than one might have expected. The greater uniformity of these differences for alcohol than for illicit drugs is a puzzle that awaits more thorough attention. The oversampling of the six MSAs in the 1991, 1992, and 1993 NHSDAs has provided a pool of nearly 60,000 respondents from these areas: these NHSDA data files are a virtual laboratory for the testing of ideas about the relationships between urbanized life and drug use in America.

**Table 12.1 Number of People Interviewed (Unweighted N) in the Oversampled MSAs, by Demographic Characteristics: 1992**

Demographic Characteristic	MSA					
	Chicago	Denver	Los Angeles	Miami	New York	Washington, DC
<b>Total</b>	<b>2,519</b>	<b>2,749</b>	<b>2,691</b>	<b>2,650</b>	<b>2,662</b>	<b>2,532</b>
<b>Age</b>						
12-17	711	659	754	718	603	620
18-25	719	805	705	733	654	738
26-34	555	723	665	680	659	606
≥35	534	562	567	519	746	568
<b>Sex</b>						
Male	1,084	1,274	1,277	1,233	1,171	1,156
Female	1,435	1,475	1,414	1,417	1,491	1,376
<b>Race/Ethnicity</b>						
White	1,053	1,833	826	434	1,052	1,195
Black	870	232	375	874	715	1,021
Hispanic	506	582	1,249	1,308	732	187
Other	90	102	241	34	163	129
<b>Adult Education<sup>1</sup></b>						
Less than high school	384	401	538	524	463	282
High school graduate	635	655	569	662	724	553
Some college	447	544	507	460	433	516
College graduate	342	490	323	286	439	561
<b>Current Employment<sup>1</sup></b>						
Full-time	938	1,241	1,026	1,040	1,026	1,144
Part-time	249	282	255	237	199	251
Unemployed	212	134	180	270	216	166
Other <sup>2</sup>	409	433	476	385	618	351
<b>Socioeconomic Status of Area</b>						
Low SES <sup>3</sup>	1,432	1,276	1,229	1,390	1,275	1,241
Other SES	1,087	1,473	1,462	1,260	1,387	1,291

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

<sup>1</sup>Data on adult education and current employment are not applicable for youth age 12-17.

<sup>2</sup>Retired, disabled, homemaker, student, or "other."

<sup>3</sup>Low SES is defined as the third of population segments in the MSA's urbanized area that had the lowest housing values and rent.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.2 Percentage in the Oversampled MSAs, Large Metropolitan Areas, and the Total Population Reporting Use of Illicit Drugs, Alcohol, and Tobacco in Their Lifetime: 1992**

Drug	MSA						Large Metropolitan Areas (20,977)	Total Population (28,832)
	Chicago (2,519)	Denver (2,749)	LA (2,691)	Miami (2,650)	NY (2,662)	DC (2,532)		
<b>Any Illicit Drug Use<sup>1</sup></b>	<b>34.3</b>	<b>49.5</b>	<b>31.0</b>	<b>23.5</b>	<b>30.5</b>	<b>39.5</b>	<b>38.6</b>	<b>36.2</b>
Marijuana/hashish	31.9	46.4	28.6	20.3	26.8	34.4	35.1	32.8
Cocaine	9.8	18.6	12.0	7.1	9.5	14.7	12.8	11.0
Crack	0.4	2.1	2.6	1.4	1.5	2.7	1.7	1.4
Inhalants	4.4	8.5	3.9	2.2	3.2	7.6	5.1	4.8
Hallucinogens	6.7	16.9	7.3	3.3	4.5	10.7	8.5	8.0
PCP	3.6	6.1	4.1	1.4	2.0	6.2	4.2	4.0
Heroin	1.0	1.6	1.1	0.4	1.4	1.4	1.0	0.9
Nonmedical use of any psychotherapeutic <sup>2</sup>	7.8	18.2	8.1	6.2	7.8	14.4	12.1	11.6
Stimulants	3.7	12.5	4.7	1.2	3.3	6.5	6.5	6.3
Sedatives	2.1	6.4	3.1	1.6	2.6	3.3	3.6	3.5
Tranquilizers	3.2	7.1	3.1	3.7	4.6	5.0	5.2	5.1
Analgesics	3.5	7.7	3.5	2.5	3.0	8.2	5.8	5.5
Alcohol	80.7	89.6	77.9	70.0	77.7	82.7	84.2	83.0
Cigarettes	64.9	75.8	58.4	46.7	53.4	65.6	69.4	71.0
Smokeless Tobacco	8.1	17.9	5.2	3.6	2.8	9.5	10.5	14.7

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.3 Percentage in the Oversampled MSAs, Large Metropolitan Areas, and the Total Population Reporting Use of Illicit Drugs, Alcohol, and Tobacco in The Past Year: 1992**

Drug	MSA						Large Metropolitan Areas (20,977)	Total Population (28,832)
	Chicago (2,519)	Denver (2,749)	LA (2,691)	Miami (2,650)	NY (2,662)	DC (2,532)		
Any Illicit Drug Use <sup>1</sup>	12.1	17.0	11.0	8.1	9.1	12.1	12.1	11.1
Marijuana/hashish	9.2	14.1	8.9	5.5	7.2	8.0	9.4	8.5
Cocaine	2.2	4.4	3.0	1.9	2.6	2.8	2.8	2.4
Crack	0.2	0.5	0.6	0.6	0.7	0.6	0.6	0.4
Inhalants	1.1	1.3	1.1	0.6	0.6	1.4	1.0	1.0
Hallucinogens	1.0	2.5	1.2	0.6	0.5	1.4	1.4	1.2
PCP	0.3	0.3	0.3	0.2	0.1	0.6	0.2	0.2
Heroin	0.2	0.1	0.3	0.1	0.3	0.2	0.3	0.2
Nonmedical use of any psychotherapeutic <sup>2</sup>	2.8	4.2	3.3	2.6	2.2	4.3	4.0	3.8
Stimulants	0.6	1.2	1.1	0.4	0.6	0.3	1.0	1.0
Sedatives	0.6	0.7	1.0	0.6	0.7	0.5	1.1	0.9
Tranquilizers	1.0	1.3	0.9	1.4	0.9	1.3	1.5	1.5
Analgesics	1.7	2.4	1.7	0.7	1.0	3.1	2.6	2.4
Alcohol	67.2	74.6	65.9	57.3	62.3	71.0	68.1	64.7
Cigarettes	32.1	32.3	26.8	23.9	25.0	26.0	30.2	31.2
Smokeless Tobacco	1.7	4.9	1.0	1.6	0.5	2.3	3.1	5.0

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.4 Percentage in the Oversampled MSAs, Large Metropolitan Areas, and the Total Population Reporting Use of Illicit Drugs, Alcohol, and Tobacco in The Past Month: 1992**

Drug	MSA						Large Metropolitan Areas (20,977)	Total Population (26,632)
	Chicago (2,519)	Denver (2,749)	LA (2,691)	Miami (2,650)	NY (2,662)	DC (2,532)		
Any Illicit Drug Use <sup>1</sup>	5.3	8.6	5.5	3.5	4.5	5.0	6.0	5.5
Marijuana/hashish	4.1	7.3	4.2	2.5	3.3	3.5	4.8	4.4
Cocaine	1.0	1.0	1.0	0.7	1.0	0.7	0.7	0.6
Crack	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.2
Inhalants	0.3	0.7	0.4	0.2	0.3	0.3	0.4	0.4
Hallucinogens	0.3	0.7	0.3	0.1	0.1	0.7	0.3	0.3
PCP	0.1	0.1	0.1	*	*	0.3	0.1	*
Heroin	0.1	*	0.1	*	0.1	0.1	0.1	0.1
Nonmedical use of any psychotherapeutic <sup>2</sup>	0.8	1.2	0.9	0.9	0.8	1.3	1.5	1.3
Stimulants	0.1	0.3	0.3	0.2	0.1	*	0.3	0.2
Sedatives	0.3	0.3	0.2	0.2	0.5	0.2	0.5	0.4
Tranquilizers	0.2	0.2	0.2	0.5	0.1	0.5	0.4	0.4
Analgesics	0.4	0.6	0.5	0.2	0.2	0.8	1.0	0.8
Alcohol	53.0	59.2	49.9	41.7	43.6	56.6	51.3	47.8
Cigarettes	27.1	26.3	20.7	20.1	23.2	21.5	25.0	26.2
Smokeless Tobacco	0.9	2.6	0.5	1.3	0.3	1.5	2.1	3.7

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

\*Low precision; no estimate reported.

<sup>1</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>2</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.5 Percentage in the Oversampled MSAs Reporting Use of Any Illicit Drug in the Past Year, by Demographic Characteristics: 1992**

Demographic Characteristic	MSA					
	Chicago	Denver	Los Angeles	Miami	New York	Washington, DC
<b>Total</b>	<b>12.1</b>	<b>17.0</b>	<b>11.0</b>	<b>8.1</b>	<b>9.1</b>	<b>12.1</b>
<b>Age</b>						
12-17	10.7	21.7	11.2	9.0	7.3	11.2
18-25	24.4	36.8	21.2	14.3	18.0	24.2
26-34	16.3	23.0	16.5	12.8	17.7	16.9
≥35	7.6	10.1	5.6	4.8	5.2	7.4
<b>Sex</b>						
Male	16.1	21.4	14.5	8.8	12.5	13.5
Female	8.6	12.6	7.7	7.5	6.2	10.7
<b>Race/Ethnicity<sup>1</sup></b>						
White	12.4	16.3	14.6	12.6	9.9	14.3
Black	13.0	17.1	12.4	6.8	9.5	9.9
Hispanic	13.2	22.0	9.8	7.1	8.7	9.4
<b>Adult Education<sup>2</sup></b>						
Less than high school	9.4	23.7	9.4	6.5	9.2	7.8
High school graduate	14.5	18.2	15.4	5.7	5.6	13.8
Some college	11.7	13.3	11.4	9.7	16.0	13.8
College graduate	11.9	13.8	7.6	13.1	10.8	11.9
<b>Current Employment<sup>2</sup></b>						
Full-time	11.5	19.9	12.5	7.7	11.5	13.4
Part-time	14.2	16.4	14.2	13.8	8.8	16.2
Unemployed	26.3	28.0	24.3	14.3	19.6	16.8
Other <sup>3</sup>	9.1	7.6	4.1	5.1	4.3	5.1

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

<sup>1</sup>The category "Other" for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education and current employment are not applicable for youth age 12-17.

<sup>3</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.6 Percentage in the Oversampled MSAs Reporting Drug Use in Their Lifetime, by Socioeconomic Status of Area: 1992**

Demographic Characteristic	MSA											
	Chicago		Denver		Los Angeles		Miami		New York		DC	
	Low SES Area <sup>1</sup>	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area
Any Illicit Drug Use <sup>2</sup>	30.7	36.0	47.0	50.4	25.0	34.0 <sup>++</sup>	18.0	26.4 <sup>+++</sup>	29.3	31.0	36.1	40.7
Marijuana/hashish	28.5	33.5	43.8	47.3	23.7	31.1 <sup>+</sup>	17.0	22.1 <sup>+</sup>	27.0	26.7	31.9	35.2
Cocaine	10.6	9.5	18.0	18.8	9.5	13.2 <sup>+</sup>	5.3	8.1	8.8	10.0	11.7	15.8
Crack	0.8	0.2	3.0	1.8	2.4	2.8	2.0	1.1	2.1	1.2	3.7	2.3
Inhalants	2.4	4.9 <sup>++</sup>	9.7	8.1	2.6	4.6 <sup>+</sup>	1.1	2.9 <sup>+++</sup>	2.0	3.8	5.3	8.4 <sup>++</sup>
Hallucinogens	5.1	7.4 <sup>+</sup>	15.6	17.4	3.8	9.0 <sup>+++</sup>	1.7	4.2 <sup>+</sup>	2.7	5.4 <sup>+</sup>	8.8	11.4
PCP	2.6	4.1	6.1	6.1	2.9	4.7	1.1	1.6	1.8	2.2	6.1	6.2
Heroin	1.8	0.7	1.8	1.6	0.8	1.2	0.5	0.4	1.1	1.5	1.6	1.3
Nonmedical use of any psychotherapeutic <sup>3</sup>	5.8	8.7	18.0	18.2	4.7	9.8 <sup>++</sup>	3.0	8.0 <sup>++</sup>	5.5	9.1 <sup>+</sup>	9.7	16.1 <sup>+++</sup>
Stimulants	2.9	4.0	11.4	12.9	2.7	5.7	1.1	1.3	2.8	3.6	3.4	7.6
Sedatives	2.5	2.0	6.6	6.3	1.8	3.8	1.5	1.7	1.3	3.3	2.9	3.4
Tranquilizers	2.8	3.4	7.3	7.1	2.3	3.5	1.6	4.9	2.7	5.5	4.0	5.4
Analgesics	3.8	3.4	8.0	7.6	2.1	4.2	1.4	3.1	2.6	3.2	6.4	8.8
Alcohol	77.9	82.0 <sup>+</sup>	86.7	90.5	71.1	81.4 <sup>+++</sup>	60.5	75.2 <sup>+++</sup>	73.3	80.0 <sup>+</sup>	74.5	85.7 <sup>+++</sup>
Cigarettes	59.5	67.4 <sup>+</sup>	71.0	77.4	54.4	60.3	42.4	49.1	48.8	55.7 <sup>+</sup>	59.6	67.7 <sup>++</sup>
Smokeless Tobacco	5.6	9.2	16.0	18.6	3.9	5.8	2.7	4.1	2.2	3.1	6.6	10.5

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

<sup>1</sup>Low SES is defined as the third of population segments in the MSA's urbanized area that had the lowest housing values and rent.

<sup>2</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>3</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>+</sup>Difference between low SES and other SES statistically significant at the .05 level.

<sup>++</sup>Difference between low SES and other SES statistically significant at the .01 level.

<sup>+++</sup>Difference between low SES and other SES statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.7 Percentage in the Oversampled MSAs Reporting Drug Use in the Past Year, by Socioeconomic Status of Area: 1992**

Demographic Characteristic	MSA											
	Chicago		Denver		Los Angeles		Miami		New York		DC	
	Low SES Area <sup>1</sup>	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area
<b>Any Illicit Drug Use<sup>2</sup></b>	12.5	11.9	18.9	16.3	8.7	12.2	7.7	8.3	9.8	8.7	13.2	11.7
Marijuana/hashish	9.8	8.9	16.4	13.3	7.4	9.6	6.5	5.0	8.7	6.4	9.3	7.6
Cocaine	3.7	1.5 <sup>++</sup>	5.7	3.9	2.4	3.3	2.1	1.7	3.1	2.3	2.8	2.9
Crack	0.5	*	1.0	0.3	0.7	0.6	1.0	0.4	1.1	0.6	1.3	0.3
Inhalants	0.7	1.3	1.6	1.2	0.6	1.4	0.1	0.8 <sup>++</sup>	0.3	0.8	1.4	1.3
Hallucinogens	0.8	1.1	2.7	2.4	0.7	1.5	0.2	0.8 <sup>+</sup>	0.3	0.6	1.8	1.3
PCP	0.4	0.3	0.3	0.3	*	0.4	0.1	0.2	0.1	0.2	0.8	0.6
Heroin	0.6	*	0.3	*	0.4	0.2	*	0.1	0.3	0.3	0.5	*
Nonmedical use of any psychotherapeutic <sup>3</sup>	2.5	2.9	4.9	4.0	1.5	4.2 <sup>+</sup>	1.3	3.2	1.6	2.5	3.4	4.6
Stimulants	0.8	0.4	1.7	1.0	0.7	1.4	0.4	0.3	0.5	0.6	0.3	0.3
Sedatives	1.0	0.4	1.2	0.6	0.4	1.4	0.4	0.7	0.3	0.9	0.7	0.4
Tranquilizers	1.2	0.8	1.0	1.4	0.5	1.1	0.4	2.0	0.5	1.2	1.1	1.4
Analgesics	1.7	1.8	2.7	2.3	1.1	2.0	0.5	0.9	1.0	1.0	2.4	3.3
<b>Alcohol</b>	61.1	70.0	65.0	77.8 <sup>+++</sup>	57.7	70.1 <sup>+++</sup>	47.7	62.6 <sup>+++</sup>	57.3	64.9 <sup>+</sup>	59.7	75.1 <sup>+++</sup>
<b>Cigarettes</b>	35.6	30.4	39.1	30.0 <sup>++</sup>	26.9	26.7	21.7	25.1	25.9	24.5	28.4	25.2
<b>Smokeless Tobacco</b>	0.7	2.2 <sup>+</sup>	3.9	5.1	1.1	1.0	0.8	2.1	0.4	0.5	1.8	2.4

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

\*Low precision; no estimate reported.

<sup>1</sup>Low SES is defined as the third of population segments in the MSA's urbanized area that had the lowest housing values and rent.

<sup>2</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>3</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>+</sup>Difference between low SES and other SES statistically significant at the .05 level.

<sup>++</sup>Difference between low SES and other SES statistically significant at the .01 level.

<sup>+++</sup>Difference between low SES and other SES statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table 12.8 Percentage in the Oversampled MSAs Reporting Drug Use in the Past Month, by Socioeconomic Status of Area: 1992**

Demographic Characteristic	MSA											
	Chicago		Denver		Los Angeles		Miami		New York		DC	
	Low SES Area <sup>1</sup>	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area	Low SES Area	Other SES Area
Any Illicit Drug Use <sup>2</sup>	6.4	4.8	10.2	8.0	4.3	6.1	3.6	3.5	5.2	4.2	6.0	4.6
Marijuana/hashish	5.3	3.6	9.2	6.7 <sup>+</sup>	3.2	4.7	2.9	2.3	4.2	2.8	4.3	3.2
Cocaine	1.3	0.8	1.9	0.7 <sup>+</sup>	0.8	1.1	0.9	0.6	1.8	0.5 <sup>+</sup>	0.8	0.7
Crack	0.3	*	0.6	0.1	0.5	0.1	0.4	0.2	0.8	0.1	0.6	*
Inhalants	0.3	0.3	1.0	0.6	0.3	0.5	*	0.2	0.1	0.4	0.6	0.2
Hallucinogens	0.5	0.2	0.6	0.7	0.1	0.3	0.1	0.2	0.1	0.1	0.6	0.7
PCP	0.3	*	0.1	0.1	*	0.1	*	*	0.1	*	0.4	0.2
Heroin	0.3	*	*	*	0.2	*	*	*	0.1	0.1	0.3	*
Nonmedical use of any psychotherapeutic <sup>3</sup>	1.1	0.7	1.2	1.2	0.7	1.1	0.6	1.1	0.4	1.1	1.2	1.3
Stimulants	0.3	0.1	0.3	0.3	0.1	0.4	*	0.2	0.1	0.2	*	*
Sedatives	0.5	0.2	0.4	0.2	0.2	0.3	0.1	0.2	0.2	0.7	0.3	0.2
Tranquilizers	0.5	0.1	0.3	0.2	0.2	0.2	0.1	0.8	0.2	0.1	0.4	0.5
Analgesics	0.6	0.4	0.7	0.6	0.4	0.5	0.1	0.2	0.1	0.3	0.8	0.8
Alcohol	46.4	56.1 <sup>++</sup>	47.3	63.1 <sup>+++</sup>	44.0	52.8 <sup>++</sup>	35.5	45.0 <sup>+</sup>	40.9	45.0	45.6	60.5 <sup>+++</sup>
Cigarettes	32.1	24.7 <sup>+</sup>	33.6	24.0 <sup>+++</sup>	21.6	20.3	18.4	21.1	24.2	22.6	23.4	20.8
Smokeless Tobacco	0.4	1.1	2.9	2.5	0.8	0.4	0.6	*	0.3	0.3	0.9	1.6

Note: The Bureau of Census definitions of these MSAs are given in Appendix A.

\*Low precision; no estimate reported.

<sup>1</sup>Low SES is defined as the third of population segments in the MSA's urbanized area that had the lowest housing values and rent.

<sup>2</sup>Use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), heroin, or nonmedical use of psychotherapeutics at least once.

<sup>3</sup>Nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

<sup>+</sup>Difference between low SES and other SES statistically significant at the .05 level.

<sup>++</sup>Difference between low SES and other SES statistically significant at the .01 level.

<sup>+++</sup>Difference between low SES and other SES statistically significant at the .001 level.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**APPENDIX A**

**KEY DEFINITIONS**

**1972 - 1992 Survey Years**

## Appendix A: Key Definitions, 1972-1992 Survey Years

This appendix is essentially a glossary providing definitions of use of illicit drugs, alcohol, and tobacco; demographic characteristics; and other terms used in this report. It also describes major changes in definitions across the survey years that may have an impact on interpretation of trends. Each entry begins with the current definition of the term, followed by previous definitions that differ from the current definition. Cross-references are included for related terms. Also included is other information regarding interpretation of the data, including topics such as decision rules with regard to rounding.

The National Household Survey on Drug Abuse (NHSDA) was conducted in 1971, 1972, 1974, 1976, 1977, 1979, 1982, 1985, 1988, 1990, 1991, and 1992. The first survey (1971) is not directly comparable to the other surveys and is not generally included in trend analyses. Since 1972, however, there has been a great deal of consistency in the questions designed to develop estimates of the prevalence of drug use. Minor changes in question wording have been made throughout the survey series to ensure more complete and accurate responses, but these changes are not expected to affect comparability of survey responses. Questions have also been added to the NHSDA at different points in time to reflect changes in the drugs of abuse. For example, questions about the use of the form of cocaine known as "crack" were added in 1988. Questions about smokeless tobacco products and additional questions about cigarette use were added in 1985.

Changes in methodology and question wording that may have an effect on trend estimates are also noted in this appendix. For example, the NHSDA has used private, self-administered answer sheets to gather information on illicit drug use since 1972. Beginning in 1979, responses to the alcohol questions were also marked on private answer sheets rather than being spoken to the interviewer as in earlier surveys. Because of this change, caution should be used in interpreting changes in reported alcohol use from pre-1979 and post-1979 surveys. Changes in the definition of cigarette use in 1979 (i.e., had to have smoked five or more packs of cigarettes in their lifetime to be asked questions about current use) suggest that data from 1979 may not be directly comparable to data from other years.

Another change worth noting that may have an effect on trend analysis (but that is not otherwise noted in this appendix) concerns the treatment of missing data. From 1972 through 1982, if recency of use of a particular drug had not been determined, the case was treated as a nonuser in the past year or past month. In 1985, 1988, 1990, 1991, and 1992 both logical and statistical imputation procedures were used to impute, where possible, the values for missing data on the recency of use questions.

**Adult Education**

See "Education."

**Age**

Age of the respondent was defined as "age at time of interview." This definition corresponds to the definition used in previous Main Findings, but differs slightly from the definition used in the report of the Population Estimates 1985, where age is defined as "age as of July 1, 1985."

**Age Group**

For most of the reported analyses, respondents were divided into four age groups: 12-17 (youth), 18-25 (young adults), 26-34 (middle adults), and  $\geq 35$  (older adults). Some data were presented for those aged 26 and older.

**Alcohol**

1985-1992:

Measures of use of alcohol in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time that you had an alcohol drink, that is, of beer, wine, or liquor or a mixed alcoholic drink?"

1991-1992:

Feeder question: "The next questions are about alcoholic beverages, that is, [beer, wine and liquor, like whiskey, gin, or scotch, including mixed alcoholic drinks like gin and tonic, and drinks like wine coolers, fortified wine, and champagne]."

1985-1990:

". . . [beer, wine and liquor, like whiskey, gin, or scotch, including mixed alcoholic drinks like gin and tonic]."

1982:

". . . [beer, wine, and liquor, like whiskey or gin]."

1979:

". . . [alcoholic beverages -- beer, wine, whiskey, gin, other 'hard' liquors]."

1974-1977:

". . . [alcoholic beverages -- beer, wine, and whiskey, or anything else to drink with alcohol in it]."

1972:

". . . [beer; wine; hard liquor like cocktails or highballs, or on the rocks, or straight shots]."

SEE:

"Answer Sheets (1979)," "Current Drinker," "Heavy Use of Alcohol," "Prevalence," and "Recency of Use."

**Alcohol Abuse Treatment**

1991-1992:

Respondents were asked: "During the past 12 months, have you gotten any treatment for drinking--such as from a clinic, self-help group, counselor, doctor, or other professional?"

**Anabolic Steroids**

1991-1992:

The measure based on this question may include people who had received treatment for conditions related to alcohol use in addition to those who had received treatment to stop drinking.

Measures of use of anabolic steroids in the respondent's lifetime were developed from responses to the question: "About how old were you the first time you actually tried anabolic steroids?"

Feeder question: "The next four questions are about anabolic steroids. Steroids, or anabolic steroids, are sometimes prescribed by doctors to promote healing from certain types of injuries. Some athletes, and others, have used them to increase muscle development. The following questions refer to taking anabolic steroids on your own, without a doctor's orders."

**Analgesics**

1985-1992:

Measures of use of analgesic in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you took any analgesic for nonmedical reasons?"

Feeder question: "The next questions are about the use of analgesics. Analgesics are usually taken as painkillers, but people sometimes use them for other reasons. We're interested in nonmedical use--using analgesics or painkillers on your own."

1982:

Respondents were told that this pill class includes painkilling pills that, unlike aspirin, are usually available only with a doctor's prescription.

1979:

"Sometimes doctors prescribe these pills to relieve pain. But besides the medical uses, people sometimes take these pills on their own to see how they work or just to feel good."

SEE:

"Nonmedical Use of Any Psychotherapeutic," "Pill Cards," "Prevalence," and "Recency of Use."

**Answer Sheets**

Since 1972, answer sheets have been used to ensure privacy of responses for questions on use of illicit drugs, and other issues pertaining to the use of drugs. Beginning in 1979, answer sheets were used for alcohol use. The new design was implemented to (1) provide respondent training on the answer sheet procedure prior to its use for illicit substances, and (2) provide the same conditions of privacy for this drug as for the illicit drugs to encourage full disclosure. Answer sheets were added in 1982 for the nonmedical use of psychotherapeutics.

<b>Base</b>		The base number or actual number of respondents in each age group by demographic characteristic (i.e., unweighted N's) is found in Table 1.1 of this report. The percentages shown in the tables are based on weighted numbers of respondents.
<b>Black</b>	1985-1992:	Black, not of Hispanic origin.
	SEE:	"Black and Other Races" and "Race/Ethnicity."
<b>Black and Other Races</b>	1985-1992:	Term not currently used.
	1982:	Those individuals who stated that they were black, American Indian, or Alaskan Native, Asian or Pacific Islander, or who volunteered black/Hispanic or some other combination.
	1977,1979:	Those individuals who stated that their family origin is American Indian, Alaskan Native, Asian, black, Pacific Islander, or some other race (other than white).
	1974,1976:	Those individuals whose racial background, according to interviewer observation, was determined to be American Indian, black, Oriental, or some other category (other than white).
	1972:	Those individuals whose category, according to interviewer observation, was determined to be Negro, Puerto Rican or other Latin American group, or some other category (other than white).
	NOTE:	Due to changes in Federal reporting options for race and ethnicity as well as frequent changes in the administration and content of such items over time, Hispanics have appeared in two racial categories ("White" and "Black and other races"). In 1979 and 1982, Hispanics were included in the "White" category; in 1977, they appeared in one or the other category depending on how they identified themselves; in 1976 and 1974, they were included in one or the other category depending on how the interviewer identified them; and in 1972, all Hispanics appeared in the "Black and other races" category.
	SEE:	"Race/Ethnicity."
<b>Chance to Use</b>		See "Opportunity to Use."
<b>Chicago MSA</b>	1991-1992	The Chicago, IL, Metropolitan Statistical Area (Chicago MSA), as defined by the U.S. Bureau of the Census, includes the following counties: Cook, Du Page, and McHenry.

**Cigarettes**

- 1985-1992: Measures of use of cigarettes in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you smoked a cigarette?"
- 1990: In 1990, the option "(6) not sure" was deleted from the response set.
- 1982: Lifetime prevalence was based on the question, "About how old were you when you first tried a cigarette?" All respondents were asked about current use, which was defined as "smoked in the past 30 days."
- 1979: Lifetime prevalence was based on the question, "About how old were you when you first tried a cigarette?" Current use was defined as "smoked in past 30 days"; only those respondents who had smoked as many as five packs of cigarettes during their lifetime were asked about current use.
- 1974-1977: Lifetime prevalence was based on the question, "Have you ever smoked cigarettes?" Current use was defined as "smoked within past month"; all respondents were asked about current use.
- 1972: No data provided on lifetime prevalence. Current use was defined as smoked at "the present time"; all respondents were asked about current use.
- NOTE: The 1979 questions on recency of cigarette use are not comparable with other years because a different operational definition was employed in 1979; that is, in 1979, only respondents who had smoked five or more packs in their lifetime were asked about recency of use.
- SEE: "Current Smoker," "Prevalence," and "Recency of Use."

**Cocaine**

- 1991-1992: Measures of use of cocaine in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time that you used cocaine in any form?"
- Feeder question: "The next questions are about cocaine, including all the different forms of cocaine such as powder, 'crack,' freebase, and coca paste."
- 1985-1990: The question read, "When was the most recent time that you used cocaine?"
- SEE: "Crack," "Prevalence," and "Recency of Use."

**Confidence Limits**

The upper and lower limits cited in this report provide the boundaries for the observed estimate of use of particular drugs. These limits suggest that, if this study had been conducted 100 times, the observed prevalence rate would have been between the lower and upper confidence limits in 95 of the 100 studies. In other words, a statement that the real value for use of a particular drug lies within those limits would be correct 95% of the time.

**Crack**

1988-1992:

Measures of use of crack cocaine in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you used the form of cocaine known as 'crack'?"

Feeder question: "The next questions refer just to 'crack,' that is, cocaine in rock or chunk form, and not the other forms of cocaine."

SEE:

"Cocaine," "Prevalence," and "Recency of Use."

**Current Drinker**

1982-1992:

Reported use of alcohol during the month prior to the interview.

1974-1979:

Drank in the past month.

1972:

Drank in the past 7 days.

SEE:

"Alcohol," "Answer Sheets (1979)," "Prevalence," and "Recency of Use."

**Current Employment**

Employment status during the past week.

SEE:

"Employment."

**Current Smoker**

1982-1992:

Reported use of cigarettes during the month prior to the interview.

1979:

Smoked in past 30 days and have smoked as many as five packs of cigarettes during their lifetime.

1974-1977:

Smoked within past month.

1972:

Smoke at "the present time."

NOTE:

The 1979 questions on cigarettes are not comparable with other years because a different operational definition was employed in 1979.

	SEE:	"Cigarettes," "Prevalence," and "Recency of Use."
<b>Current Use</b>		Any reported use of a specific drug in the past month.
	SEE:	"Prevalence," "Recency of Use," and "Use in the Past Month."
<b>DC MSA</b>	1990-1992:	The Washington, DC, Metropolitan Statistical Area (DC MSA), as defined by the U.S. Bureau of the Census, includes the District of Columbia; the Maryland counties of Calvert, Charles, Frederick, Montgomery, and Prince Georges; the Virginia counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; and the Virginia cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.
<b>Denver MSA</b>	1991-1992	The Denver, CO, Metropolitan Statistical Area (Denver MSA), as defined by the U.S. Bureau of the Census, includes the following counties: Adams, Arapahoe, Denver, Douglas, and Jefferson.
<b>Drug Abuse Treatment</b>	1991-1992:	<p>Respondents were asked: "During the <u>past 12 months</u>, have you received treatment for other drug use, not counting cigarettes or alcohol?"</p> <p>This was the first in a series of eight questions about treatment for drug use. The remaining seven questions ask about treatment in various specific settings. The measure of drug abuse treatment is based only on responses to the first question stated above. This measure may include some people who had received treatment for conditions related to drug use in addition to those who had received treatment to stop drug use.</p>
<b>Education</b>		This is the measure of educational attainment among respondents who are $\geq 18$ years old. It contains the respondents' reports of their highest level of education completed: less than high school; high school graduate; some college; and college graduate. Persons who completed postgraduate work are classified as college graduates.
<b>Employment</b>		Respondents were asked to look at a card and tell which statement best described their present work situation: "Working full-time, 35 hours or more a week"; "Working part-time, less than 35 hours a week"; "Have a job but not at work because of extended illness, maternity leave, furlough, or strike"; "Unemployed or laid off and looking for work"; "Unemployed and <u>not</u> looking for work"; "Full-time homemaker"; "In school only"; "Retired"; "Disabled, not able to work"; and "Something else."
	<b>Full-time</b>	"Full-time" in the tables includes both "working full-time" and "Have a job but not at work."

	<b>Part-time Unemployed</b>	"Part-time" in the tables refers exclusively to those reporting they worked part-time. "Unemployed" in the tables includes those giving either of the two "unemployed" answers.
	<b>Other</b>	"Other" includes all other responses, including being a student, a housewife, retired, disabled, or other miscellaneous work statuses.
<b>Ethnicity</b>	1985-1992:	Ethnicity is used to refer to the respondent's self-classification as to ethnic origin and identification. Tabular data were presented separately throughout the 1985, 1988, 1990, 1991, and 1992 <u>Main Findings</u> for the three largest ethnic categories: white, not Hispanic; black, not Hispanic; and Hispanic. Because the percentage of persons not classified in one of these three categories was so small and there were several different ethnic groups represented, the "others" were not shown separately in the tables, but were included in the calculation of prevalence rates for the total sample.
	SEE:	"Black," "Black and Other Races," "Hispanic," "Race/Ethnicity," and "White."
	<b>Ever Used</b>	See "Lifetime Prevalence."
	<b>Family Income</b>	1992: A series of questions was asked to determine the amount of income the respondent and every member of his/her family received during the past month from a variety of sources, including employment, Social Security, Railroad Retirement, Supplemental Security Income, public assistance, AFDC, interest, dividends, rents, royalties, trusts, child support, and any other source. Imputations were made, monthly estimates were multiplied by 12, and variables were summed to obtain the total family income.
	NOTE:	For youth and those unable to respond to income questions, proxy responses were accepted in 1991 and 1992.
	1990:	A single question was asked: "The last few questions are about the <u>total income during the past year</u> for <u>all</u> members of your family who lived here then, from all sources. We would like for you to combine everyone's income--that is, yours (your (mother's/father's stepmother's/stepfather's/wife's/husband's)). Include money from wages and salaries, social security, retirement income, unemployment payments, public assistance, and so forth. Also include income from interest, dividends, net income from business, farm, or rent, and any other money income received."
		Respondents were handed a card with a series of response alternatives and asked to indicate the letter that best describes their total family income from all sources. Respondents were also asked to indicate how much every member of their family

received from each possible income source. Both the total categorical variable and each of the individual continuous income sources were compared and imputed to obtain the family income variable.

**Geographic Region**

See "Region."

**Hallucinogens**

1985-1992:

Measures of use of hallucinogens in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you used LSD or PCP or another hallucinogen?"

Specific types of hallucinogens came from the questions on the hallucinogens answer sheets with "other" responses coded to specific types as appropriate (e.g., acid to LSD).

Feeder question: "The next questions are about LSD and other hallucinogens such as [PCP or 'angel dust,' peyote, and mescaline]."

1982:

"...[LSD and other hallucinogens, such as PCP or phencyclidine, mescaline, peyote, psilocybin, DMT]." Data for PCP are included within general data on hallucinogens and also provided separately.

1979:

"...[LSD and other hallucinogens such as PCP or phencyclidine, mescaline, peyote, psilocybin, DMT]." Data for PCP are included within general data on hallucinogens and also provided separately.

1976,1977:

"...[LSD and other hallucinogens like mescaline, peyote, psilocybin, and DMT]." Separate data are provided for PCP.

1974:

"...[LSD or other hallucinogens]."

1972:

"...[LSD or something like it, such as mescaline, psilocybin, MSA, STP]."

NOTE:

In the Population Estimates 1985, PCP was included as a hallucinogen only if the respondent identified PCP specifically when answering the recency question for hallucinogens. This leads to slight differences with the 1985 Main Findings, where PCP use is always included as a hallucinogen.

SEE:

"Prevalence" and "Recency of Use."

**Health Insurance  
Status**

1991-1992: A series of questions was asked to determine what kinds of insurance the respondent was covered under in the last full calendar month. Types of coverage asked about included Medicare, Medicaid, CHAMPUS, CHAMPVA, the VA, other military health care, private insurance obtained through a current or former employer, or by paying premiums directly to the health insurance company. An indicator variable that shows if the respondent was covered by any of these plans was created.

NOTE: For youth and those respondents who were unable to respond to the insurance questions, proxy responses were accepted in 1991 and 1992.

1990: A single question was asked: "We are interested in all kinds of health insurance plans, except those that only cover accidents. Are you now covered by a health insurance plan which pays any part of a hospital, doctor's, or surgeon's bill?" The response alternatives were: (1) yes; and (2) no.

**Heavy Use of Alcohol**

1985-1992: "Heavy use of alcohol" was defined as drinking five or more drinks on the same occasion (i.e., within a few hours) on 5 or more days in the past 30 days.

SEE: "Alcohol."

**Heroin**

1976-1992: Measures of use of heroin in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you [used heroin]?"

1972-1974: "...[tried heroin]?"

SEE: "Prevalence" and "Recency of Use."

**Hispanic**

1985-1992: "Hispanic" was included as anyone of Hispanic origin (i.e., individuals from Puerto Rico, Mexico, Cuba, Central America, the Caribbean, South America, or other Hispanic countries). The individual may be racially white, black, or other.

SEE: "Black and Other Races," "Race/Ethnicity," and "White."

<b>Ice</b>	1991-1992:	<p>Respondents were asked if they had "ever used the smokable form of methamphetamine called 'ice.'"</p> <p>Feeder question: "Now let's talk about a form of methamphetamine that can be smoked, say in a cigarette or pipe."</p>
<b>Illicit Drugs</b>	1979-1992:	<p>Illicit drugs include marijuana, cocaine, inhalants, hallucinogens, PCP, heroin, or nonmedical use of psychotherapeutics, which include stimulants, sedatives, tranquilizers, and analgesics. Illicit drug use has referred to use of any of these drugs. A composite measure "any illicit drug use" was constructed from data for the 1979 and later surveys.</p>
<b>Income</b>		<p>See "Family Income."</p>
<b>Inhalants</b>	1985-1992:	<p>Measures of use of inhalants in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the <u>most recent time</u> you used an inhalant; that is, sniffed or inhaled something to get high or for kicks?"</p> <p>Data on specific types of inhalants have come from the questions on the inhalants answer sheet with "other" responses coded to specific types as appropriate.</p>
	NOTE:	<p>Lighter gases (butane, propane) were added as a response option in 1991 and 1992.</p>
	1991-1992:	<p>Feeder question: "These next questions are about inhalants that people sniff or breathe in, to get high or to make them feel good. I am referring to things like lighter fluids and gases, aerosol sprays like Pam, glue, amyl nitrate, 'poppers,' or locker room odorizers. The questions use the term 'inhalant' which refers to any and all of the items listed on this card."</p>
	1985-1990:	<p>". . . [I am referring to things like lighter fluids, aerosol sprays . . . ]"</p>
	1972-1979:	<p>Comparable questions on recency of use were used to derive prevalence rates for inhalants in 1972 through 1979. There were no questions on inhalant use in the 1982 survey.</p>
	SEE:	<p>"Prevalence" and "Recency of Use."</p>
<b>LA MSA</b>	1991-1992:	<p>The Los Angeles, CA, Metropolitan Statistical Area (LA MSA), as defined by the U.S. Bureau of the Census, includes Los Angeles County.</p>

**Large Metropolitan Area**

1991-1992: In 1991 and 1992, large metropolitan areas included Metropolitan Statistical Areas (MSAs) with a 1990 population of 1,000,000 or more. Large metropolitan areas included cities and surrounding areas as defined by the U.S. Bureau of the Census. Other population density areas defined are "Small Metropolitan" and "Nonmetropolitan."

As of October 1991, the definition of the 1988 and 1990 large metropolitan areas was revised to match the 1991 definition. Estimates reported by population density for 1988 and 1990 since that revision may therefore differ from and are not strictly comparable to similarly labeled, earlier estimates.

1988,1990: In 1988 and 1990, large metropolitan areas included Standard Metropolitan Statistical Areas (SMSAs) with a 1980 population of 1,000,000 or more.

1985: In 1985, large metropolitan areas included SMSAs with a 1980 population of 250,000 or more.

1982: Include SMSAs with a population of 1,000,000 or more in 1970.

1979: A county or group of contiguous counties that contains at least one city with at least 50,000 inhabitants or more, or "twin cities" with a minimum combined population of 50,000.

1972-1977: Includes the top 25 SMSAs as of 1970 according to the U.S. Bureau of the Census.

SEE: "Small Metropolitan," "Nonmetropolitan," and "Other Metropolitan Area."

**Lifetime Frequency**

1979-1992: Respondents were asked: "About how many times in your life have you used X drug: 1-2 times, 3-5 times, 6-10 times, 11-49 times, 50-99 times, 100-199 times, 200 or more times, never?"

**Lifetime Prevalence**

The percentage who have "ever" used the drug regardless of the number of times it was used.

SEE: "Recency of Use."

**Low Precision**

1992: Prevalence estimates based on only a few respondents were not shown in the 1988, 1990, 1991, and 1992 Main Findings tables, but have been replaced with an asterisk (\*) and noted as "low precision." These estimates have been omitted because one cannot place

a high degree of confidence in their accuracy. In statistical terms, low precision estimates are those for which the natural log of the relative standard error (i.e., the ratio of the standard error to the prevalence estimate) was .175 or greater.

	1988, 1990:	In statistical terms, low precision estimates were those for which the relative standard error (i.e., the ratio of the standard error to the prevalence estimate) was .50 or greater.
	1972-1985:	An asterisk (*) was used in report tables to indicate prevalence rates of less than .5%.
<b>Low SES Area</b>	1991-1992:	See "Socioeconomic Status of Area."
<b>Marijuana</b>	1985-1992:	Measures of use of marijuana in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the <u>most recent time</u> you used [marijuana or hash]?"
	1982:	"...[marijuana and hashish]."
	1979:	"...[marijuana and (or) hashish]."
	1972-1977:	Data reported are for marijuana only.
	NOTE:	Although the data in 1979 and 1982 pertain to use of either of these substances, experience in the earlier surveys indicated that most respondents who reported using hashish had also used marijuana.
	SEE:	"Prevalence" and "Recency of Use."
<b>MSA</b>		Metropolitan Statistical Area.
	SEE:	"Large Metropolitan," "Small Metropolitan," and "Nonmetropolitan."
<b>Miami MSA</b>	1991-1992	The Miami, FL, Metropolitan Statistical Area (Miami MSA), as defined by the U.S. Bureau of the Census, includes Dade County.
<b>Needle Use</b>	1988-1992:	Needle use was derived from specific questions about use of cocaine, heroin, or amphetamines with a needle and from general questions about needle use with other drugs.

NOTE:

Estimates of needle use in 1990, 1991, and 1992 are not comparable to those published in the 1988 Main Findings. The 1990-1992 estimates were based on a more extensive set of questions about needle use available in the 1990-1992 NHSDA.

**Nonmedical Use of Any  
Psychotherapeutic**

1991-1992:

The section of the interview instrument and the answer sheets dealing with nonmedical use of the four classes of psychotherapeutics was introduced as follows:

Feeder question: "The next questions will be about prescription-type drugs. There will be separate questions for sedatives, tranquilizers, stimulants, and analgesics.

As you can see on this card, [sedatives include barbiturates, sleeping pills, and Seconal; sedatives are sometimes referred to as 'downers.'] Tranquilizers include antianxiety drugs like Librium, Valium, Ativan, and Meprobamate. [Stimulants include amphetamines and Preludin; stimulants are often called 'uppers' or 'speed.'] Analgesics include painkillers like Darvon, Demerol, Percodan, and Tylenol with codeine.

"Now, please read the information below the line on the card while I say it aloud. This is a very important point about the next set of questions. We are interested in the nonmedical use of these prescription-type drugs. Nonmedical use of these drugs is any use on your own, that is, either: without your own prescription from a doctor, or in greater amounts than prescribed, or more often than prescribed, or for kicks, to get high, to feel good, or curiosity about the pill's effect, or for any reasons other than a doctor said you should take them."

NOTE:

The pill card contains pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium, Librium, and other tranquilizers are shown when the section on tranquilizers is introduced. Pill cards were introduced in 1972 for all but analgesics. A pill card for analgesics was introduced in 1979. Pill cards have been modified over the years to reflect changes in available psychotherapeutic drugs.

"Now, read with me below the line on the card because this is very important. We are interested in the nonmedical use of these prescription-type drugs. Nonmedical use of these drugs is any use on your own, that is, either: without a doctor's prescription, or in greater amounts, or more often, or for any reasons other than a doctor said that you should take them--such as for kicks, to get high, to feel good, or curiosity about the pill's effect."

1985-1990

". . . [sedatives include downers, barbiturates, and Seconal]."

". . . [Stimulants include uppers, amphetamines, speed, and Preludin]."

- 1982: Use of a pill or other drug(s) from any of the four psychotherapeutic drug categories in order to get high or to enjoy the feeling or just for kicks or curiosity or for any other nonmedical purpose. The four categories are sedatives, tranquilizers, stimulants, and analgesics.
- 1974-1979: A "yes" or "not sure" response to any one (or more) of the following three items: "(1) Did you ever take any of these kinds of pills just to see what it was like and how it would work? (2) Did you ever take any of these kinds of pills just to enjoy the feeling they give you? (3) Did you ever take any of the pills for some other nonmedical reason, and not because you needed it?"
- 1972 A "yes" response to any one (or more) of the following five items: "(1) Have you ever taken these pills to help you get along with your family or other people? (2) Have you ever taken any of these pills to help you accomplish something? (3) Did you ever take any of these kinds of pills just to see what it was like and how it would work? (4) Have you ever taken any of these pills before going out, so that you could enjoy yourself more with other people? (5) Did you ever take these kinds of pills just to enjoy the feeling they give you?"
- NOTE: In 1977 only, questions about nonmedical experience were assigned to a random half of the households in which interviews were conducted.
- SEE: "Analgesics," "Pill Cards," "Sedatives," "Stimulants," and "Tranquilizers."
- Nonmetropolitan** 1991-1992: Those areas of the United States that were not part of a Metropolitan Statistical Area (MSA) as of 1990, according to the U.S. Bureau of the Census. In general, these areas include small communities, rural nonfarm areas, and farm areas. Other population density areas defined are "Large Metropolitan" and "Small Metropolitan."
- As of October 1991, the definition of the 1988 and 1990 nonmetropolitan areas was revised to match the 1991 definition. Estimates reported by population density for 1988 and 1990 since that revision may therefore differ from and are not strictly comparable to similarly labeled, earlier estimates.
- 1985-1990: Areas that were not part of a Standard Metropolitan Statistical Area (SMSA) as of 1980, according to the U.S. Bureau of the Census.

	1972-1982:	Nonmetropolitan generally includes smaller communities, rural nonfarm areas, and farm areas according to the standards set in 1970 U.S. Bureau of the Census classifications.
	SEE:	"Large Metropolitan," "Small Metropolitan," and "Other Metropolitan."
<b>North Central</b>		The States included are the East North Central States--Illinois, Indiana, Michigan, Ohio, and Wisconsin--and the West North Central States--Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
	SEE:	"Region."
<b>Northeast</b>		The States included are the New England States--Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont--and the Middle Atlantic States--New Jersey, New York, Pennsylvania.
	SEE:	"Region."
<b>NY MSA</b>	1991-1992	The New York, NY, Metropolitan Statistical Area (NY MSA), as defined by the U.S. Bureau of the Census, includes the following counties: Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester.
<b>Opportunity to Use</b>	1972-1992:	Respondents reported how old they were when they first had a chance to try a particular drug.
<b>Other Metropolitan</b>	1972-1977:	Includes a sample of those SMSAs not included in "Large Metropolitan," i.e., the top 25 SMSAs as of 1970 according to standards set by the U.S. Bureau of the Census.
	SEE:	"Large Metropolitan," "Small Metropolitan," and "Nonmetropolitan."
<b>Pill Cards</b>		The pill cards contain pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium, Librium, and other tranquilizers are shown when the questionnaire section on tranquilizers is introduced. Pill cards were introduced in 1972 for sedatives, stimulants, and tranquilizers. A pill card for analgesics was introduced in 1979. Pill cards have been modified over the years to reflect changes in available psychotherapeutic drugs.

<b>PCP</b>	1982-1992:	Measures of use of phencyclidine (PCP) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the <u>most recent time</u> you used <u>PCP</u> ?"
	1979:	The following questions were used to generate lifetime and past month PCP prevalence rates: "Have you ever used PCP or Angel Dust?" "In the past 30 days, did you use PCP or Angel Dust?"
	1976-1977:	A question on lifetime prevalence was included: "Have you ever used PCP or Angel Dust?"
	NOTE:	In the 1985 <u>Main Findings</u> , the measure of PCP differs slightly from that reported earlier in the <u>Population Estimates 1985</u> because of a difference in the treatment of missing data.
	SEE:	"Hallucinogens," "Prevalence," and "Recency of Use."
<b>Perceived Harmfulness</b>	1985-1992:	Respondents were asked to assess the extent to which people risk harming themselves physically and in other ways when they use various illicit drugs, alcohol, and cigarettes, with various levels of frequency. These questions were first asked in 1985.
	NOTE:	Questions on anabolic steroids were added in 1990.
<b>Percentages</b>		The percentages in the tables are based on weighted data, and they are presented to one digit beyond the decimal point. In this report, all the 1992 tables contain percentages based on weighted data except for tables in the appendix on sampling and statistical inference (Appendix D).
	SEE:	"Rounding."
<b>Population Density</b>		See "Large Metropolitan," "Nonmetropolitan," "Other Metropolitan," and "Small Metropolitan."
<b>Prevalence</b>		General term used to describe the estimates for lifetime, past year, and past month use.
	SEE:	"Recency of Use."

**Psychotherapeutic  
Drugs**

1985-1992: Psychotherapeutic drugs are generally prescription medications that also can be used illicitly to "get high" or for other mental effects. These include analgesics, sedatives, stimulants, and tranquilizers. Also included are drugs such as "speed" or "ice."

SEE "Analgesics," "Nonmedical Use of Any Psychotherapeutic," "Sedatives," "Stimulants," and "Tranquilizers."

**Race/Ethnicity**

1985-1992: Data were presented separately for whites, not of Hispanic origin; blacks, not of Hispanic origin; Hispanics; and others. Others include: Indian (American), Aleut, Eskimo, Asian or Pacific Islander (including Asian Indian).

1972-1982: In previous versions of this survey, the racial categories were "white" and "black and other races."

SEE: See "Black," "Black and Other Races," "Ethnicity," "Hispanic," and "White."

**Recency of Use**

The recency question for each drug was the source for the lifetime, past year, and past month prevalence rates.

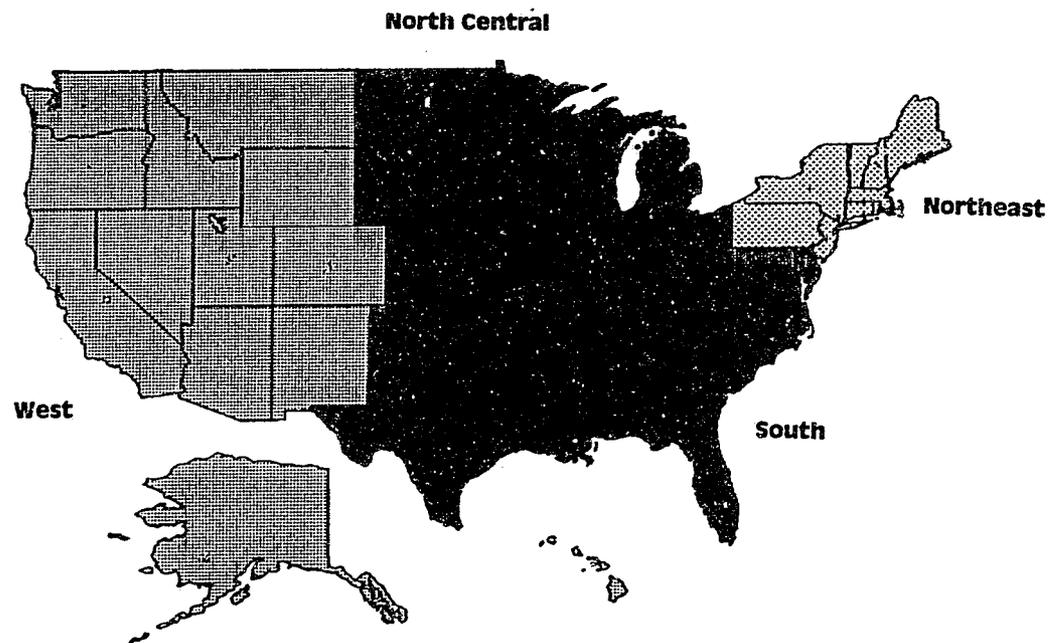
The question was essentially the same for all classes of drugs. The question was: "When was the most recent time/that you used/you took/[drug name]?" For the four classes of psychotherapeutics, the phrase "for nonmedical reasons" was added after the name of the drug.

The response alternatives were the same for each drug with the exception of marijuana, cocaine, and inhalants. The response alternatives were (1) within the past month (30 days); (2) more than 1 month ago but less than 6 months ago; (3) 6 or more months ago but less than 1 year ago; (4) 1 or more years ago but less than 3 years ago; and (5) 3 or more years ago. For marijuana, inhalants, and cocaine, the first two response alternatives are (1) within the past week (7 days) and (2) more than 1 week ago but less than 1 month (30 days) ago.

However, the recency questions were recoded to contain the best available information on each drug. (See Appendix C for more details.)

## Region

Region was grouped in this study into four categories: Northeast, North Central, South, and West. These regions are based on classifications developed by the U.S. Bureau of the Census. See Figure A below for this division.



A-21

**SEE:** Northeast, North Central, South, and West for listings of the States included in each region.

## Rounding

The decision rules for rounding of percentages were as follows. If the second number to the right of the decimal point was greater than or equal to 5, the first number to the right of the decimal point was rounded up to the next higher number. If the second number to the right of the decimal point was less than 5, the first number to the right of the decimal point remained the same. Thus, a prevalence rate of 16.55% would be rounded to 16.6%, while a rate of 16.44% would be rounded to 16.4%.

Although the percentages in the 1992 tables generally total 100%, the use of rounding sometimes produces a total of slightly less than or more than 100%.

**SEE:** "Percentages."

**Sedatives**

1985-1992: Measures of use of sedatives in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you took any sedative for nonmedical reasons?"

Feeder question: "We'll start by talking about barbiturates and other sedatives. People sometimes take barbiturates and other sedatives to help them go to sleep or to help them stay calm during the day. We're interested in the use of sedatives, also called downers, on your own, or nonmedically."

1982: Barbiturates and other sedatives (often referred to as sleeping pills). Respondents were told that doctors sometimes prescribe these pills to help people go to sleep or to help them calm down during the day or for some other medical purpose.

1979: "These pills are barbiturates and other sedatives. Sometimes doctors prescribe these pills to calm people down during the day or to help them sleep at night. But besides medical use, people sometimes take these pills on their own, to help them relax, or just to feel good."

1974-1977: "Doctors sometimes prescribe these to help relax during the day and to get a better night's sleep. People also use these on their own, to help relax and just feel good. These are barbiturates or sedatives and are sometimes called 'downs' or 'downers.'"

**Sedatives**

1972: "Doctors prescribe these to help relax and to get a better night's sleep. People also use these on their own--to help relax and just feel good. These are barbiturates and are sometimes called 'downs' or 'downers.'"

NOTE: In 1977 only, questions about sedatives were assigned to a random half of the households in which interviews were conducted.

SEE: "Nonmedical Use of Any Psychotherapeutic," "Pill Cards," "Prevalence," and "Recency of Use."

**Significance**

In tables in which trends are shown, the levels of significance for the changes between the two most recent survey years, are noted as follows: .05, .01, and .001. These same levels were used in comparing two rates in the text for demographic subgroups of the most recent survey sample.

**Small Metropolitan**

1991-1992: Metropolitan Statistical Areas (MSAs) with a 1990 population of 50,000 to 999,999 constituted small metropolitan areas. Other population density areas defined were "Large Metropolitan," "Nonmetropolitan," and "Other Metropolitan."

As of October 1991, the definition of 1988 and 1990 small metropolitan areas was revised to match the 1991 definition. Estimates reported by population density for 1988 and 1990 since that revision may therefore differ from and are not strictly comparable to similarly labeled, earlier estimates.

1988-1990: Small metropolitan areas included Standard Metropolitan Statistical Areas (SMSAs) with a 1980 population of 50,000 to 999,999.

1985: In 1985, small metropolitan areas included SMSAs with a 1980 population of under 250,000.

1979-1982: Small metropolitan areas included SMSAs under 1,000,000 population in 1970.

NOTE: From 1972 to 1977, "Other Metropolitan" was used as the categorization rather than "Small Metropolitan."

SEE: "Large Metropolitan," "Nonmetropolitan," and "Other Metropolitan."

**Smokeless Tobacco Use**

1985-1992: Measures of use of smokeless tobacco in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you used chewing tobacco or snuff or other smokeless tobacco?"

SEE: "Prevalence" and "Recency of Use."

**SMSA**

Standard Metropolitan Statistical Area.

SEE: "Large Metropolitan," "Small Metropolitan," "Nonmetropolitan," and "Other Metropolitan."

**Socioeconomic  
Status of Area**

1991-1992: The DC, Chicago, Denver, LA, Miami, and NY MSAs were each divided into "Low SES" and "Other SES." "Low SES" is defined as the third of population segments within the urbanized area with the lowest housing values and rent.

1990: Data only available for DC MSA.

**South**

This Census classification contains the South Atlantic States--Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; the East South Central States--Alabama, Kentucky, Mississippi, and Tennessee; and the West South Central States--Arkansas, Louisiana, Texas, and Oklahoma.

SEE: "Region."

**Stimulants**

1985-1992: Measures of use of stimulants in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you took any amphetamine or other stimulant for nonmedical reasons?"

Feeder question: "The next questions are about the use of amphetamines and other stimulants. People sometimes take stimulants to help them lose weight or to help them stay awake. We're interested in nonmedical use--taking stimulants, also called uppers, on your own."

1982: Amphetamines or other stimulants. Respondents were told that these pills are sometimes used to help people lose weight and they are usually available only with a doctor's prescription.

1979: "These pills are amphetamines and other stimulants. Doctors sometimes prescribe these for losing weight. But besides medical uses, people sometimes take them on their own to make them feel more wide-awake, peppy, and alert."

1974-1977: "Doctors sometimes prescribe these for losing weight. But besides medical uses, people sometimes take them on their own to make them feel more wide-awake, peppy, and alert. They are sometimes called 'ups' or 'uppers,' 'speed,' or 'bennies.'"

1972: "Doctors prescribe these mostly for losing weight, and sometimes to give people more energy. People also use these on their own, just to feel good. These are amphetamines. They are sometimes called 'ups' or 'uppers,' 'speed,' or 'bennies.'"

NOTE: In 1977 only, questions about stimulants were assigned to a random half of the households in which interviews were conducted.

SEE: "Nonmedical Use of Any Psychotherapeutic," "Pill Cards," "Prevalence," and "Recency of Use."

**Tobacco**

See "Cigarettes" and "Smokeless Tobacco."

**Total Family Income**

See "Family Income."

**Tranquilizers**

1985-1992: Measures of use of tranquilizers in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "When was the most recent time you took any tranquilizer for nonmedical reasons?"

Feeder question: "The next few questions are about the use of tranquilizers, on your own. People sometimes take tranquilizers to help them calm down or to relax their muscles or to relieve depression. They are sometimes called 'nerve pills.'"

1982: Respondents were told that the tranquilizer pill class includes pills that are usually available only with a doctor's prescription and are prescribed to help people calm down or to relax their muscles, etc.

1979: "These pills are tranquilizers. Doctors sometimes prescribe them to calm people down, quiet their nerves, or relax their muscles. But besides the medical uses, people sometimes take these pills on their own to help them relax, or just feel good."

1974-1977: "Doctors sometimes prescribe these to calm people down, or quiet their nerves, or relax their muscles. People also take them on their own to help them feel better. These are tranquilizers."

1972: "These help people to calm down, and to quiet their nerves. Doctors sometimes prescribe them. People also take them on their own to help them feel better. These are tranquilizers."

	NOTE:	In 1977 only, questions about tranquilizers were assigned to a random half of the households in which interviews were conducted.
	SEE:	"Nonmedical Use of Any Psychotherapeutic," "Pill Cards," "Prevalence," and "Recency of Use."
<b>Treatment for Drug or Alcohol Abuse</b>	1992:	The measure of treatment for drug or alcohol abuse was developed from the responses to two questions, one asking whether the respondent had received treatment for <u>drinking</u> in the past 12 months and the other asking whether the respondent had received treatment for <u>drug use</u> in the past 12 months. Respondents who answered "yes" to either of those questions were counted as having received treatment for drug or alcohol abuse.
	SEE:	"Alcohol Abuse Treatment" and "Drug Abuse Treatment."
<b>Urbanized Area</b>	1992:	Any NHSDA sample segment in the oversampled areas (DC, Chicago, Denver, LA, Miami, and NY MSAs) that included a block classified by the U.S. Bureau of the Census as part of a city and its surrounding area with a 1990 population of 1,000,000 or more.
	1990:	Data only available for DC MSA.
<b>Use in the Past Month</b>	1982-1992:	Respondent reported use within the month (30 days) prior to the interview date. Also referred to as "current use."
	1976-1979:	Reported use within "past week," "past month," or 1 or more days within the past 30 days.
	1974:	Had used within past month.
	1972:	Marijuana only--self-designated current users who reported usage "once a month or less," as well as those who reported more frequent use. Other drugs--had used within past month.
	SEE:	"Recency of Use."
<b>Use in the Past Year</b>	1985-1992:	Respondent reported use within the past year prior to the interview date.

	1982:	Respondent reported use one or more times during the year prior to the interview date. Included persons reporting that their most recent use occurred in the past month or past year, as well as those persons who (though categorized as "not sure" of most recent use) indicated that their first use of the drug occurred during the past year.
	1979:	Respondent reported use one or more times during the year prior to the interview date.
	1977:	Respondent reported use one or more times within the past calendar year.
	1972-1976:	Respondent reported use within the past year.
	SEE:	"Recency of Use."
<b>Weight</b>		A weight variable was used to adjust percentage estimates to represent the approximate age group by sex by race/ethnicity distribution in the U.S. household population. See Appendix B for more details.
<b>Welfare Assistance</b>	1991-1992:	Respondents were asked whether they received "public assistance or welfare payments from the State or local welfare office."
	NOTE:	For youth and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted in 1991 and 1992.
<b>West</b>		This census classification includes the States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
	SEE:	"Region."
<b>White</b>	1985-1992:	White, not of Hispanic origin.
	1982:	Those individuals who chose the category white or Hispanic as the category that best describes them.
	1979:	Those individuals who stated that their family origin is white or that they are of Spanish-American origin.
	1977:	Those individuals who stated that their family origin is white.
	1972-1976:	Those individuals whose racial background, according to interviewer observation, was determined to be white.
	SEE:	"Race/Ethnicity."

**APPENDIX B**  
**QUALITY OF THE DATA**

## Appendix B: Quality of the Data

All aspects of survey design and execution affect data quality. In this appendix, those procedures undertaken to ensure the quality of the data from the 1992 NHSDA and in this Main Findings report are discussed. Quality control efforts and results in the survey are discussed in terms of respondent cooperation, response rates for the various subsamples, interview and data keying verification, and data editing. Variable recodes, assessment of missing data on key drug use variables, and procedures for dealing with missing data in the analyses are considered where they affect the analytical results and their presentation in this Main Findings report. All phases of survey design, sample selection, data collection and data preparation were conducted by Research Triangle Institute (RTI).

### Field Data Collection Period and Data Preparation

#### *Data Collection Instruments*

For the 1992 NHSDA, a conscious effort was made to replicate the data collection instruments and methodology used in 1985, 1988, 1990 and 1991. The small innovations in wording and interviewer instructions that had been introduced in the 1991 NHSDA were retained in 1992. Between 1991 and 1992, several revisions occurred; primarily minor improvements in question response option, and instruction wording. As in 1991, both the English-language and Spanish-language versions of the NHSDA questionnaire were pretested, and, based on these pretests, a number of changes, mostly syntax/grammar enhancements, were made to the questionnaire, answer sheets, and respondent instructions.

An innovation implemented for the 1992 NHSDA was a quarterly data collection and reporting schedule. This was to provide for a more immediate and continuous picture of the nation's drug problems. Also implemented during the first quarter of 1992 was a small-scale field test of an alternative version of the NHSDA questionnaire. This version incorporated the use of "skip patterns" for non-users of the particular drug in question. The purpose of testing the alternative version was to determine if the use of skip patterns would affect reported drug usage rates. Approximately 1,000 interviews, distributed across all first-quarter segments, were completed using the alternative questionnaire.

#### *Interviewer Recruitment, Selection, and Training*

Field interviewers for the 1992 NHSDA were selected from the contractor's national interviewer file, other survey organizations, and local government employment agencies. Initially, 353 field interviewers were hired and sent to training. Of these, 62 (18%) were black and 53 (15%) were Hispanic. A total of 66 (19%) of those recruited were bilingual in Spanish and English. Almost all the field staff were experienced interviewers.

Twenty field supervisors managed the field interviewers. All field supervisors had proven their ability to supervise interviewers on similar studies for the contractor or other national research firms. Before interview data collection began, the field supervisors recruited the interviewer staff, trained the interviewers for counting and listing activities, prepared and monitored interviewers' assignments, and assisted with interviewer data collection training. The field supervisors were organized into four regional teams, each managed by a regional supervisor.

All interviewers working on the 1992 NHSDA participated in a comprehensive training program. About a week before the formal training sessions were held, each interviewer was provided, for study and review, a copy of the *RTI General Interviewer's Manual*, the *RTI Counting and Listing Manual*, and the *1992 NHSDA Field Interviewer's Manual*, as well as copies of the English-language household screening and data collection forms. The *1992 NHSDA Field Interviewer's Manual* provided detailed, study-specific descriptions of all procedures that the interviewers were to follow during the data collection period. This manual was designed to serve as both a training manual and a reference source during the fieldwork.

Each interviewer attended a formal training session lasting three days. The session was conducted by the contractor's senior survey operations staff assisted by the regional supervisors and field supervisors for the area, who had received training earlier for their roles in training the field interviewers. An extra half-day of training was held for bilingual interviewers to familiarize them with administering the Spanish-language version of the data collection instrument. Interviewers new to the contractor's survey research procedures arrived early for a one-day general field interviewer training session. Two videotapes were prepared for the 1992 NHSDA training. One tape was part of the contractor's general interviewer training curriculum and was shown to new interviewers. The other tape was NHSDA-specific and was shown to all interviewers. The purpose of the NHSDA-specific video was to show the entire interviewing process: contacting the household, completing screening, selecting the sampled respondent, and conducting the interview.

#### *Fieldwork—Preliminary Activities*

Before beginning the initial fieldwork of counting and listing segments, segment kits were prepared for each of the 3,218 segments and mailed to field interviewers. Interviewers listed the address or description of up to 400 housing units in each segment, and then returned the segment kit to the contractor. Each segment listing was edited to ensure that no housing units located outside the segment boundaries had been included, that listing sheets matched segment maps/sketches, and that listing order and related rules had been properly followed. Sample housing units (SHUs) were selected from segment listings by a routine designed by the sampling statisticians. A label, containing study identification information and housing unit address, was printed for each SHU and attached to a household screening form. On the form were printed the different person-selection procedures the interviewer was to follow, depending on the type of SHU and ages of residents. The household screening forms were sent to the field supervisors for assignment to field interviewers.

Field interviewers made initial contact with SHUs by mailing an introductory letter from the study director to each household one week before their first visit. The letter provided a brief description of the study and its methods, informed the recipient of the voluntary nature of participation, and assured confidentiality. One side of the one-page letter was printed in English, and the other side repeated the message in Spanish.

#### *Fieldwork—Interviewing*

Interviewers had received training in introducing themselves and the study to SHU residents, answering questions, and soliciting cooperation. They had also received training in completing the screening form, including rostering household members aged 12 or older and following the person-selection procedures to select a respondent or respondents randomly from the age-race/ethnicity strata appropriate for the household. When the sampled respondent was available and cooperative, the interview was conducted immediately following screening and person selection. A second or subsequent

visit was required to complete screening at about 60% of the SHUs, and about 50% of the interviews required a second or subsequent visit. Interviewers were required to make at least four callbacks to a SHU to complete screening and interviewing. In reality, however, unlimited callbacks were made as long as, in the opinion of the field supervisor, there was a reasonable chance the screening or the interview could be completed. In particular, repeated visits were made to interview sampled respondents. Similarly, initial refusals were not simply accepted but were assigned to other interviewers and ultimately to the field supervisors for conversion.

Throughout the field data collection period, field supervisors maintained weekly or more frequent contact with their interviewers to ensure that problems were detected and resolved as they occurred. Each interviewer mailed the forms from the first three interviews to the field supervisor for immediate review and critique. During scheduled weekly contacts, supervisors reviewed the status of each active case and advised and assisted the interviewer with problem cases. The supervisors were also responsible for reviewing each potential noninterview and for taking or directing the appropriate follow-up action. In addition, field supervisors monitored performance indicators (e.g., costs per interview, screening and interview completion rates) for each interviewer, maintained independent records on the handling and status of each SHU, and submitted weekly fieldwork status reports.

After each completed interview, the respondent was asked to complete a verification form by adding his/her name, address, and phone number so that the field interviewer's work could be verified. This form was sealed in a preaddressed envelope separate from the envelope used for mailing the interview data collection forms to the contractor. Upon receipt by the contractor, these forms were filed according to interviewer. The interviews with 15% of each interviewer's respondents were verified by experienced telephone interviewers through a few simple questions about the interviewer's visit. When verification forms did not have a telephone number but did have an address, verification by mail was attempted. Discrepancies were identified, and the appropriate field supervisor was notified by electronic mail for resolution; all discrepancies were satisfactorily resolved. Verification interviews, follow-up letters, and records of any discrepancies and their resolution were filed with the respondents' original verification forms.

#### *Manual Editing, Coding of Open-Ended Responses, and Data Entry*

For the 1992 NHSDA, manual editing of interview data collection forms was limited. Essentially, editing of the interview forms prior to data entry was restricted to checking a few critical study identification items and demographic questions for completeness, assigning missing data codes (e.g., illegible, multiple response, item or form refusal, don't know) where needed, and entering codes for open-ended responses (e.g., drug names not listed, occupation, national origin for Hispanics). When information was missing for one or more of the few interview items defined as critical (and it could not be supplied by reference to the household screening form), the interviewer was instructed to visit the respondent to get the necessary information.

Editor/coders were provided a personal copy of the *1992 NHSDA Editing Manual* for use in recording notes taken during a 1-day training session and as a reference document during editing and coding. After training, each editor/coder's work was verified by a senior editor, and additional training was provided if necessary. Subsequently, at least a 10% sample of each editor/coder's work was verified by a second editor/coder.

Data from edited interview forms were keyed directly from the forms to disk using software that provided form-specific images on the keyers' terminal screens. All forms were keyed a second time by

a different operator through a verification routine that compared both records and stopped the rekeying process when a rekeyed entry did not match the original entry, until the discrepancy had been resolved.

Immediately after data entry verification, interview data from all the different forms were consolidated into an interview record that was matched with and checked against the appropriate household screening form record. A few critical variables were checked to monitor interviewers' performance, and any problems in interview administration thus identified were reported to the appropriate field supervisor so that remedial action could be taken with the interviewer.

### *Machine Editing and Imputation*

Most editing of the 1992 NHSDA interview data was accomplished by the contractor's existing standard editing programs or by study-specific programs executed by computer. Among the standard editing routines executed were valid code checks for all variables, accounting for all missing information by assignment of "not-answered" or "legitimate skip" codes, and identification of ambiguities for resolution by reference to the original data collection forms. The rate of errors in coding and keying uncovered by these standard editing routines was less than 0.001%.

NHSDA-specific machine editing consisted primarily of checking for and resolving logical inconsistencies and recoding of raw sampling and interview variables into forms more amenable for analytical purposes. For selected key variables, response data were changed to reflect more recent use, or missing data were replaced with nonmissing values. The two different imputation procedures used are called logical and statistical imputation.

Logical imputation was used in editing the original recency-of-use variables. This procedure involved checking, for each recency-of-use variable, every other variable in an interview record that could yield evidence of use of that specific drug or class of drugs. Then the most recent indication supplied by the respondent anywhere of use of that drug was used to replace missing data in the subject drug recency-of-use variable or to change a less recent response value to a value reflecting the indication elsewhere of more recent use. Unique code values were assigned to the recency-of-use variable when such logical imputation occurred. For those recency-of-use variables with missing data for which no indication of use of the drug could be found by examination of all relevant variables in the record, a "never used" code value was assigned if there were one or more indications of such nonuse in the set of relevant variables.

At this point in the editing process, a determination was made as to whether each record in the data base contained enough information to be considered complete. To be classified as a minimally complete case, and thus to be retained in the data base, data on the recency of use of alcohol, marijuana, and cocaine at one of four levels<sup>1</sup> had to have been provided by the respondent or logically imputed from other answers supplied by the respondent. If the recency-of-use of these three drugs could not be determined after the completion of editing, then the case was omitted from the person-level data set and the sample weights of the remaining respondents were adjusted to account for the nonrespondent.

Following logical imputation, any remaining missing data for recency-of-use variables (other than for alcohol, marijuana, and cocaine), for the frequency-of-use-in-past-12-months variables, and for age, race, Hispanic origin, marital status, past-week work status, education, and health insurance variables, were

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<sup>1</sup>Past-month use, use between one month and one year ago, use more than one year ago, and never used.

imputed by using a statistically based technique known as "hot deck imputation." The first step in the hot-deck imputation procedure involved progressively sorting the data file by age, sex, Hispanic origin, and race. This sorting produced an ordered data file in which adjacent data records represent individuals with similar characteristics. A missing value for each demographic variable was then replaced by the nonmissing response for the same variable in the last encountered record in the sorted data base. After all missing age, race, and Hispanic-origin values had been statistically imputed, the file was again progressively sorted by these variables. Then a missing value for each recency-of-use, frequency-of-use-in-past-12-months, marital status, past week work status, education, and health insurance variable was replaced by the nonmissing response for the same variable in the last encountered record in the sorted data base. For each hot-deck imputation-revised variable, there is an imputation-indicator variable whose values distinguish whether the imputed variable's value originated from edited (and perhaps logically imputed) interview responses or were imputed by the hot-deck technique.

Another statistical technique, a regression-based method, was used to impute frequency of use variables and personal earnings and family income variables. Using this method of imputation, some model is specified and its parameters are estimated using the respondent data. The model is constructed so that the dependent variable of the model is the item being imputed and the independent variables are known for both item respondents and nonrespondents. With this method of imputation, to obtain an imputed response for an item nonrespondent, one uses the estimated model along with the item nonrespondent's auxiliary information. Weighted logistic regression was used to compute an estimated model for the indicator variables, and weighted ordinary least square regression was used to compute an estimated model for the dollar amounts. The explanatory variables used in these models included recency of use (four levels) of alcohol, marijuana, and cocaine, age, sex, Hispanic origin, and race. After the model parameters were estimated, the resulting model was used to predict a categorical response for each frequency-of-use item nonrespondent. As discussed above, each of alcohol, marijuana, and cocaine recency-of-use was initially determined to be at one of four levels, ranging from past-month use to never used, for each completed case. These three recency variables were subsequently extended to more levels using the regression-based model of imputation.

### **Evaluation of the 1992 NHSDA**

In the tables and discussion that follow, an assessment of the 1992 NHSDA is presented in terms of screening and interviewing response rates (including numbers of interviews targeted and achieved), interviewers' perceptions of respondents' cooperation and comprehension, and number of visits necessary to achieve the interviews.

#### ***Screening and Interviewing Response Rates***

Table B.1 presents the screening response results for the total sample. The overall screening response rate was 95%. Screenings not completed are identified by reason. Refusals and inability to contact a potential respondent resulted in the highest proportions of incomplete screenings.

Overall, interview response results are presented in Tables B.2 and B.3 for the national sample (excluding the six MSA oversamples), the six MSA oversamples, and the total U.S. sample. Overall, the interview response rate was 82.5% across the total sample of 34,942 eligible SHU members. For the national sample, the interview response rate was 81.7%, and response rates for the six oversampled MSAs ranged from 77.8% to 90.8%. Refusals and inability to contact the sampled respondent accounted for the highest proportions of incomplete interviews.

Interview response rates are presented in Table B.4 by age group and race/ethnicity. Response rates tended to be inversely related to age, with the highest response rate (86.4%) among 12- to 17-year-old sample members and the lowest response rate (80.2%) among those aged 35 and older. Conversely, refusal rates rose slightly with age. Hispanics had higher response rates than non-Hispanic sample members. The inability to find the selected person at home was lowest among Hispanics and highest for non-Hispanic nonblacks. Response rates by race/ethnicity ranged from 80.1% to 86.0%.

Table B.5 presents interview response rates by age group and region (including the six oversampled MSAs), Table B.6 by race/ethnicity and region, and Table B.7 by race/ethnicity and population density. Response rates varied by region from 78.7% in the North Central to 84.6% in the South. For all age and racial/ethnic groups, they were highest in the South. Response rates varied among the six oversampled MSAs from 77.8% for the DC MSA to 90.8% for the Miami MSA. They were somewhat higher in the more rural areas than in the more urbanized locales. As shown in Table B.7, this variation by population density ranges from a low of 76.2% response among non-MSA Hispanics to a high response rate of 90.5% among non-MSA non-Hispanic blacks.

#### *Number of Visits and Response Rates*

Tables B.8 and B.9 show the results of initial and repeated visits to SHUs to complete household screening and to obtain an interview. Although only 37.9% of all screenings were completed on the initial visit, more than 78% of all screenings had been completed after four visits. Approximately half (48%) of the interviews were completed during the screening visit, and another fifth (21.2%) of the interviews required only a second visit. By the fourth attempt, 81.8% of all interviews had been completed. Up to 9 callbacks yielded still substantial increases in the number of interviews completed, but 10 or more callbacks resulted in only slight improvements in the overall response rate.

#### *Privacy and Respondent Cooperation and Comprehension*

Interviewers reported that about 50% to 62% of the interviews, depending on the race/ethnicity of respondents, were conducted in complete privacy, as shown in Table B.10. Interviews with non-Hispanics were more likely to be completely private than those with Hispanics. Over 70% of the interviews, regardless of race/ethnicity, were virtually undisturbed with only minor distractions occurring. For 10% to 13.2% of respondents, interviewers reported that another person was present for almost the whole interview period. Among Hispanics, 13.2% of the interviews were completed with another person constantly present. Bilingual interviewers reported during debriefings that this lack of privacy stemmed both from a cultural tradition that places less value on individual privacy, a greater interest in the study, and high motivation among other family members (particularly parents of 12- to 17-year-old sample members) for the respondent to be cooperative.

Interviewers reported that 77.2% to 86.9% of the respondents, depending on race/ethnicity, were very cooperative, as shown in Table B.11. At least 93% of respondents in each racial/ethnic category were at least fairly cooperative. Most respondents were perceived as experiencing only a little or no difficulty in understanding during the interview, more than 89% of each racial/ethnic group.

## Missing Data

The issues concerning the effects of missing data on drug use prevalence estimates are different for the 1992 NHSDA than has been true for NHSDA rounds prior to 1988, while issues concerning the effects of missing data in other variables are similar.

### *Prevalence Measures and Missing Data*

After editing and imputation, there are no missing data in the 1992 NHSDA for the drug use prevalence measures or for the age, sex, race/ethnicity, adult education, current employment, health insurance, and income variables. Before statistically imputing values to replace missing data in the recency-of-use measures on which prevalence estimates are based, no recency-of-use variable had missing data for more than 4.8% of the sample cases. The three highest rates of statistically imputed data among recency-of-use items were for cigarettes (4.8%), marijuana (3.5%), and alcohol (2.4%).

### *Procedures for Handling Missing Data in Analyses*

When there are no missing data, a decision rule is not required. When there are only a few cases with missing data, analysis results are not likely to be greatly affected by how missing data are treated. When the amount of missing data is substantial, results can be appreciably affected by decisions about how to handle the missing data. Both the situations of a little missing data and substantial missing data in variables other than age, sex, race/ethnicity, adult education, current employment, and the drug use prevalence measures need to be considered in assessing how results were produced for this Main Findings report.

For some variables, a small amount of missing data may seem to create inconsistencies in comparing estimates across different tables. There are a few tables in this Main Findings report where an estimate may differ slightly from one that may be reported in or inferred from one of the basic prevalence tables, either here or in the Population Estimates report. Such situations arise because respondents whose drug use and basic demographic characteristics are not missing have missing data for the other variable(s) being analyzed (e.g., number of times used the drug in the lifetime, days used the drug in the past month). For this Main Findings report, such cases have been excluded from the analyses, with the effect that the drug use prevalence may seem to be slightly different from that reported in the basic prevalence table. Such apparent differences occur because the ratio of users to nonusers, excluded because of missing data is different from the ratio of users to nonusers in the basic prevalence table.

There are two other situations where the decision about treatment of missing data can significantly affect the interpretation of results. The first instance occurs when comparing prevalence rates for 1982, 1985, 1988, 1990, 1991, and 1992 in the trend tables. Because no data are missing for lifetime use in any of these 6 years, interpreting differences in the lifetime prevalence rates across the period from 1982 to 1992 is straightforward. However, prior to 1985, if past-year or past-month use or nonuse of a drug could not be determined, the respondent was effectively counted as a nonuser in any period for which use or nonuse was missing. Then prevalence rates were calculated by dividing the number of users by the sum of the number of users, nonusers, and missing cases. Such treatment of respondents known to have used the drug at some time in the lifetime for whom use or nonuse in the past year or month is unknown seems unwarranted because doing so results in underestimating past-year and past-month drug use. For the 1985 Main Findings report, if it was not possible to determine past-year or past-month use or nonuse of a drug, the case was excluded from the appropriate analyses. For the 1988, 1990, 1991 and 1992 Main Findings reports, the elimination of missing data for past-year and past-month drug use by

means of statistical imputation has essentially the same effect as did excluding cases with such missing data from analyses of the 1985 NHSDA data. In practice, underestimation of past-year and past-month drug use prior to 1985 appears to have been negligible because the amount of missing data has always been very small, with one exception. In 1982, counting cases known to have used alcohol at some time in their lifetime for whom past-year and past-month alcohol use was unknown as nonusers resulted in atypically low prevalence rates for the past-year and past-month periods. Nevertheless, differences between 1982 and 1985 rates of past-year and past-month alcohol use calculated both ways are negligible.

The second instance where treatment of missing data significantly affects interpretation of results occurs in Chapter 9 where problems that respondents attributed to alcohol or drugs are analyzed. Approximately 8.5% of the respondents who had used some drug and who should have answered the questions on the Drug Problems Answer Sheet (#16) failed to do so. Most of these persons smoked cigarettes or drank alcohol less often than weekly and had used no illicit drug in their lifetime. Provisional estimates of the prevalence of problems were generated in 1988 and 1990 in two ways: treating missing data as instances of no problems and excluding respondents from the analysis when their data were missing. As a result of the relatively small differences between results of these two approaches, the decision was made to treat these respondents as not having problems rather than exclude them from the analyses. This treatment is documented in both the tables and the accompanying text in the 1988, 1990 and 1991 Main Findings reports and represents a conservative strategy that errs, if at all, in the direction of underestimating the prevalence of problems thought by respondents to have been caused by their use of drugs, alcohol, or tobacco. For 1992, such respondents were again treated as not having problems rather than excluding them from the analyses.

**Table B.1 Number and Percentage of Sampled Housing Units Screened**

<b>Screening Results</b>	<b>Number</b>	<b>Percent</b>
<b>Total Sample</b>	<b>82,127</b>	<b>100.0</b>
Ineligible cases	8,473	10.3
Eligible cases	73,654	89.7
<b>Ineligible Cases</b>	<b>8,473</b>	<b>100.0</b>
Vacant	6,128	72.3
Temporary/vacation home	1,106	13.1
Not a housing unit	1,057	12.5
Other ineligible	182	2.2
<b>Eligible Cases</b>	<b>73,654</b>	<b>100.0</b>
Screening completed	69,995	95.0
Selected for interview	29,574	40.2
Not selected for interview	40,421	54.9
Screening not completed	3,659	5.0
Unable to contact	1,161	1.6
Language barrier--Hispanic	9	0.0
Language barrier--other	94	0.1
Refusal	1303	1.8
Not returned from the field	501	0.7
Physical/mental incompetent	23	0.0
Other eligible <sup>1</sup>	178	0.2
Access to structure denied	390	0.5

<sup>1</sup>Other eligibles include screening forms not received from the field and secured apartment buildings that were inaccessible.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.2 Number of Sampled Individuals Interviewed in Oversampled MSAs**

	MSA							Total U.S.
	National	Chicago	Denver	LA	Miami	NY	DC	
<b>Total Sample</b>	15,834	3,325	3,397	3,194	2,929	3,080	3,263	35,022
Ineligible HU members <sup>1</sup>	38	8	3	8	9	6	8	80
Eligible HU members	15,796	3,317	3,394	3,186	2,920	3,074	3,255	34,942
<b>Interview Completed</b>	12,897	2,592	2,759	2,691	2,650	2,711	2,532	28,832
<b>Interview Not Completed</b>								
Unable to contact	907	259	127	124	62	137	218	1,834
Physical/mental incompetent	149	26	27	19	21	14	19	275
Language barrier--Hispanic	19	0	0	0	0	3	0	22
Language barrier--other	47	15	31	56	12	24	20	205
Refusal	1,213	247	320	169	84	112	330	2,475
Parental refusal	231	62	60	41	12	19	43	468
Other eligible <sup>2</sup>	333	116	70	86	79	54	93	831

DC = District of Columbia.

HU = housing unit.

LA = Los Angeles.

MSA = Metropolitan Statistical Area.

NY = New York.

<sup>1</sup>Ineligible HU members are defined as follows:

- No one should have been selected
- Second HU member selected, but shouldn't have been
- Deceased or less than 12 years old

<sup>2</sup>Other eligibles include screening forms not received from the field and secured apartment buildings that were inaccessible.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.3 Percentage of Sampled Individuals Interviewed in Oversampled MSAs**

	MSA							Total U.S.
	National	Chicago	Denver	LA	Miami	NY	DC	
<b>Total Sample</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ineligible HU members <sup>1</sup>	0.2	0.2	0.1	0.3	0.3	0.2	0.3	0.2
Eligible HU members	99.8	99.8	99.9	99.8	99.7	99.8	99.8	99.8
<b>Interview Completed</b>	<b>81.7</b>	<b>78.1</b>	<b>81.3</b>	<b>84.5</b>	<b>90.8</b>	<b>88.2</b>	<b>77.8</b>	<b>82.5</b>
<b>Interview Not Completed</b>								
Unable to contact	5.7	7.8	3.7	3.9	2.1	4.5	6.7	5.3
Physical/mental incompetent	0.9	0.8	0.8	0.6	0.7	0.5	0.6	0.8
Language barrier - Hispanic	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Language barrier - other	0.3	0.5	0.9	1.8	0.41	0.8	0.6	0.6
Refusal	7.7	7.5	9.4	5.3	2.9	3.6	10.1	7.1
Parental refusal	1.5	1.9	1.8	1.3	0.4	0.6	1.3	1.3
Other eligible <sup>2</sup>	2.1	3.5	2.1	2.7	2.7	1.8	2.9	2.4

DC = District of Columbia.

HU = housing unit.

LA = Los Angeles.

MSA = Metropolitan Statistical Area.

NY = New York.

<sup>1</sup>Ineligible HU members are defined as follows:

No one should have been selected

Second HU member selected, but shouldn't have been

Deceased or less than 12 years old

<sup>2</sup>Other eligibles include screening forms not received from the field and secured apartment buildings that were inaccessible.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.4 Interview Results, by Age Group and Race/Ethnicity**

Race/Ethnicity	Age Group (Years)								Total	
	12-17		18-25		26-34		≥35			
	N	%	N	%	N	%	N	%	N	%
<b>Hispanic</b>										
Eligible HU members	2,177	100.0	2,456	100.0	2,142	100.0	1,534	100.0	8,309	100.0
Interview completed	1,941	89.2	2,112	86.0	1,801	84.1	1,294	84.4	7,148	86.0
No respondent home	14	0.6	33	1.3	36	1.7	16	1.0	99	1.2
Refusal	49	2.3	101	4.1	117	5.5	105	6.8	372	4.5
Other	173	8.0	210	8.6	188	8.8	119	7.8	690	8.30
<b>Non-Hispanic Black</b>										
Eligible HU members	2,149	100.0	2,028	100.0	1,856	100.0	1,647	100.0	7,680	100.0
Interview completed	1,887	87.8	1,719	84.8	1,552	83.6	1,353	82.2	6,511	84.8
No respondent home	19	0.9	36	1.8	43	2.3	27	1.6	125	1.6
Refusal	46	2.1	97	4.8	112	6.0	125	7.6	380	5.0
Other	197	9.2	176	8.7	149	8.0	142	8.6	664	8.7
<b>Non-Hispanic Nonblack</b>										
Eligible HU members	4,067	100.0	4,873	100.0	5,289	100.0	4,724	100.0	18,953	100.0
Interview completed	3,426	84.2	3,890	79.8	4,163	78.7	3,694	78.2	15,173	80.1
No respondent home	35	0.9	93	1.9	113	2.1	82	1.7	323	1.7
Refusal	147	3.6	416	8.5	602	11.4	557	11.8	1,722	9.1
Other	459	11.3	474	9.7	411	7.8	391	8.3	1,735	9.2
<b>Total</b>										
Eligible HU members	8,393	100.0	9,357	100.0	9,287	100.0	7,905	100.0	34,942	100.0
Interview completed	7,254	86.4	7,721	82.5	7,516	80.9	6,341	80.2	28,832	82.5
No respondent home	68	0.8	162	1.7	192	2.1	125	1.6	547	1.6
Refusal	242	2.9	614	6.6	831	9.0	787	10.0	2,474	7.1
Other	829	9.9	860	9.2	748	8.1	652	8.3	3,089	8.8

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Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.5 Interview Results, by Age Group and Region/MSA**

Region/MSA	Age Group (Years)								Total	
	12-17		18-25		26-34		≥ 35			
	N	%	N	%	N	%	N	%	N	%
<b>Northeast<sup>1</sup></b>										
Eligible HU members	510	100.0	614	100.0	665	100.0	540	100.0	2,329	100.0
Interview completed	419	82.2	487	79.3	530	79.7	430	79.6	1,866	80.1
No respondent home	2	0.4	15	2.4	15	2.3	6	1.1	38	1.6
Refusal	17	3.3	52	8.5	65	9.8	55	10.2	189	8.1
Other	72	14.1	60	9.8	55	8.3	49	9.1	236	10.1
<b>North Central<sup>1</sup></b>										
Eligible HU members	743	100.0	749	100.0	901	100.0	719	100.0	3,112	100.0
Interview completed	615	82.8	583	77.8	692	76.8	559	77.8	2,449	78.7
No respondent home	2	0.3	18	2.4	21	2.3	10	1.4	51	1.6
Refusal	24	3.2	76	10.2	122	13.5	95	13.2	317	10.2
Other	102	13.7	72	9.6	66	7.3	55	7.7	295	9.5
<b>South<sup>1</sup></b>										
Eligible HU members	1,613	100.0	1,830	100.0	1,888	100.0	1,465	100.0	6,796	100.0
Interview completed	1,444	89.5	1,552	84.8	1,561	82.7	1,192	81.4	5,749	84.6
No respondent home	18	1.1	45	2.5	45	2.4	27	1.8	135	2.0
Refusal	33	2.1	91	5.0	137	7.3	139	9.5	400	5.9
Other	118	7.3	142	7.8	145	7.7	107	7.3	512	7.5
<b>West<sup>1</sup></b>										
Eligible HU members	813	100.0	904	100.0	1,023	100.0	819	100.0	3,559	100.0
Interview completed	686	84.4	711	78.7	799	78.1	637	77.8	2,833	79.6
No respondent home	11	1.4	17	1.9	28	2.7	16	2.0	72	2.0
Refusal	29	3.6	75	8.3	111	10.9	92	11.2	307	8.6
Other	87	10.7	101	11.2	85	8.3	74	9.0	347	9.8
<b>Chicago MSA</b>										
Eligible HU members	883	100.0	922	100.0	765	100.0	747	100.0	3,317	100.0
Interview completed	731	82.8	735	79.7	582	76.1	544	72.8	2,592	78.1
No respondent home	12	1.4	17	1.8	22	2.9	25	3.4	76	2.3
Refusal	21	2.4	59	6.4	76	9.9	91	12.2	247	7.5
Other	119	13.5	111	12.0	85	11.1	87	11.7	402	12.1

See notes at end of table.

(continued)

**Table B.5 (Continued)**

Region/MSA	Age Group (Years)									
	12-17		18-25		26-34		≥35		Total	
	N	%	N	%	N	%	N	%	N	%
<b>Denver MSA</b>										
Eligible HU members	789	100.0	972	100.0	896	100.0	737	100.0	3394	100.0
Interview completed	659	83.5	812	83.5	725	80.9	563	76.4	2759	81.3
No respondent home	6	0.8	15	1.5	16	1.8	14	1.9	51	1.5
Refusal	34	4.3	73	7.5	101	11.3	112	15.2	320	9.4
Other	90	11.4	72	7.4	54	6.0	48	6.5	264	7.8
<b>LA MSA</b>										
Eligible HU members	846	100.0	843	100.0	780	100.0	717	100.0	3186	100.0
Interview completed	754	89.1	705	83.6	665	85.3	567	79.1	2691	84.5
No respondent home	0	0.0	6	0.7	4	0.5	8	1.1	18	0.6
Refusal	17	2.0	43	5.1	44	5.6	65	9.1	169	5.3
Other	75	8.9	89	10.6	67	8.6	77	10.7	308	9.7
<b>Miami MSA</b>										
Eligible HU members	759	100.0	811	100.0	764	100.0	586	100.0	2920	100.0
Interview completed	718	94.6	733	90.4	680	89.0	519	88.6	2650	90.8
No respondent home	1	0.1	6	0.7	5	0.7	2	0.3	14	0.5
Refusal	8	1.1	19	2.3	33	4.3	24	4.1	84	2.8
Other	32	4.2	53	6.5	46	6.0	41	7.0	172	5.9
<b>NY MSA</b>										
Eligible HU members	692	100.0	770	100.0	770	100.0	842	100.0	3074	100.0
Interview completed	608	87.9	665	86.4	676	87.8	762	90.5	2711	88.2
No respondent home	7	1.0	8	1.0	7	0.9	5	0.6	27	0.9
Refusal	19	2.8	32	4.2	36	4.7	25	3.0	112	3.6
Other	58	8.4	65	8.44	51	6.6	50	5.9	224	7.3
<b>DC MSA</b>										
Eligible HU members	745	100.0	942	100.0	835	100.0	733	100.0	3255	100.0
Interview completed	620	83.2	738	78.3	606	72.6	568	77.5	2532	77.8
No respondent home	9	1.2	15	1.6	29	3.5	12	1.6	65	2.0
Refusal	40	5.4	94	10.0	106	12.7	89	12.1	329	10.1
Other	76	10.2	95	10.1	94	11.3	64	8.7	329	10.1
<b>Total</b>										
Eligible HU members	8393	100.0	9357	100.0	9287	100.0	7905	100.0	34942	100.0
Interview completed	7254	86.4	7721	82.5	7516	80.9	6341	80.2	28832	82.5
No respondent home	68	0.8	162	1.7	192	2.1	125	1.6	547	1.6
Refusal	242	2.9	614	6.6	831	9.0	787	10.0	2474	7.1
Other	829	9.9	860	9.2	748	8.1	652	8.3	3089	8.8

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HU = housing unit.  
MSA = Metropolitan Statistical Area.

<sup>1</sup>Northeast totals exclude New York MSA cases; North Central totals exclude Chicago MSA cases; South totals exclude DC MSA and Miami MSA cases; and West totals exclude Denver MSA and LA MSA cases.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.6 Interview Results, by Race/Ethnicity and Region/MSA**

Region/MSA	Race/Ethnicity						Total	
	Hispanic		Non-Hispanic Black		Non-Hispanic Nonblack			
	N	%	N	%	N	%	N	%
<b>Northeast<sup>1</sup></b>								
Eligible HU members	265	100.0	322	100.0	1,742	100.0	2,329	100.0
Interview completed	215	81.1	251	78.0	1,400	80.4	1,866	80.1
No respondent home	3	1.1	4	1.2	31	1.8	38	1.6
Refusal	13	4.9	24	7.5	152	8.7	189	8.1
Other	34	12.8	43	13.4	159	9.1	236	10.1
<b>North Central<sup>1</sup></b>								
Eligible HU members	119	100.0	546	100.0	2,447	100.0	3,112	100.0
Interview completed	97	81.5	401	73.4	1,951	79.7	2,449	78.7
No respondent home	0	0.0	20	3.7	31	1.3	51	1.6
Refusal	10	8.4	50	9.2	257	10.5	317	10.2
Other	12	10.1	75	13.7	208	8.5	295	9.5
<b>South<sup>1</sup></b>								
Eligible HU members	1,254	100.0	1,842	100.0	3,700	100.0	6,796	100.0
Interview completed	1,074	85.7	1,595	86.6	3,080	83.2	5,749	84.6
No respondent home	28	2.2	27	1.5	80	2.2	135	2.0
Refusal	54	4.3	73	4.0	273	7.4	400	5.9
Other	98	7.8	147	8.0	267	7.2	512	7.5
<b>West<sup>1</sup></b>								
Eligible HU members	1,398	100.0	240	100.0	1,921	100.0	3,559	100.0
Interview completed	1,146	82.0	175	72.9	1,512	78.7	2,833	79.6
No respondent home	23	1.7	10	4.2	39	2.0	72	2.0
Refusal	91	6.5	26	10.8	190	9.9	307	8.6
Other	138	9.9	29	12.1	180	9.4	347	9.8
<b>Chicago MSA</b>								
Eligible HU members	637	100.0	1,060	100.0	1,620	100.0	3,317	100.0
Interview completed	527	82.7	872	82.3	1,193	73.6	2,592	78.1
No respondent home	12	1.9	20	1.9	44	2.7	76	2.3
Refusal	32	5.0	58	5.5	157	9.7	247	7.5
Other	66	10.4	110	10.4	226	14.0	402	12.1

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See notes at end of table.

(continued)

**Table B.6 (Continued)**

Region/MSA	Age Group (Years)							
	Hispanic		Non-Hispanic Black		Non-Hispanic Nonblack		Total	
	N	%	N	%	N	%	N	%
<b>Denver MSA</b>								
Eligible HU members	689	100.0	264	100.0	2,441	100.0	3,394	100.0
Interview completed	590	85.6	232	87.9	1,937	79.4	2,759	81.3
No respondent home	7	1.0	1	0.4	43	1.8	51	1.5
Refusal	37	5.4	15	5.7	268	11.0	320	9.4
Other	55	8.0	16	6.1	193	7.9	264	7.8
<b>LA MSA</b>								
Eligible HU members	1,451	100.0	420	100.0	1,315	100.0	3,186	100.0
Interview completed	1,249	86.1	375	89.3	1,067	81.1	2,691	84.5
No respondent home	5	0.3	2	0.5	11	0.8	18	0.6
Refusal	62	4.3	16	3.8	91	6.9	169	5.3
Other	135	9.3	27	6.4	146	11.1	308	9.7
<b>Miami MSA</b>								
Eligible HU members	1,431	100.0	930	100.00	559	100.0	2,920	100.00
Interview completed	1,308	91.4	874	94.0	468	83.7	2,650	90.8
No respondent home	7	0.5	2	0.2	5	0.9	14	0.5
Refusal	41	2.9	7	0.8	36	6.4	84	2.9
Other	75	5.2	47	5.1	50	8.9	172	5.9
<b>NY MSA</b>								
Eligible HU members	844	100.0	807	100.0	1,423	100.0	3,074	100.0
Interview completed	755	89.5	715	88.6	1,241	87.2	2,711	88.2
No respondent home	12	1.4	5	0.6	10	0.7	27	0.9
Refusal	19	2.3	24	3.0	69	4.9	112	3.6
Other	58	6.8	63	7.8	103	7.2	224	7.3
<b>DC MSA</b>								
Eligible HU members	221	100.0	1,249	100.0	1,785	100.0	3,255	100.0
Interview completed	187	84.6	1,021	81.5	1,324	74.2	2,532	77.8
No respondent home	2	0.9	34	2.7	29	1.6	65	2.0
Refusal	13	5.9	87	7.0	229	12.8	329	10.1
Other	19	8.6	107	8.6	203	11.4	329	10.1
<b>Total</b>								
Eligible HU members	8,309	100.0	7,680	100.0	18,953	100.0	34,942	100.0
Interview completed	7,148	86.0	6,511	84.8	15,173	80.1	28,832	82.5
No respondent home	99	1.2	125	1.7	323	1.7	547	1.6
Refusal	372	4.5	380	5.0	1,722	9.1	2,474	7.1
Other	690	8.3	664	8.7	1,735	9.2	3,089	8.8

HU = housing unit.  
MSA = Metropolitan Statistical Area.

<sup>1</sup>Northeast totals exclude New York MSA cases; North Central totals exclude Chicago MSA cases; South totals exclude DC MSA and Miami MSA cases; and West totals exclude Denver MSA and LA MSA cases.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.7 Interview Results, by Race/Ethnicity and Population Density**

Population Density	Race/Ethnicity							
	Hispanic		Non-Hispanic Black		Non-Hispanic Nonblack		Total	
	N	%	N	%	N	%	N	%
<b>1,000,000 +</b>								
Eligible HU members	6,873	100.0	6,226	100.0	12,427	100.0	25,526	100.0
Interview completed	5,933	86.3	5,275	84.7	9,769	78.6	20,977	82.2
No respondent home	74	1.1	107	1.7	210	1.7	391	1.5
Refusal	303	4.4	303	4.9	1,194	9.6	1,800	7.1
Other	563	8.2	541	8.7	1,254	10.1	2,358	9.2
<b>50,000 to 999,999</b>								
Eligible HU members	1,247	100.0	958	100.0	3,533	100.0	5,738	100.0
Interview completed	1,071	85.9	787	82.2	2,848	80.6	4,706	82.0
No respondent home	19	1.5	10	1.0	68	1.9	97	1.7
Refusal	54	4.3	66	6.9	335	9.5	455	7.9
Other	103	8.3	95	9.9	282	8.0	480	8.4
<b>Non-MSA</b>								
Eligible HU members	189	100.0	496	100.0	2,993	100.0	3,678	100.0
Interview completed	144	76.2	449	90.5	2,556	85.4	3,149	85.6
No respondent home	6	3.2	8	1.6	45	1.5	59	1.6
Refusal	15	7.9	11	2.2	193	6.5	219	6.0
Other	24	12.7	28	5.7	199	6.7	251	6.8
<b>Total</b>								
Eligible HU members	8,309	100.0	7,680	100.0	18,953	100.0	34,942	100.0
Interview completed	7,148	86.0	6,511	84.8	15,173	80.1	28,832	82.5
No respondent home	99	1.2	125	1.6	323	1.7	547	1.6
Refusal	372	4.5	380	5.0	1,722	9.1	2,474	7.1
Other	690	8.3	664	8.7	1,735	9.2	3,089	8.8

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.8 Number of Visits Required to Complete Screening**

Area	Visits	Screenings	Percent	Cumulative Percent
National	1	15,586	42.9	42.9
	2	7,625	21.0	63.8
	3	4,522	12.4	76.3
	4	2,734	7.5	83.8
	5-9	4,496	12.4	96.2
	10+	1,005	2.8	98.9
	<u>Missing</u>	392	1.1	100.0
	<b>Total</b>	<b>36,360</b>		
Chicago MSA	1	2,156	37.3	37.3
	2	1,039	18.0	55.2
	3	715	12.4	67.6
	4	436	7.5	75.1
	5-9	1,072	18.5	93.6
	10+	295	5.1	98.7
	<u>Missing</u>	73	1.3	100.0
	<b>Total</b>	<b>5,786</b>		
Denver MSA	1	2,519	37.9	37.9
	2	1,358	20.4	58.3
	3	959	14.4	72.7
	4	567	8.5	81.3
	5-9	924	13.9	95.2
	10+	256	3.9	99.0
	<u>Missing</u>	65	1.0	100.0
	<b>Total</b>	<b>6,648</b>		
LA MSA	1	1,861	34.9	34.9
	2	1,100	20.6	55.5
	3	718	13.5	68.9
	4	528	9.9	78.8
	5-9	936	17.5	96.3
	10+	153	2.9	99.2
	<u>Missing</u>	42	0.8	100.0
	<b>Total</b>	<b>5,338</b>		
Miami MSA	1	1,922	43.7	43.7
	2	790	18.0	61.6
	3	535	12.2	73.8
	4	341	7.8	81.5
	5-9	563	12.8	94.3
	10+	154	3.5	97.8
	<u>Missing</u>	95	2.2	100.0
	<b>Total</b>	<b>4,400</b>		

See notes at end of table.

(continued)

Table B.8 (Continued)

Area	Visits	Screenings	Percent	Cumulative Percent
NY MSA	1	1,598	27.8	27.8
	2	1,241	21.6	49.5
	3	850	14.8	64.3
	4	569	9.9	74.2
	5-9	1,174	20.5	94.7
	10+	251	4.4	99.0
	<u>Missing</u>	56	1.0	100.0
	<b>Total</b>	<b>5,739</b>		
DC MSA	1	2,402	42.0	42.0
	2	1,053	18.4	60.4
	3	655	11.4	71.8
	4	412	7.2	79.0
	5-9	837	14.6	93.6
	10+	232	4.1	97.7
	<u>Missing</u>	133	2.3	100.0
	<b>Total</b>	<b>5,724</b>		
Total U.S.	1	28,044	40.1	40.1
	2	14,206	20.3	60.4
	3	8,954	12.8	73.2
	4	5,587	8.0	81.1
	5-9	10,002	14.3	95.4
	10+	2,346	3.4	98.8
	<u>Missing</u>	856	1.2	100.0
	<b>Total</b>	<b>69,995</b>		

DC = District of Columbia.

LA = Los Angeles.

MSA = Metropolitan Statistical Area.

NY = New York.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.9 Number of Visits Required to Complete Interviewing**

Area	Visits <sup>1</sup>	Interviews	Percent	Cumulative Percent
National	1	5,924	45.9	45.9
	2	2,924	22.7	68.6
	3	1,072	8.3	76.9
	4	628	4.9	81.8
	5-9	1,162	9.0	90.8
	10+	260	2.0	92.8
	<u>Missing</u>	926	7.2	100.0
	<b>Total</b>	<b>12,896</b>		
Chicago MSA	1	1,180	45.5	45.5
	2	613	23.6	69.2
	3	213	8.2	77.4
	4	122	4.7	82.1
	5-9	223	8.6	90.7
	10+	63	2.4	93.1
	<u>Missing</u>	178	6.9	100.0
	<b>Total</b>	<b>2,592</b>		
Denver MSA	1	1,112	40.3	40.3
	2	638	23.1	63.4
	3	242	8.8	72.2
	4	141	5.1	77.3
	5-9	314	11.4	88.7
	10+	110	4.0	92.7
	<u>Missing</u>	202	7.3	100.0
	<b>Total</b>	<b>2,759</b>		
LA MSA	1	1,372	51.0	51.0
	2	477	17.7	68.7
	3	225	8.4	77.1
	4	121	4.5	81.6
	5-9	238	8.8	90.4
	10+	62	2.3	92.7
	<u>Missing</u>	196	7.3	100.0
	<b>Total</b>	<b>2,691</b>		
Miami MSA	1	1,537	58.0	58.0
	2	407	15.4	73.4
	3	146	5.5	78.9
	4	83	3.1	82.0
	5-9	165	6.2	88.2
	10+	49	1.8	90.1
	<u>Missing</u>	263	9.9	100.0
	<b>Total</b>	<b>2,650</b>		

See notes at end of table.

(continued)

Table B.9 (Continued)

Area	Visits <sup>1</sup>	Interviews	Percent	Cumulative Percent
NY MSA	1	1,650	60.9	60.9
	2	493	18.2	79.0
	3	165	6.1	85.1
	4	76	2.8	87.9
	5-9	112	4.1	92.1
	10+	40	1.5	93.5
	<u>Missing</u>	175	6.5	100.0
	<b>Total</b>	<b>2,711</b>		
DC MSA	1	1,078	42.6	42.6
	2	569	22.5	65.0
	3	247	9.8	74.8
	4	139	5.5	80.3
	5-9	262	10.3	90.6
	10+	61	2.4	93.0
	<u>Missing</u>	176	7.0	100.0
	<b>Total</b>	<b>2,532</b>		
Total U.S.	1	13,853	48.0	48.0
	2	6,121	21.2	69.3
	3	2,310	8.0	77.3
	4	1,310	4.5	81.8
	5-9	2,476	8.6	90.4
	10+	645	2.2	92.7
	<u>Missing</u>	2,116	7.3	100.0
	<b>Total</b>	<b>28,832</b>		

DC = District of Columbia.

LA = Los Angeles.

MSA = Metropolitan Statistical Area.

NY = New York.

<sup>1</sup>Numbers of visits to complete an interview in excess of one represent the visit to complete screening and any additional visits required to complete interviewing. Any visits to a selected household before the visit when screening was completed are not included.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.10 Interviewer's Assessment of Respondent's Level of Privacy During Interview, by Age and Ethnicity of Respondent**

Race/Ethnicity and Interviewer Assessment	Age Group (Years)				Total
	12-17	18-25	26-34	≥35	
<b>Hispanic</b>					
Total number	1,941	2,112	1,801	1,294	7,148
Level of privacy (percent of total)					
01 - Completely private	39.4	52.7	51.6	59.3	50.0
02 -	4.6	3.5	2.7	2.8	3.5
03 - Minor distractions	17.9	18.7	19.8	14.3	17.9
04 -	1.3	1.4	2.2	1.3	1.6
05 - Person(s) in room 1/3 of time	13.4	8.9	8.2	6.9	9.6
06 -	0.7	0.6	0.5	0.4	0.6
07 - Serious interruptions > 1/2 time	1.5	0.9	1.7	1.5	1.4
08 -	0.3	0.1	0.2	0.1	0.2
09 - Constant presence of other people	18.2	11.6	10.9	11.2	13.2
10 - Not sure	2.7	1.5	2.2	2.2	2.1
<b>Non-Hispanic Black</b>					
Total number	1,887	1,719	1,552	1,353	6,511
Level of privacy (percent of total)					
01 - Completely private	41.8	58.8	60.7	67.8	56.2
02 -	4.8	4.5	3.5	3.0	4.0
03 - Minor distractions	15.1	14.3	15.5	11.5	14.2
04 -	2.0	1.7	1.6	1.4	1.7
05 - Person(s) in room 1/3 of time	14.6	6.5	6.4	6.3	8.8
06 -	1.2	0.8	0.7	0.5	0.8
07 - Serious interruptions > 1/2 time	2.2	1.5	2.0	0.8	1.7
08 -	0.4	0.2	0.3	0.1	0.2
09 - Constant presence of other people	15.6	9.9	7.6	6.7	10.4
10 - Not sure	2.3	1.9	1.7	1.9	2.0
<b>Non-Hispanic Nonblack</b>					
Total number	3,426	3,890	4,163	3,694	15,173
Level of privacy (percent of total)					
01 - Completely private	48.8	64.6	63.8	69.5	62.0
02 -	3.9	3.2	2.4	1.7	2.8
03 - Minor distractions	14.3	11.5	14.7	10.4	12.8
04 -	1.2	1.2	1.2	0.8	1.1
05 - Person(s) in room 1/3 of time	12.7	6.5	5.8	5.9	7.5
06 -	0.8	0.7	0.4	0.4	0.6
07 - Serious interruptions > 1/2 time	1.4	0.8	1.2	1.0	1.1
08 -	0.2	0.4	0.3	0.1	0.3
09 - Constant presence of other people	14.9	9.2	8.4	8.1	10.0
10 - Not sure	1.8	1.9	1.9	2.2	2.0

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table B.11 Interviewer's Assessment of Respondent's Level of Cooperation and Understanding, by Age and Ethnicity of Respondent**

Race/Ethnicity and Interviewer Assessment	Age Group (Years)				Total
	12-17	18-25	26-34	≥35	
<b>Hispanic</b>					
Total number	1,941	2,112	1,801	1,294	7,148
Level of cooperation (percent of total)					
Very cooperative	84.9	82.2	79.8	80.3	82.0
Fairly cooperative	10.8	13.2	13.6	13.4	12.7
Not very cooperative	2.0	2.7	3.3	3.2	2.8
Openly hostile	0.1	0.0	0.2	0.4	0.1
No response	2.3	1.9	3.1	2.6	2.4
Level of understanding (percent of total)					
No difficulty	79.1	77.4	71.3	67.9	74.6
Just a little difficulty	14.0	14.3	17.8	16.9	15.6
A fair amount of difficulty	4.4	5.2	7.0	9.4	6.2
A lot of difficulty	1.2	2.3	2.4	4.4	2.4
No response	1.2	0.9	1.4	1.4	1.2
<b>Non-Hispanic Black</b>					
Total number	1,887	1,719	1,552	1,353	6,511
Level of cooperation (percent of total)					
Very cooperative	81.7	76.6	73.8	75.8	77.2
Fairly cooperative	13.4	16.6	18.2	16.1	15.9
Not very cooperative	1.6	3.3	4.4	4.1	3.3
Openly hostile	0.3	1.0	0.6	1.0	0.7
No response	3.0	2.6	3.0	3.0	2.9
Level of understanding (percent of total)					
No difficulty	68.4	77.3	75.1	72.6	73.2
Just a little difficulty	20.3	14.6	14.8	14.8	16.4
A fair amount of difficulty	7.9	5.2	6.7	7.0	6.7
A lot of difficulty	1.6	1.6	2.2	4.0	2.2
No response	1.6	1.3	1.2	1.6	1.5
<b>Non-Hispanic Nonblack</b>					
Total number	3,426	3,890	4,163	3,694	15,173
Level of cooperation (percent of total)					
Very cooperative	89.9	87.7	87.2	82.8	86.9
Fairly cooperative	6.4	7.6	8.1	11.6	8.4
Not very cooperative	1.0	1.6	2.3	2.4	1.8
Openly hostile	0.2	0.3	0.2	0.4	0.3
No response	2.5	2.8	2.2	2.8	2.6
Level of understanding (percent of total)					
No difficulty	85.8	89.4	90.1	87.0	88.2
Just a little difficulty	9.4	6.6	5.6	7.3	7.2
A fair amount of difficulty	2.9	2.0	2.1	2.8	2.4
A lot of difficulty	0.6	0.6	0.8	1.5	0.9
No response	1.2	1.5	1.3	1.4	1.3

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**APPENDIX C**

**SAMPLING AND STATISTICAL INFERENCE**

## Appendix C: Sampling and Statistical Inference

### Sampling Error and Confidence Intervals

In the 1992 National Household Survey on Drug Abuse (NHSDA), sampling error occurs due to the random process of sampling the total population of inferential interest (i.e., the civilian, noninstitutionalized population age 12 and older of the United States). Other NHSDA reports have used 95% confidence intervals to quantify sampling error. Because the estimates in the NHSDA are frequently small percentages, the confidence intervals were based on logit transformations. Logit transformations yield asymmetric interval boundaries that provide a more suitable measure of sampling error for small percentages.

To illustrate, let the proportion  $P_d$  represent the true prevalence rate for a particular analysis domain "d." Then the logit transformation of  $P_d$ , commonly referred to as the "log odds," is defined as

$$L = \ln[p_d/(1-p_d)]$$

where "ln" denotes the natural logarithm.

Letting  $p_d$  be the estimate of the proportion, the log odds estimate becomes  $\hat{L} = \ln[p_d/(1-p_d)]$ . Then the lower and upper limits of L are calculated as

$$A = \hat{L} - K \left[ \frac{\sqrt{\text{var}(p_d)}}{P_d(1-p_d)} \right]$$

$$B = \hat{L} + K \left[ \frac{\sqrt{\text{var}(p_d)}}{P_d(1-p_d)} \right]$$

where  $\text{var}(p_d)$  is the variance estimate of  $p_d$ , and K is the constant chosen to yield the proper level of confidence (e.g.,  $K = 1.96$  for 95% confidence limits).

Applying the inverse logit transformation to A and B above yields a confidence interval for  $p_d$  as follows:

$$P_{d,lower} = \frac{1}{1 + \exp(-A)}$$

$$P_{d,upper} = \frac{1}{1 + \exp(-B)}$$

where "exp" denotes the inverse log transformation. The upper and lower limits of the percentage estimate are obtained by simply multiplying the upper and lower limits of  $p$  by 100.

Corresponding to the percentage estimates, the number of drug users,  $Y_d$ , can be estimated as

$$\hat{Y}_d = \hat{N}_d * P_d$$

where

$\hat{N}_d$  = estimated population total for domain  $d$

$P_d$  = estimated proportion for domain  $d$ .

The confidence interval for  $\hat{Y}_d$  is obtained by multiplying the lower and upper limits of the proportion confidence interval by  $\hat{N}_d$ .

In addition, the variance of  $\hat{Y}_d$  can be estimated as

$$var(\hat{Y}_d) = \hat{N}_d^2 * var(p_d)$$

For the 1992 NHSDA, the design-based variance was estimated using a Taylor series linearization. For a given variance estimate, the associated design effect is the ratio of the design-based variance estimate over the variance that would have been obtained from a simple random sample of the same size. Because the combined design features of stratification, clustering, and unequal weighting are expected to increase the variance estimates, the design effect should virtually always be greater than one. However, for prevalence rates near zero, the variance inflating effects of unequal weighting and clustering were sometimes underestimated, resulting in design effects less than one. Because the corresponding variance estimates were considered anomalously small, two other variance estimates were computed as quality control measures. The first was based only on the stratification and unequal weighting effects and the second was based on no effects or simple random sampling. The reported variance estimate was then the maximum of these three estimates.

As in other publications, estimates with low precision were not reported. The criterion used for suppressing estimates was based on the relative standard error (RSE). The RSE is defined as the ratio of the standard error of the estimate over the estimate. For the 1992 NHSDA reports, the log transformation of the proportion estimate was used to calculate the RSE. Specifically, percentages and corresponding population estimates were suppressed if

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

or

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

For computational purposes, this is equivalent to

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

or

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

where  $SE(p)$  equals the standard error estimate of  $p$ . The log transformation of  $p$  is used to provide a more balanced treatment of measuring the quality of small, large, and intermediate  $p$  values. The switch to  $(1-p)$  for  $p$  greater than 0.5 provides a symmetric suppression rule across the range of possible  $p$  values.

### Statistical Significance of Differences

This section describes methods used to compare prevalence estimates. Customarily, the observed difference between estimates is evaluated in terms of its statistical significance. "Statistical significance" refers to the probability that a difference as large as that observed would occur due to random error in the estimates if there were no difference in the prevalence rates for the population groups being compared. In this report, comparisons were made between estimates in the 1991 and 1992 surveys and between estimates within the 1992 survey. The significance of observed differences is reported at the 0.05, 0.01, and 0.001 levels. However, the reader may wish to compare prevalence estimates from two groups for which the significance of the difference is not reported.

To compare the prevalence of drug use for 1991 versus 1992, one can test the hypothesis of no difference in prevalence rates using the standard difference in proportions test, expressed as

$$z = \frac{|p1 - p2|}{\sqrt{\text{var}(p1) + \text{var}(p2) - 2\text{cov}(p1,p2)}}$$

where

p1 = 1991 estimated proportion

var(p1) = 1991 variance estimate for p1

p2 = 1992 estimated proportion

var(p2) = 1992 variance estimate of p2

cov(p1,p2) = covariance between p1 and p2

Under the null hypothesis of no difference in prevalence rates, Z is asymptotically distributed as a normal random variable; calculated values of Z can, therefore, be referred to the unit normal distribution to determine the corresponding probability level (i.e., p value). The covariance term -2cov(p1,p2) in the denominator of the test statistic was included because the 118 primary sampling units that were used in the 1992 NHSDA were a subset of the 125 primary sampling units that were used in the 1991 NHSDA. (See Appendix D.)

For comparing prevalence estimates within the same survey, the same Z statistic quoted above can be used. The covariance term -2cov(p1,p2) in within-survey comparisons represents the dependence between observations due to the use of cluster sampling. Since cov(p1,p2) is generally positive, tests that omitted the covariance term would be slightly conservative. That is, tests assuming independent samples generally yield test statistics that are too small and understate the statistical significance of differences between the 1991 and 1992 surveys. Since the dependence between the 1991 and 1992 samples occurred only at the PSU level, the magnitude of any such bias is likely to be small.

### Sample Design Effects and Generalized Standard Errors

This section describes methods for approximating sampling variability by computing generalized standard errors. (The standard error estimate is the square root of the variance estimate.)

Estimated standard errors have been computed for all parameter estimates appearing in this report and are available from the Office of Applied Studies (OAS) upon request. Whenever possible, these estimates should be used to compute confidence intervals and perform statistical comparisons. However, it is the goal here to provide future users of the 1992 NHSDA data base with approximate standard error estimates for situations in which NHSDA standard error estimates are not available.

Two approaches for approximating standard error estimates are presented in this section. The first uses median domain design effects. The second is based on a prediction equation obtained from

modeling design effects. These alternatives to the published standard error estimates are described below.

As noted previously, the design effect is the ratio of the design-based variance estimate divided by the variance estimate that would have been obtained from a simple random sample of the same size. Therefore, the design effect summarizes the effects of stratification, clustering, and unequal weighting on the variance of a complex sample design. Because clustering and unequal weighting are expected to increase the variance, the design effect should virtually always be greater than one.

However, as discussed earlier, design effects were frequently less than one for prevalence rates near zero. Because these values were considered spurious, another design effect estimate based only on stratification and unequal weighting effects was substituted if it was greater than the total design effect. Moreover, if both design effect estimates were less than one, a value of one was substituted.

The median design effects were based on estimates from:

- **15 illicit drug use categories:** any illicit drug use; marijuana/hashish; cocaine; crack; inhalants; hallucinogens; PCP; heroin; nonmedical use of any psychotherapeutic; nonmedical use of stimulants; nonmedical use of sedatives; nonmedical use of tranquilizers; nonmedical use of analgesics; needle use; anabolic steroids;
- **3 licit drug use categories:** cigarettes; alcohol; and smokeless tobacco; and
- **3 recency-of-use categories:** ever used; used in past year; used in past month.

For each specified domain, a median design effect was calculated from the above estimates as opposed to calculating an average design effect. Because extreme values of some design effects would have distorted the associated averages, medians were chosen to provide a better measure of the central value. The domains were defined by cross-classifications of age by sex, race/ethnicity, population density, geographic region of residence, adult education, and current employment. Design effects associated with percentage estimates exhibiting low precision were not used. Because the design effects from the licit drug use estimates tended to be larger than the design effects from the illicit drug use estimates, the median design effects were computed separately for these two classifications. Table C.1 contains the median design effects for the illicit drugs, and Table C.2 contains the median design effects for the licit drugs. These tables can be used to calculate an approximate variance estimate for a particular domain as follows:

$$\text{var}(p_d)_{\text{appx}} = \text{DEFF}_{d,\text{MED}} * [p_d(1-p_d)/n_d] \quad (\text{C-1})$$

where

$p_d$  = estimated proportion for domain d

$n_d$  = sample size for domain d

$DEFF_{d,MED}$  = median design effect for domain  $d$ .

The approximate standard error estimate for  $p_d$ ,  $SE(p_d)_{appx}$ , is simply the square root of  $var(p_d)_{appx}$ .

To approximate standard errors from estimates on the six oversampled MSAs, it is recommended that the user substitute the median domain design effects based on these areas only. Table C.3 contains these median design effects, which were computed for cross-classifications of age by sex, race/ethnicity, and socioeconomic status.

When a median design effect for a domain under investigation is not listed in Tables C.1 and C.2, an alternative standard error approximation is recommended. This approximation uses a prediction equation obtained from modeling estimated design effects. The definition of the design effect is the basis for the regression model:

$$DEFF(p) = var(p) / [p(1-p)/n]$$

where

$var(p)$  = design-based variance estimate of  $p$

$[p(1-p)/n]$  = simple random sample variance estimate of  $p$ .

Taking the log (base 10) of both sides of the above relation leads to the following log-linear model:

$$\log[DEFF(p)] = \beta_0 + \beta_1 \log(p) + \beta_2 \log(1-p) + \beta_3 \log(n)$$

where

$\beta_0, \beta_1, \beta_2, \beta_3$  = regression coefficients for the intercept,  $\log(p)$ ,  $\log(1-p)$ , and  $\log(n)$ , respectively.

Separate models were fit for the licit and illicit drug use estimates. The design effects used to calculate the medians in Tables C.1 and C.2 were used as data to fit the two models.

By substituting the fitted model into the definition of the design effect, a prediction equation for the approximate standard error is obtained:

$$SE_i(p)_{appx} = \frac{10^{(b_{0i}/2)} * p^{(1-b_{1i})/2} * (1-p)^{(1+b_{2i})/2}}{n^{(1-b_{3i})/2}}$$

where

$b_{0i}, b_{1i}, b_{2i}, b_{3i}$  = regression coefficients estimates for the intercept,  $\log(p)$ ,  $\log(1-p)$ , and  $\log(n)$ , respectively.

The index- $i$  depicts whether the standard error approximation is for a licit drug or illicit drug prevalence estimate.

After solving for the regression coefficients, the above approximation reduces to the following two prediction equations:

$$SE(p_{illegal})_{appx} = \frac{1.0498 * p^{(0.5980)} * (1-p)^{(0.7354)}}{n^{(0.4068)}} \quad (C-2)$$

and

$$SE(p_{legal})_{appx} = \frac{.7676 * p^{(0.5052)} * (1-p)^{(0.5247)}}{n^{(0.3357)}} \quad (C-3)$$

Table C.4 and Table C.5 contain generalized standard errors for various percentages (from 1% to 99%) and sample sizes (from 100 to 28,832), predicted from Equations (C-2) and (C-3). The generalized standard errors in the shaded areas of these tables correspond to estimated percentages that would not meet the precision constraint.

In summary, the user may obtain 1992 NHSDA standard error estimates from the following recommended order of sources:

1. Published standard errors from this or other reports in the 1992 NHSDA (obtainable upon request from the OAS at SAMHSA); otherwise,
2. Median domain design effects appearing in Tables C.1 through C.3 and application of Equation (C-1); otherwise,
3. Model-based prediction, using Equations (C-2) and (C-3) or Tables C.4 and C.5 for national or regional estimates. Note that this model-based prediction method would not be used for estimates from the six oversampled MSAs.

If a domain within an oversampled MSA is not presented in Table C.3, it is recommended that users choose a reported domain that is thought to be similar to the domain of interest.

Once the variance estimates have been obtained, the user may apply the methods discussed in previous sections to compute confidence intervals or make statistical comparisons.

**Table C.1 Median Design Effects of Illicit Drug Use Estimates, by Age Group and Demographic Characteristics: 1992 NHSDA**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Total</b>	<b>2.80</b>	<b>3.62</b>	<b>2.59</b>	<b>1.81</b>	<b>3.02</b>
<b>Sex</b>					
Male	2.99	3.63	2.47	1.67	2.77
Female	2.62	3.58	2.27	2.16	2.98
<b>Race/Ethnicity<sup>1</sup></b>					
White	2.02	2.62	2.02	1.46	2.18
Black	3.18	2.54	2.84	1.47	2.94
Hispanic	2.33	2.56	2.53	1.23	2.28
<b>Population Density</b>					
Large Metro	4.55	5.07	3.40	2.92	4.38
Small Metro	1.54	1.81	1.74	1.05	1.98
Nonmetro	1.38	1.63	1.35	1.01	1.53
<b>Region</b>					
Northeast	2.41	3.37	2.41	1.69	2.47
North Central	2.01	2.88	1.65	1.55	2.29
South	3.37	3.44	2.76	1.67	2.71
West	2.65	4.95	3.38	2.50	3.93
<b>Adult Education<sup>2</sup></b>					
Less than high school	N/A	3.40	3.27	2.11	2.54
High school graduate	N/A	3.11	2.31	1.30	1.95
Some college	N/A	3.24	2.34	1.61	2.35
College graduate	N/A	3.05	2.81	2.31	2.83
<b>Current Employment<sup>3</sup></b>					
Full-time	N/A	3.67	2.76	2.32	2.98
Part-time	N/A	3.12	2.02	1.51	2.17
Unemployed	N/A	3.07	2.53	2.12	2.83
Other <sup>4</sup>	N/A	3.29	2.34	2.13	2.54

N/A: Not applicable.

<sup>1</sup>The category "Other for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable of 12- to 17-year-olds.

<sup>3</sup>Data on current employment are not applicable for 12- to 17-year-olds.

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table C.2 Median Design Effects of Licit Drug Use Estimates, by Age Group and Demographic Characteristics: 1992 NHSDA**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
Total	3.59	4.63	3.75	4.66	9.37
Sex					
Male	3.92	4.28	2.95	3.62	6.76
Female	2.99	3.01	2.29	3.19	6.45
Race/Ethnicity <sup>1</sup>					
White	2.42	3.38	3.02	3.74	6.86
Black	2.95	2.63	2.40	3.15	5.35
Hispanic	2.91	2.39	2.57	2.10	4.35
Population Density					
Large Metro	4.31	3.82	4.11	5.20	8.14
Small Metro	1.99	2.22	2.29	2.44	5.56
Nonmetro	1.45	2.55	2.46	2.97	6.44
Region					
Northeast	2.73	3.07	3.39	3.00	4.56
North Central	2.68	3.39	3.45	3.00	6.02
South	3.55	4.40	4.63	4.33	9.40
West	3.57	6.37	3.97	4.94	7.42
Adult Education <sup>2</sup>					
Less than high school	N/A	2.96	3.51	4.39	7.41
High school graduate	N/A	3.27	2.56	3.96	6.27
Some college	N/A	3.24	2.30	3.15	4.77
College graduate	N/A	2.57	3.02	3.12	4.39
Current Employment <sup>3</sup>					
Full-time	N/A	3.26	3.26	3.83	6.57
Part-time	N/A	3.08	2.19	3.10	4.96
Unemployed	N/A	2.77	2.68	3.55	4.94
Other <sup>4</sup>	N/A	4.79	2.32	3.53	5.99

N/A: Not applicable.

<sup>1</sup>The category "Other for Race/Ethnicity is not included.

<sup>2</sup>Data on adult education are not applicable of 12- to 17-year-olds.

<sup>3</sup>Data on current employment are not applicable for 12- to 17-year-olds.

<sup>4</sup>Retired, disabled, homemaker, student, or "other."

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table C.3 Median Design Effects for the Six Oversampled MSAs, by Age Group and Demographic Characteristics: 1992 NHSDA**

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Chicago MSA</b>					
Total	1.78	1.53	1.44	1.15	1.77
Sex					
Male	2.12	1.51	1.51	1.00	1.82
Female	1.47	1.60	1.34	1.38	1.61
Race/Ethnicity <sup>1</sup>					
White	1.60	1.52	1.40	1.30	1.45
Black	2.22	1.54	1.51	1.00	1.99
Hispanic	1.27	1.64	1.39	1.27	1.97
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.33	1.51	1.38	1.55	2.37
Other SES	1.62	1.34	1.23	1.07	1.37
<b>Denver MSA</b>					
Total	1.49	1.64	1.37	1.50	2.14
Sex					
Male	1.63	1.48	1.39	1.55	2.56
Female	1.44	1.55	1.33	1.27	1.63
Race/Ethnicity <sup>1</sup>					
White	1.36	1.50	1.37	1.21	1.76
Black	*	1.18	1.00	*	1.21
Hispanic	1.73	1.68	1.31	1.00	2.00
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.26	1.48	1.54	1.02	1.68
Other SES	1.21	1.47	1.17	1.45	2.01
<b>Washington, DC, MSA</b>					
Total	1.65	1.70	1.47	1.36	1.79
Sex					
Male	1.65	1.59	1.40	1.49	1.86
Female	1.32	1.62	1.44	1.36	1.95
Race/Ethnicity <sup>1</sup>					
White	1.59	1.48	1.42	1.21	1.59
Black	1.15	1.54	1.16	1.18	1.39
Hispanic	*	1.37	*	*	1.56
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.26	1.41	1.19	1.08	1.46
Other SES	1.31	1.49	1.41	1.15	1.62

(continued)

Table C.3 (Continued)

Demographic Characteristic	Age Group (Years)				Total
	12-17	18-25	26-34	≥ 35	
<b>Los Angeles MSA</b>					
Total	1.31	1.53	1.38	1.56	2.28
Sex					
Male	1.26	1.45	1.21	1.09	1.84
Female	1.28	1.55	1.62	1.69	2.08
Race/Ethnicity <sup>1</sup>					
White	1.10	1.54	1.40	1.02	1.55
Black	1.57	1.37	1.37	1.20	1.57
Hispanic	1.43	1.32	1.32	1.19	1.53
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.00	1.34	1.36	1.00	1.42
Other SES	1.41	1.67	1.28	1.48	2.39
<b>Miami MSA</b>					
Total	1.30	1.60	1.72	1.18	2.25
Sex					
Male	1.40	1.35	1.44	1.46	2.03
Female	1.16	1.83	1.66	1.00	1.53
Race/Ethnicity <sup>1</sup>					
White	1.22	1.47	1.27	1.00	1.40
Black	1.43	1.26	1.14	1.05	1.75
Hispanic	1.33	1.59	1.62	1.24	1.53
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.22	1.19	1.37	1.26	2.21
Other SES	1.26	1.47	1.59	1.02	1.72
<b>New York MSA</b>					
Total	1.25	1.43	1.55	1.31	2.15
Sex					
Male	1.51	1.41	1.43	1.11	1.93
Female	1.36	1.44	1.39	1.48	1.58
Race/Ethnicity <sup>1</sup>					
White	1.04	1.56	1.74	1.47	2.03
Black	1.18	1.67	1.66	1.22	2.01
Hispanic	1.46	1.16	1.20	1.42	1.03
Socioeconomic Status of Area					
Low SES <sup>2</sup>	1.39	1.20	1.45	1.13	1.38
Other SES	1.13	1.40	1.45	1.21	1.88

\*Not enough estimates to produce reliable median.

<sup>1</sup>The category "Other" for Race/Ethnicity is not included.

<sup>2</sup>Low SES is defined as the third of population segments in the urbanized area with the lowest housing value and rent.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**Table C.4 Generalized Standard Errors for Estimated Percentages of Illicit Drug Use Estimates: 1992 NHSDA**

Sample Size for Base of Percentage, n	Estimated Percent (Proportion, p, Multiplied by 100)																
	1	2	3	5	10	20	30	40	50	60	70	80	90	95	97	98	99
100	1.02	1.53	1.94	2.59	3.77	5.23	6.04	6.40	6.40	6.06	5.37	4.32	2.78	1.73	1.20	0.90	0.54
300	0.65	0.98	1.24	1.66	2.41	3.34	3.86	4.10	4.09	3.87	3.44	2.76	1.78	1.10	0.77	0.57	0.35
500	0.53	0.80	1.01	1.35	1.96	2.72	3.14	3.33	3.32	3.15	2.79	2.24	1.45	0.90	0.62	0.47	0.28
700	0.46	0.69	0.88	1.17	1.71	2.37	2.74	2.90	2.90	2.74	2.44	1.96	1.26	0.78	0.54	0.41	0.25
900	0.42	0.63	0.79	1.06	1.54	2.14	2.47	2.62	2.62	2.48	2.20	1.77	1.14	0.71	0.49	0.37	0.22
1,000	0.40	0.60	0.76	1.01	1.48	2.05	2.37	2.51	2.51	2.37	2.11	1.69	1.09	0.68	0.47	0.35	0.21
1,250	0.36	0.55	0.69	0.93	1.35	1.87	2.16	2.29	2.29	2.17	1.92	1.55	1.00	0.62	0.43	0.32	0.19
1,500	0.34	0.51	0.64	0.86	1.25	1.74	2.01	2.13	2.13	2.01	1.79	1.44	0.93	0.57	0.40	0.30	0.18
1,750	0.32	0.48	0.60	0.81	1.18	1.63	1.88	2.00	2.00	1.89	1.68	1.35	0.87	0.54	0.37	0.28	0.17
2,000	0.30	0.45	0.57	0.77	1.11	1.55	1.79	1.89	1.89	1.79	1.59	1.28	0.82	0.51	0.36	0.27	0.16
2,500	0.28	0.41	0.52	0.70	1.02	1.41	1.63	1.73	1.73	1.63	1.45	1.17	0.75	0.47	0.32	0.24	0.15
3,000	0.26	0.38	0.49	0.65	0.94	1.31	1.51	1.61	1.60	1.52	1.35	1.08	0.70	0.43	0.30	0.22	0.14
4,000	0.23	0.34	0.43	0.58	0.84	1.17	1.35	1.43	1.43	1.35	1.20	0.96	0.62	0.39	0.27	0.20	0.12
5,000	0.21	0.31	0.39	0.53	0.77	1.06	1.23	1.30	1.30	1.23	1.09	0.88	0.57	0.35	0.24	0.18	0.11
7,500	0.18	0.26	0.33	0.45	0.65	0.90	1.04	1.11	1.10	1.05	0.93	0.75	0.48	0.30	0.21	0.15	0.09
10,000	0.16	0.24	0.30	0.40	0.58	0.80	0.93	0.98	0.98	0.93	0.83	0.66	0.43	0.27	0.18	0.14	0.08
15,000	0.13	0.20	0.25	0.34	0.49	0.68	0.79	0.83	0.83	0.79	0.70	0.56	0.36	0.22	0.16	0.12	0.07
20,000	0.12	0.18	0.22	0.30	0.44	0.61	0.70	0.74	0.74	0.70	0.62	0.50	0.32	0.20	0.14	0.10	0.06
25,000	0.11	0.16	0.20	0.27	0.40	0.55	0.64	0.68	0.68	0.64	0.57	0.46	0.29	0.18	0.13	0.09	0.06
28,832 <sup>1</sup>	0.10	0.15	0.19	0.26	0.38	0.52	0.60	0.64	0.64	0.60	0.54	0.43	0.28	0.17	0.12	0.09	0.05

Note: Generalized standard errors in the shaded area correspond to estimated proportions that do not meet the precision constraint. They are predicted from the following equation:  $SE = 100 * [1.0498 * p^{(0.5980)} * (1-p)^{(0.7354)} / n^{(0.4068)}]$ .

<sup>1</sup>The total sample size for the 1992 NHSDA is 28,832.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

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**Table C.5 Generalized Standard Errors for Estimated Percentages of Licit Drug Use Estimates: 1992 NHSDA**

Sample Size for Base of Percentage, n	Estimated Percent (Proportion, p, Multiplied by 100)																
	1	2	3	5	10	20	30	40	50	60	70	80	90	95	97	98	99
100	1.59	2.24	2.74	3.51	4.84	6.45	7.38	7.88	8.01	7.81	7.26	6.28	4.63	3.31	2.56	2.08	1.45
300	1.10	1.55	1.89	2.42	3.34	4.46	5.11	5.45	5.54	5.40	5.02	4.34	3.20	2.29	1.77	1.44	1.00
500	0.93	1.31	1.60	2.04	2.82	3.76	4.30	4.59	4.67	4.55	4.23	3.66	2.70	1.93	1.49	1.21	0.85
700	0.83	1.17	1.42	1.82	2.52	3.36	3.84	4.10	4.17	4.07	3.78	3.27	2.41	1.72	1.33	1.08	0.76
900	0.76	1.07	1.31	1.68	2.31	3.09	3.53	3.77	3.83	3.74	3.47	3.00	2.22	1.58	1.22	0.99	0.69
1,000	0.73	1.04	1.26	1.62	2.23	2.98	3.41	3.64	3.70	3.61	3.35	2.90	2.14	1.53	1.18	0.96	0.67
1,250	0.68	0.96	1.17	1.50	2.07	2.76	3.16	3.37	3.43	3.35	3.11	2.69	1.98	1.42	1.10	0.89	0.62
1,500	0.64	0.90	1.10	1.41	1.95	2.60	2.97	3.17	3.23	3.15	2.93	2.53	1.87	1.33	1.03	0.84	0.59
1,750	0.61	0.86	1.05	1.34	1.85	2.47	2.82	3.01	3.06	2.99	2.78	2.40	1.77	1.27	0.98	0.80	0.56
2,000	0.58	0.82	1.00	1.28	1.77	2.36	2.70	2.88	2.93	2.86	2.66	2.30	1.69	1.21	0.94	0.76	0.53
2,500	0.54	0.76	0.93	1.19	1.64	2.19	2.51	2.67	2.72	2.65	2.47	2.13	1.57	1.12	0.87	0.71	0.49
3,000	0.51	0.72	0.87	1.12	1.54	2.06	2.36	2.51	2.56	2.49	2.32	2.01	1.48	1.06	0.82	0.66	0.46
4,000	0.46	0.65	0.79	1.02	1.40	1.87	2.14	2.28	2.32	2.26	2.11	1.82	1.34	0.96	0.74	0.60	0.42
5,000	0.43	0.60	0.74	0.94	1.30	1.74	1.99	2.12	2.15	2.10	1.95	1.69	1.25	0.89	0.69	0.56	0.39
7,500	0.37	0.53	0.64	0.82	1.14	1.51	1.73	1.85	1.88	1.83	1.70	1.47	1.09	0.78	0.60	0.49	0.34
10,000	0.34	0.48	0.58	0.75	1.03	1.38	1.57	1.68	1.71	1.67	1.55	1.34	0.99	0.71	0.55	0.44	0.31
15,000	0.30	0.42	0.51	0.65	0.90	1.20	1.37	1.46	1.49	1.45	1.35	1.17	0.86	0.62	0.48	0.39	0.27
20,000	0.27	0.38	0.46	0.59	0.82	1.09	1.25	1.33	1.35	1.32	1.23	1.06	0.78	0.56	0.43	0.35	0.25
25,000	0.25	0.35	0.43	0.55	0.76	1.01	1.16	1.23	1.26	1.22	1.14	0.98	0.73	0.52	0.40	0.33	0.23
28,832 <sup>1</sup>	0.24	0.33	0.41	0.52	0.72	0.96	1.10	1.18	1.20	1.17	1.08	0.94	0.69	0.49	0.38	0.31	0.22

Note: Generalized standard errors in the shaded area correspond to estimated proportions that do not meet the precision constraint. They are predicted from the following equation:  $SE = 100 * [0.7676 * p^{(0.5052)} + (1-p)^{(0.5247)} / n^{(0.3357)}]$ .

<sup>1</sup>The total sample size for the 1992 NHSDA is 28,832.

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**APPENDIX D**

**SAMPLING AND WEIGHTING PROCEDURES**

## Appendix D: Sampling and Weighting Procedures

The respondent universe for the 1992 NHSDA was the civilian, noninstitutionalized population aged 12 years and older within the United States, including residents of noninstitutional group quarters (e.g., shelters, rooming houses, dormitories) as well as residents of civilian housing on military bases. Persons excluded from the universe include those with no fixed address, residents of institutional quarters (such as jails and hospitals), and active military personnel. The sample design used to survey this population was a multistage area probability sample. The 1992 sample design used a composite size measure methodology and a specially designed within-dwelling selection procedure to ensure that desired sample sizes would be achieved for subpopulations defined by age and race/ethnicity. Oversampling was used to meet specified precision constraints for these subgroups. To reduce survey costs, the design sampled Hispanics at higher rates in geographic areas where they were most concentrated. In addition, the 1992 NHSDA oversampled six Metropolitan Statistical Areas (MSAs): Chicago, Denver, Los Angeles, Miami, New York, and Washington, DC. They were oversampled in a way to allow separate estimation for their "low-socioeconomic status (low-SES) urbanized" areas versus the remainder of the MSA.

The basic sample design involved several selection stages: (a) the selection of primary areas (e.g., counties), (b) the selection of subareas (blocks or block groups) within these primary areas, (c) the selection of listing units (housing units or civilian, noninstitutionalized group quarters' units) within these subareas, (d) the selection of age group domains within sampled listing units, and (e) the selection of eligible individuals within the sampled age groups. Details of these sampling procedures are provided in the following sections.

### Selection of Primary Sampling Units

For the 1991 survey, a first-stage sampling frame was constructed that partitioned the entire land area of the 50 states and the District of Columbia into non-overlapping PSUs. These PSUs were defined in terms of counties, groups of counties, and independent cities, using 1980 census data. Within each of the PSUs, Census blocks were grouped by combining adjacent blocks to create non-overlapping area segments that contained at least 75 occupied dwellings. For the 1991 survey, a total of 125 PSUs were selected from this frame, and, for the 1992 survey, a subset of 118 of the 125 previously selected was used.

Because of the desire to oversample Hispanics, 45 of the 118 PSUs in the 1992 first-stage sample, PSUs with relatively high concentrations of Hispanics, were selected with certainty. The remaining 73 PSUs were selected from the remainder of the country with probabilities proportional to size with minimum replacement. Of the 45 Certainty PSUs, six contained special-interest MSAs that were oversampled to allow separate estimation for low-SES urbanized areas of these MSAs and for all other areas of these MSAs.

The 45 Certainty PSUs were constructed from MSAs (or adjoining MSAs) that were large enough to result in a suitable sample size for field purposes. The segments that formed the 45 Certainty PSUs were partitioned into three strata:

- Stratum 1: High-concentration Hispanic area segments. These segments had 73% or more Hispanic dwellings in 1990.

- Stratum 2: Moderate-concentration Hispanic area segments. These segments had between 21% and 73% Hispanic dwellings in 1990.
- Stratum 3: Low-concentration Hispanic area segments. These segments had less than 21% Hispanic dwellings in 1990.

A fourth stratum was created for the residual (noncertainty) portion of the United States that was defined as:

- Stratum 4: Outside the 45 Certainty PSUs, i.e., outside the 39 high Hispanic concentration Certainty PSUs and also outside the six oversampled MSAs.

An optimal allocation procedure was used to allocate the sample to the four strata listed above. The results of the allocation suggested that total survey costs would be minimized for fixed precision when Hispanics were oversampled in the strata in which they were concentrated. Once sufficient screening interviews were conducted to identify the required number of Hispanic dwellings, more than enough non-Hispanic black and non-Hispanic nonblack dwellings would be identified so that these interviews could be proportionally allocated to strata.

The 45 Certainty PSUs contain approximately 80% of the Hispanic population in the United States. They also contain approximately 50% of the non-Hispanic blacks and 40% of the non-Hispanic nonblacks in the United States. The segments of Stratum 1 have 87.6% Hispanic dwellings on average and contain 11.9% of the U.S. Hispanic population. The segments of Stratum 2 have 39.4% Hispanic dwelling units and contain 19.7% of the U.S. Hispanic population. The segments of Stratum 3 have 4.8% Hispanic dwelling units and contain 14.5% of the U.S. Hispanic population.

The remaining 74 Noncertainty PSUs were selected from Stratum 4. The Noncertainty PSUs were selected with probabilities proportional to a composite size measure. The composite size measure was defined as the sum of racial/ethnic group dwelling counts weighted by the specified racial/ethnic sampling rates. This selection scheme allowed for targeting particular racial/ethnic subpopulation sample sizes. Chromy's (1979) probability minimum replacement sequential sampling scheme was used to select these 74 PSUs with probabilities proportional to their composite size measure.

The basic design for the 1992 NHSDA was the same as that used in 1991 to oversample six MSAs—Chicago, Denver, Los Angeles, Miami, New York, and Washington, DC—in such a way that separate estimation was possible for their "low-SES urbanized" areas versus the remainder of the MSA. The "low-SES urbanized" areas were defined as the lowest third of the urbanized area dwellings in terms of SES. Urbanized areas are areas (having a total population of at least 50,000) designed by the Bureau of the Census to include the densely settled area around a large place. SES was defined based on housing value and rent. Low SES was assigned to segments that ranked in the lowest third of segments by median housing value and median rent.

For the purpose of selecting the second-stage sample (below), segments from these six MSAs were removed from the frame for Strata 1 to 3 and stratified as follows:

- Stratum 5: Chicago low-SES urbanized area segments.
- Stratum 6: Remainder of the Chicago MSA.

- Stratum 7: Denver low-SES urbanized area segments.
- Stratum 8: Remainder of the Denver MSA.
- Stratum 9: Washington, DC, low-SES urbanized area segments.
- Stratum 10: Remainder of the Washington, DC, MSA.
- Stratum 11: Los Angeles low-SES urbanized area segments.
- Stratum 12: Remainder of the Los Angeles MSA.
- Stratum 13: Miami low-SES urbanized area segments.
- Stratum 14: Remainder of the Miami MSA.
- Stratum 15: New York low-SES urbanized area segments.
- Stratum 16: Remainder of the New York MSA.
- Stratum 17: Low Hispanic and low black area segments--segments originally selected in Stratum 3 with less than 2% combined Hispanic and non-Hispanic black population according to the 1990 Census.
- Stratum 18: Noncertainty, low Hispanic and low black area segments--segments originally selected in Stratum 4 with less than 2% combined Hispanic and non-Hispanic black population according to the 1990 Census.

In the second-stage sampling, segments from Strata 5-16 were oversampled relative to the sampling rates of Strata 1-3, while segments from Strata 17-18 were undersampled relative to the sampling rates of Strata 1-3.

#### **Selection of the Second-Stage Sample: Segments within PSUs**

Area segments within each PSU were defined using aggregated blocks or enumeration districts that had at least 75 occupied dwellings according to the 1990 Census. The sample segment size allocations, based on optimal allocation and the expected precision requirements of individual strata, are given in Table D.1 for each stratum. These allocations also assumed nine completed interviews per sample segment.

Each of the six MSAs of special interest was oversampled such that separate estimation would be possible for low-SES urbanized areas and for all other areas of the MSA. The households classified as low-SES in each MSA were the one-third of households in the urbanized area which ranked lowest on a composite index of median housing value and median rent. For the six oversampled MSAs, there were no suitable indications of low income status in the 1990 Census data. Therefore, the 1980 Census data and the associated 1991 NHSDA sampling frame were combined to achieve the required oversampling of low socioeconomic status in the six oversampled MSAs.

The area segments from each stratum of each sample PSU were selected with probabilities proportional to a composite size measure. For Strata 1-4 and 17-18, the composite size measure was defined to equal a weighted average of the numbers of Hispanic, non-Hispanic black, and non-Hispanic non-black dwelling units with weights proportional to the desired racial/ethnic sampling rates. A variable number of segments was selected from each metropolitan PSU depending on the PSU's overall composite size measure. For strata of the six oversampled MSA strata (Strata 5-16), segments were also selected with probabilities proportional to a size measure. For Los Angeles and New York (Strata 11-12, 15-16), the size measure was a composite measure analogous to the racial/ethnic measure employed in Strata 1-4 and 17-18. For the remaining four special-interest MSAs (Strata 5-10, 13-14), the size measure was the 1990 Census housing unit count.

### **Selection of the Third-Stage Sample: Dwelling Units within Segments**

Projections indicated that screenings had to be completed for 67,000 dwelling units in the 1992 NHSDA in order to yield a total of approximately 28,000 completed interviews and to identify sufficient households to yield Hispanic and non-Hispanic age-domain samples of the required size. Assuming an average 94% screening completion rate and an average 89% listing eligibility rate, a total of about 80,000 dwelling unit listings had to be selected in order to yield 67,000 screeners of eligible dwelling units. A listing unit was ineligible for the study if it was (a) vacant; (b) a vacation, second, or temporary home; (c) not a dwelling unit; (d) a military facility whose occupants were only military personnel; or (e) an institutional housing facility.

The selection of dwelling unit listings was performed using systematic sampling. The sampled listings were then sent to the field for screening. Having first determined that a sampled listing was eligible for the study, the interviewer completed a dwelling roster that listed all residents aged 12 and older with their age and race/ethnicity. This roster formed the basis for the within-dwelling sampling of individuals.

### **Selection of the Fourth-Stage Sample: Persons within Dwelling Units**

Following the completion of the third-stage sampling, the interviewers screened each selected dwelling. Following screening, the dwelling was classified by race/ethnicity based on the head of the dwelling. The interviewers, then, determined the age group composition of the dwelling in terms of presence versus absence of five age domains (12- to 17-year-olds, 18- to 25-year-olds, 26- to 34-year-olds, 35- to 49-year-olds, and 50 years and older). Interviewers were provided a mechanism for selecting none, one, or two age group domains and, subsequently, one sampled person from each selected domain. The age group selection probabilities were based on the desired sample sizes for each age group by racial/ethnic domain. The probabilities of selecting the person within the age group were based on the number of persons found in the age group.

### **Weighting Procedures**

At the conclusion of data collection, sample weights were constructed that reflect the four stages of sampling described above. Specifically, for each quarter the person-level sampling weight is the product of the four stagewise sampling weights, each of which is equal to the inverse of the selection probability for that stage.

Five adjustments were made to the sampling weights at various stages of selection. Regression-based methods were used to compensate for nonresponse and sampling error. For nonresponse adjustments, logistic regression was used to model the response probability. For sampling error adjustments, an

exponential regression was used to model the ratio of the observed sample selection frequencies divided by the specified selection probabilities. Other adjustments included trimming the sample weights to reduce excessive weight variation and a poststratification to intercensal Census population projections.

The first adjustment was a poststratification for dwelling units. An adjustment factor was constructed so that when it is applied to the sample dwelling weight, the adjusted weight sums will equal specified control totals of the dwelling unit population. These specified totals were derived from county-level projections of the December 1991 housing unit count obtained from Market Statistics Inc. These housing unit counts were ratio adjusted upward to account for group quarter units. Specifically, the housing unit counts were divided by the observed fraction of all listed dwelling units in the 1991 survey, including group quarters units, that were housing units. A total of eight post-strata were formed: one for the high Hispanic concentration MSAs, six for each of the oversampled MSAs, and one for the remainder portion of the country.

The second adjustment was to compensate for dwelling nonresponse. Failure to complete the screening interview for sampled dwellings was the first type of nonresponse encountered in the survey. Sample weights were adjusted for nonresponse using a logistic adjustment. This procedure uses logistic regression to model the expected value of a zero-one response indicator given a set of predictor variables available for both respondents and nonrespondents. The algorithm used to fit the logistic regression response propensity model is a generalization of raking or iterative proportional fitting (Bishop, Fienberg, & Holland, 1975, pp.83-102). In this generalization, the weight sums of each regression variable are forced to reproduce the corresponding unadjusted weight sums over respondents and nonrespondents (Folsom, 1991). Separate models were fit to sample dwellings from different geographically or demographically defined areas related to design strata. Final models were determined by screening variables in a backward elimination process. The potential predictor variables were based primarily on 1990 Census block and enumeration district characteristics (except in the six oversampled MSAs as noted above), including percent Hispanic, percent black, percent owner-occupied households, median housing value, median rent, region, and metropolitan status. Both categorical and continuous variables were created from which main effects and interactions were defined. After obtaining the final models, the adjustment factor was calculated as the inverse of the estimated response propensity.

The third adjustment was performed on person-level weights. The distributions for these weights were examined within classes defined by strata, race/ethnicity, and age group to determine if there was a need for truncation of very large weights. When there appeared to be a need for truncation, an upper limit was established for that class. The weights were then truncated and smoothed.

The fourth adjustment was a combined adjustment compensating for the sampling error associated with subsampling persons within responding dwellings and for the bias associated with interview nonresponse. The adjustment was based on an exponential regression model subjected to a generalized raking procedure. This exponential regression modeled the ratio of observed selection frequencies and planned selection probabilities given a vector of person and dwelling unit characteristics. The dependent variable in the exponential model was a zero-one variable indicating sampled person(s) divided by the specified person selection probability. Because survey estimates on age, race/ethnicity, and sex were of primary interest, all of the main effects and interactions involving these variables were forced into the models during the backward elimination process. The contribution from the roster adjustment was small relative to the nonresponse adjustment contribution in the combined adjustment factor. By incorporating both adjustments into one factor, greater precision was achieved in the final survey estimates than if just a nonresponse adjustment was performed.

The final adjustment was a poststratification to Bureau of the Census monthly projections of the civilian, noninstitutional population age 12 and older. Because counts were not available in the projections for the full cross-classification of age, sex, race, and Hispanic origin, the pair of three-way classifications of age, sex, and race, and age, sex, and Hispanic origin were used. This adjustment was performed with the same exponential procedure used in the roster and nonresponse adjustment. The samples from each quarter were post-stratified to one-fourth of the projected population totals that were calculated for the midpoint of each quarter's data collection period. These midpoint projections were calculated as the simple average of the first of month projections for the second and third month in each quarter. The resulting weight sums for the entire sample equate to the simple average of the four quarter specific projections.

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**Table D.1 Optimal Allocation of Segments Over Strata**

<b>Stratum</b>	<b>Description of Stratum</b>	<b>Number of Segments Allocated</b>
1	High Hispanic	96
2	Moderate Hispanic	156
3	Low Hispanic-Revised	320
4	Noncertainty-Revised	568
5	Chicago MSA, Low-SES	140
6	Chicago MSA, Remainder	140
7	Denver MSA, Low-SES Urbanized	140
8	Denver MSA, Remainder	140
9	DC MSA, Low-SES Urbanized	140
10	DC MSA, Remainder	140
11	Los Angeles MSA, Low-SES Urbanized	140
12	Los Angeles MSA, Remainder	140
13	Miami MSA, Low-SES	140
14	Miami MSA, Remainder	140
15	New York MSA, Low-SES Urbanized	140
16	New York MSA, Remainder	140
17	Low Hispanic/Low Black	78
18	Noncertainty, Low Hispanic/Black	320
		<hr/> 3,218

Source: Office of Applied Studies, SAMHSA, National Household Survey on Drug Abuse, 1992.

**APPENDIX E**

**DATA ANOMALIES AFFECTING THE 1992 SURVEY**

## Appendix E: Data Anomalies Affecting the 1992 Survey\*

The preliminary 1992 National Household Survey on Drug Abuse (NHSDA) results raised some concerns among staff at the data collection contractor, Research Triangle Institute (RTI), and the sponsoring agency, Substance Abuse and Mental Health Services Administration (SAMHSA), because of certain differences between the 1992 results and the results from 1988, 1990, and 1991 surveys. The main concern was a greater than expected decline in reported drug use in 1992, primarily among blacks. Particularly puzzling was a drop in the reported lifetime use of illicit drugs which would not be expected to change from one year to the next. This pattern occurred for cigarette smoking and alcohol consumption as well as the use of illegal drugs such as marijuana, cocaine, and heroin.

Because of the survey differences between years, SAMHSA formed a Peer Review Committee (PRC) to evaluate the results from the 1992 NHSDA and to make recommendations about the release and publication of the results. Members of the PRC and their agency affiliations are listed below:

James T. Massey, Ph.D., Chair	NCHS, CDC
Marc Brodsky	NIDA, NIH
Joe Gfroerer	OAS, SAMHSA
Tom Harford, Ph.D.	NIAAA, NIH
Lana Harrison, Ph.D.	NIDA, NIH
Dale Hitchcock	OHPE, OASH
Ron Manderscheid, Ph.D.	CMHS, SAMHSA
Nancy Pearce	OHPE, OASH
Marilyn Henderson	CMHS, SAMHSA
Beatrice Rouse, Ph.D.	OAS, SAMHSA
Ron Wilson	NCHS, CDC

The PRC had its initial meeting on December 11, 1992, and met a total of five times between December 11, 1992, and February 17, 1993.

The Committee reached a series of conclusions. First, the 1992 reported drug use for blacks was consistently lower than the 1991 results. The lower rates of reported drug use in 1992 were consistent across all demographic subdomains. The lower rates were also observed for the past month, the past year, and lifetime use. This latter result was the primary concern, since the number of persons reporting that they have ever used illicit drugs (lifetime use) should change very little from one year to the next and any changes should generally be upward. Another important observation made was that higher levels of drug use were reported for blacks in 1991 versus 1988 and 1990. This led to the hypothesis that the observed differences might be caused by changes in the 1991 NHSDA rather than the 1992 survey. In order to keep the amount of work at a manageable level, the Committee agreed to restrict its analyses primarily to differences between 1991 and 1992, and lifetime drug use. The analysis was also restricted to a subset of the different types of drugs. It was reasoned that if the Committee could explain these differences it would also be able to determine which year contributed most to the changes in trends and

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\*This appendix is an abridged and edited version of the June 3, 1993 report of the Peer Review Committee on the National Household Survey on Drug Abuse, submitted to Daniel Melnick, acting director, Office of Applied Studies, Substance Abuse and Mental Health Services Administration, by Peer Review Committee chair James T. Massey, National Center for Health Statistics.

possibly whether current drug use had the same reporting anomalies as did lifetime use. A critical part of the 1991 versus 1992 and lifetime use analysis was explaining why the differences among blacks were so much greater in magnitude than differences among other race and ethnic groups.

The Committee identified and explored a series of possible methodological and substantive causes for the observed changes in drug use. Possible explanations that were studied are listed below.

<b>Possible Methodological Factors</b>	<b>Possible Substantive Factors</b>
<ul style="list-style-type: none"><li>• Sampling error and changes in the sample design</li><li>• Editing, imputation, and weighting adjustments of the data</li><li>• Sampling frame differences associated with 1980 and 1990 censuses</li><li>• Interviewer effects, including experience, workload, and characteristics of interviewers</li><li>• Seasonality of drug use behavior</li><li>• Nonresponse bias due to different response patterns</li><li>• Changes in the questionnaire and field procedures</li></ul>	<ul style="list-style-type: none"><li>• Cohort effects</li><li>• Significant numbers of drug users, especially among the black population, are no longer in the target population due to deaths and incarceration</li><li>• The number of current drug users has declined and recent quitters are less likely to report ever using drugs</li><li>• As the baby boom generation ages, former drug users who quit a number of years ago are less and less likely to report previous drug use over time</li><li>• External events, such as the Rodney King verdict, are having an adverse effect on cooperation and reporting of drug use among blacks</li></ul>

The consensus of the Committee was that the observed differences between 1991 and 1992 could not be explained by any single factor, although several small differences were found among the factors examined. A careful examination of the data in 1991 and 1992 indicated that lower levels of lifetime drug use were reported in 1992 than in 1991 after controlling for such factors as editing, imputation, weighting adjustment, interviewer effects, and sampling variability. Although no effect due to a change in survey field procedures could be found, the Committee could not rule out the possibility of a survey procedural effect. The Committee felt that a change in the attitudes among blacks was very unlikely to be the cause of the reporting difference in 1991 and 1992. It was not clear whether 1991 and 1992 was the aberrant year although trends would be more consistent if 1991 were the aberrant year. The Committee also felt that some of the decline in current drug use in 1992 was likely to reflect a real decline and some of the drop in lifetime use may have been due to a drop in current use.

In conducting its analysis of the NHSDA, the Committee concluded that the design and procedures for sampling, weighting, editing, and imputing the survey results were statistically sound. Great care had been taken by SAMHSA and RTI to implement the survey procedures and to evaluate the quality of the results. The unexpected decrease in lifetime drug use among blacks was an example of what can occasionally occur in survey estimates, particularly when a large number of different estimates are generated and comparisons are made. Often a review of the procedures will uncover an error in the process. In other cases, such as the NHSDA, an explanation for unexpected results may never be found.

**APPENDIX F**

**DRUG ANSWER SHEETS FROM QUESTIONNAIRE**

**CIGARETTES**

The first questions are about smoking tobacco.

C-1. About how old were you when you first tried a cigarette?

AGE WHEN FIRST TRIED A CIGARETTE ----- |

NEVER TRIED A CIGARETTE IN LIFETIME ----- 991 → (SKIP TO BOX A, NEXT PAGE)

C-2. Since that time, have you smoked at least 100 cigarettes in all, in your lifetime? (That's about as many as 5 packs.)

YES ----- 01

NO ----- 02 → (SKIP TO Q.C-6)

C-3. About how old were you when you first started smoking daily?

AGE WHEN FIRST STARTED SMOKING DAILY ----- |

NEVER SMOKED DAILY ----- 993 → (SKIP TO Q.C-6)

C-4. For how many years did you smoke daily?

NUMBER OF YEARS SMOKED DAILY ----- |

SMOKED DAILY LESS THAN 1 YEAR ----- 00

C-5. During the period when you smoked daily, about how many cigarettes did you smoke per day, on the average? (IF NEEDED, READ ANSWER CHOICES.)

One to five cigarettes a day ----- 01

About 1/2 pack a day (6-15 cigarettes) ----- 02

About a pack a day (16-25 cigarettes) ----- 03

About 1 1/2 packs a day (26-35 cigarettes) ----- 04

About 2 packs or more a day (over 35 cigarettes) ----- 05

C-6. When was the most recent time you smoked a cigarette? (IF NEEDED, READ ANSWER CHOICES.)

Within the past month (30 days) ----- 01

More than 1 month ago but less than 6 months ago ----- 02

6 or more months ago but less than 1 year ago ----- 03

1 or more years ago but less than 3 years ago ----- 04

3 or more years ago ----- 05

(SKIP TO BOX A, NEXT PAGE)

C-7. How many cigarettes have you smoked per day, on the average, during the past 30 days? Give me the average number per day. (IF NEEDED, READ ANSWER CHOICES.)

- Less than one cigarette a day ----- 01
- One to five cigarettes a day ----- 02
- About 1/2 pack a day (6-15 cigarettes) ----- 03
- About a pack a day (16-25 cigarettes) ----- 04
- About 1 1/2 packs a day (26-35 cigarettes) ----- 05
- About 2 packs or more a day (over 35 cigarettes) ----- 06

C-8. For about how many years have you smoked (AMOUNT FROM Q.C-7)? (IF "Less than 1 year," PROBE FOR NUMBER OF MONTHS; RECORD IN LOWER BOXES.)

NUMBER OF YEARS ® HAS SMOKED AMOUNT  
IN Q.C-7 ----- [ ]

(IF "Less than 1 year" RECORD  
NUMBER OF MONTHS HERE) ----- [ ]

A The next two questions are about smokeless tobacco, such as chewing tobacco or snuff.

C-9. When was the most recent time you used chewing tobacco or snuff or other smokeless tobacco? (IF NEEDED, READ ANSWER CHOICES.)

- Within the past month (30 days) ----- 01
  - More than 1 month ago but less than 6 months ago ----- 02
  - 6 or more months ago but less than 1 year ago ----- 03
  - 1 or more years ago but less than 3 years ago ----- 04
  - 3 or more years ago ----- 05
  - NEVER USED SMOKELESS TOBACCO IN LIFETIME ----- 91
- } (SKIP TO  
NEXT PAGE,  
ALCOHOL)

C-10. On the average, in the past 12 months, how often have you used chewing tobacco or snuff or other smokeless tobacco? (IF NEEDED, READ ANSWER CHOICES.)

- Daily in the past 12 months ----- 01
- Almost daily (3-6 days a week) ----- 02
- 1 or 2 days a week ----- 03
- Several times a month (25-51 days a year) ----- 04
- 1 or 2 times a month (12-24 days a year) ----- 05
- Every other month or so (6-11 days a year) ----- 06
- 3-5 days this past year ----- 07
- 1 or 2 days this past year ----- 08

ALCOHOL--ANSWER SHEET #1

- A-1. About how old were you the first time you had a glass of beer or wine or a drink of liquor, such as whiskey, gin, scotch, etc.? Do not include childhood sips that you might have had from an older person's drink. (IF YOU HAVE NEVER HAD A DRINK OF BEER, WINE OR LIQUOR, ONLY CIRCLE THE 991.)

Age when you had your first drink of beer, wine, or liquor -----

Never had a drink of beer, wine, or liquor in your life ----- 991

- A-2. When was the most recent time that you had an alcohol drink, that is, of beer, wine, or liquor or a mixed alcoholic drink?

Within the past month (30 days) ----- 01

More than 1 month ago but less than 6 months ago ----- 02

6 or more months ago but less than 1 year ago ----- 03

1 or more years ago but less than 3 years ago ----- 04

3 or more years ago ----- 05

Never had a drink of beer, wine, or liquor in your life ----- 91

- A-3. About how old were you when you first began to drink beer, wine or liquor once a month or more often?

IF YOU EVER DRANK ALCOHOL MONTHLY, ENTER NUMBER  
IN SPACES FOR:

Age when you began to drink alcohol at least once a month -----

IF YOU NEVER DRANK ALCOHOL MONTHLY, CIRCLE ONE NUMBER  
FOR THE ANSWER THAT BEST FITS YOU:

Used alcohol in your life but never drank alcohol once a month or more often ----- 993

Never had a drink of beer, wine, or liquor in your life ----- 991

**THE NEXT FIVE QUESTIONS ARE ABOUT DRINKING ALCOHOL IN THE PAST 30 DAYS.**

- A-4. On about how many different days did you have one or more drinks of beer, wine or liquor during the past 30 days?

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you drank any kind of alcohol in past month -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used alcohol in your life but did not drink any alcohol in the past 30 days ----- 93

Never had a drink of beer, wine, or liquor in your life ----- 91

(PLEASE TURN THE PAGE)

A-5. About how many drinks of beer, wine or liquor did you usually have in a day on the days that you drank during the past 30 days?

IF ANY, ENTER NUMBER IN SPACES FOR:

Usual number of drinks per day on the days you drank in the past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used alcohol in your life but did not drink any alcohol in the past 30 days ----- 93

Never had a drink of beer, wine, or liquor in your life ----- 91

A-6. On about how many days did you have five or more drinks of beer, wine or liquor on the same occasion during the past 30 days? By "occasion" we mean at the same time or within a couple of hours of each other.

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days in the past 30 days you drank five or more drinks -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Drank alcohol in past 30 days but did not have five or more drinks on one day ----- 00

Used alcohol in your life but did not drink any alcohol in the past 30 days ----- 93

Never had a drink of beer, wine, or liquor in your life ----- 91

A-7. What is the most you had to drink on any one day you drank beer, wine or liquor during the past 30 days?

IF ANY, ENTER NUMBER IN SPACES FOR:

Most number of drinks you had in one day in the past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used alcohol in your life but did not drink any alcohol in the past 30 days ----- 93

Never had a drink of beer, wine, or liquor in your life ----- 91

A-8. On how many days did you have this number of drinks of beer, wine or liquor in the past 30 days? (ANSWER FOR THE AMOUNT YOU RECORDED IN QUESTION A-7 ABOVE.)

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you drank amount in question A-7 in the past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used alcohol in your life but did not drink any alcohol in the past 30 days ----- 93

Never had a drink of beer, wine, or liquor in your life ----- 91

(PLEASE GO TO THE NEXT PAGE)

**THE NEXT TWO QUESTIONS ARE ABOUT DRINKING ALCOHOL IN THE PAST 12 MONTHS.**

**A-9.** On the average, how often in the past 12 months have you had any alcoholic beverage, that is, beer, wine, or liquor?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Used alcohol in your life but did not drink any alcohol in the past 12 months ----- 93
- Never had a drink of beer, wine, or liquor in your life ----- 91

**A-10.** How many times in the past 12 months have you gotten very high or drunk on alcohol, that is, beer, wine or liquor?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Drank beer, wine, or liquor in past 12 months but did not get very high or drunk ----- 09
- Used alcohol in your life but did not drink any alcohol in the past 12 months ----- 93
- Never had a drink of beer, wine, or liquor in your life ----- 91

**(PLEASE TURN TO THE NEXT PAGE)**

A-11. On those occasions when you drink alcohol, is it usually beer, wine, or liquor? (PLEASE CIRCLE ONLY ONE ANSWER.)

- Beer ----- 01
- Wine ----- 02
- Liquor ----- 03
- It varies ----- 04
- Never had a drink of beer, wine, or liquor in your life ----- 91

(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)

NOTICE

Public respondent burden for this collection of information is estimated to average 62 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate, or any other aspect of this collection of information, including suggestions for reducing this burden, to: Public Health Service Reports Clearance Officer, Attn: PRA, Hubert H. Humphrey Building, Room 721B, 200 Independence Avenue, SW, Washington, DC 20201; and to the Paperwork Reduction Project (0930-0110), Office of Management and Budget, Washington, DC 20503.

**SEDATIVES--ANSWER SHEET #2**

S-1. Circle the number next to each sedative you have ever taken for nonmedical reasons--on your own, either without your own prescription from a doctor, or in greater amounts or more often than prescribed, or for any reason other than a doctor said you should take them.

- |                   |   |  |
|-------------------|---|--|
| BUTISOL ----- 01  | TUINAL ----- 10   | CHLORAL HYDRATE ----- 17                   |
| BUTICAPS ----- 02 | DALMANE ----- 11  | PENTOBARBITAL ----- 18                     |
| AMYTAL ----- 03   | RESTORIL ----- 12                                       | SECOBARBITAL ----- 19                      |
| MEBARAL ----- 04  | HALCION ----- 13  | OTHER (SPECIFY):                           |
| PLACIDYL ----- 05 | AMOBARBITAL ----- 14                                    | _____ 20                                   |
| DORIDEN ----- 06  | PHENOBARBITAL ----- 15                                  | USED SEDATIVE,<br>DON'T KNOW NAME ----- 21 |
| NOLUDAR ----- 07  | METHAQUALONE<br>(including SOPOR,<br>QUAALUDE) ----- 16 |  |
| NEMBUTAL ----- 08 |   |  |
| SECONAL ----- 09  |   |  |

<p>If you have never taken any sedative for nonmedical reasons, circle the 91 in the box to the right. Then tell the interviewer that you are finished with this answer sheet. Otherwise, continue with S-2 below.</p>	91
--	----

S-2. About how old were you the first time you took a sedative for any nonmedical reason?

Age when you first used a sedative for a nonmedical reason -----

S-3. Altogether, about how many times in your life have you taken sedatives for any nonmedical reason?

- 1 or 2 times ----- 01
- 3 to 5 times ----- 02
- 6 to 10 times ----- 03
- 11 to 49 times ----- 04
- 50 to 99 times ----- 05
- 100 to 199 times ----- 06
- 200 or more times ----- 07

**(PLEASE TURN THE ANSWER SHEET OVER)**

S-4. When was the most recent time you took any sedative for nonmedical reasons?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05

S-5. On the average, how often in the past 12 months have you taken any sedative for nonmedical reasons?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Did not use any sedative for a nonmedical reason in the past 12 months ----- 93

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**TRANQUILIZERS--ANSWER SHEET #3**

**T-1.** Circle the number next to each tranquilizer you have ever taken for nonmedical reasons--on your own, either without a doctor's prescription, or in greater amounts or more often than prescribed, or for any reason other than a doctor said you should take them.

- |                    |                   |  |
|--------------------|-------------------|--|
| VALIUM ----- 01    | PAXIPAM ----- 10  | DIAZEPAM ----- 18                              |
| LIBRIUM ----- 02   | BUSPAR ----- 11   | SK-LYGEN ----- 19                              |
| LIMBITROL ----- 03 | MILTOWN ----- 12  | MEPROBAMATE ----- 20                           |
| MENRIUM ----- 04   | EQUANIL ----- 13  | OTHER (SPECIFY):                               |
| SERAX ----- 05     | DEPROL ----- 14   | _____ 21                                       |
| TRANXENE ----- 06  | VISTARIL ----- 15 | USED TRANQUILIZER,<br>DON'T KNOW NAME ----- 22 |
| ATIVAN ----- 07    | ATARAX ----- 16   |  |
| CENTRAX ----- 08   | DURRAX ----- 17   |  |
| XANAX ----- 09     |                   |  |

<p>If you have never taken any tranquilizer for nonmedical reasons, circle the 91 in the box to the right. Then tell the interviewer that you are finished with this answer sheet. Otherwise, continue with T-2 below.</p>	91
--	----

**T-2.** About how old were you the first time you took a tranquilizer for any nonmedical reason?

Age when you first used a tranquilizer for a nonmedical reason -----

**T-3.** Altogether, about how many times in your life have you taken tranquilizers for any nonmedical reason?

- 1 or 2 times ----- 01
- 3 to 5 times ----- 02
- 6 to 10 times ----- 03
- 11 to 49 times ----- 04
- 50 to 99 times ----- 05
- 100 to 199 times ----- 06
- 200 or more times ----- 07

**(PLEASE TURN THE ANSWER SHEET OVER)**

T-4. When was the most recent time you took any tranquilizer for nonmedical reasons?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05

T-5. On the average, how often in the past 12 months have you taken any tranquilizer for nonmedical reasons?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Did not use any tranquilizer for a nonmedical reason in the past 12 months ----- 93

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**STIMULANTS--ANSWER SHEET #4**

01

**ST-1.** Circle the number next to each stimulant you have ever taken for nonmedical reasons--on your own, either without a doctor's prescription, or in greater amounts or more often than prescribed, or for a reason other than a doctor said you should take them.

- |                      |                         |  |
|----------------------|-------------------------|--|
| DEXEDRINE ----- 01   | PRELUDIN ----- 11       | METHEDRINE ----- 21  |
| DEXAMYL ----- 02     | IONAMIN ----- 12        | METHAMPHETAMINE<br>("speed" or "ice" or<br>"crank") ----- 22 |
| ESKATROL ----- 03    | FASTIN ----- 13         | OBEDRIN-L.A. ----- 23  |
| BENZEDRINE ----- 04  | PONDIMIN ----- 14       | OTHER (SPECIFY):<br>_____ 24                                 |
| BIPHETAMINE ----- 05 | VORANIL ----- 15        | USED STIMULANT,<br>DON'T KNOW NAME ----- 25                  |
| DESOXYN ----- 06     | SANOREX ----- 16        |  |
| TENUATE ----- 07     | MAZANOR ----- 17        |  |
| TEPANIL ----- 08     | RITALIN ----- 18        |  |
| DIDREX ----- 09      | CYLERT ----- 19         |  |
| PLEGINE ----- 10     | DEXTROAMPHETAMINE -- 20 |  |

If you have never taken any stimulant for nonmedical reasons, circle the 91 in the box to the right.  
Then tell the interviewer that you are finished with this answer sheet.  
Otherwise, continue with ST-2 below.

91

**ST-2.** About how old were you the first time you took amphetamines or other stimulants for any nonmedical reason?

Age when you first used a stimulant for a nonmedical reason ----- [ \_\_\_\_\_ ]

**ST-3.** Altogether, about how many times in your life have you taken amphetamines or other stimulants for any nonmedical reason?

- |                         |    |
|-------------------------|----|
| 1 or 2 times -----      | 01 |
| 3 to 5 times -----      | 02 |
| 6 to 10 times -----     | 03 |
| 11 to 49 times -----    | 04 |
| 50 to 99 times -----    | 05 |
| 100 to 199 times -----  | 06 |
| 200 or more times ----- | 07 |

(PLEASE TURN THE ANSWER SHEET OVER)

ST-4. When was the most recent time you took any amphetamine or other stimulant for nonmedical reasons?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05

ST-5. On the average, how often in the past 12 months have you taken any amphetamine or other stimulant for nonmedical reasons?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Did not use any stimulant for a nonmedical reason in the past 12 months ----- 93

**THE NEXT TWO QUESTIONS ARE ABOUT USE OF AMPHETAMINES WITH A NEEDLE.**

ST-6. Have you ever used amphetamines with a needle?

- Yes ----- 01
- No ----- 02

ST-7. When was the most recent time you used amphetamines with a needle?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago but less than 10 years ago ----- 05
- 10 or more years ago ----- 06
- Never used any amphetamine with a needle ----- 93

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

ANALGESICS--ANSWER SHEET #5

AN-1. Circle the number next to each analgesic you have ever taken for nonmedical reasons--on your own, either without a doctor's prescription, or in greater amounts or more often than prescribed, or for a reason other than a doctor said you should take them.

- |                        |                                    |   |
|------------------------|------------------------------------|---|
| DARVON ----- 01        | TYLENOL WITH<br>CODEINE ----- 09   | ANILERIDINE ----- 16                        |
| DOLENE ----- 02        | PHENAPHEN WITH<br>CODEINE ----- 10 | MORPHINE ----- 17                           |
| SK-65 ----- 03         | TALWIN ----- 11                    | METHADONE ----- 18                          |
| WYGESIC ----- 04       | TALWIN NX ----- 12                 | STADOL ----- 19                             |
| LEVO-DROMORAN ----- 05 | TALACEN ----- 13                   | OTHER (SPECIFY):<br>_____ 20                |
| PERCODAN ----- 06      | PROPOXYPHENE ----- 14              | USED ANALGESIC,<br>DON'T KNOW NAME ----- 21 |
| DEMEROL ----- 07       | CODEINE ----- 15                   |   |
| DILAUDID ----- 08      |                                    |   |

If you have never taken any analgesic for nonmedical reasons, circle the 91 in the box to the right. Then tell the interviewer that you are finished with this answer sheet. Otherwise, continue with AN-2 below.	91
---	----

AN-2. About how old were you the first time you took an analgesic for any nonmedical reason?

Age when you first used an analgesic for a nonmedical reason -----

AN-3. Altogether, about how many times in your life have you taken analgesics for any nonmedical reason?

- 1 or 2 times ----- 01
- 3 to 5 times ----- 02
- 6 to 10 times ----- 03
- 11 to 49 times ----- 04
- 50 to 99 times ----- 05
- 100 to 199 times ----- 06
- 200 or more times ----- 07

(PLEASE TURN THE ANSWER SHEET OVER)

AN-4. When was the most recent time you took any analgesic for nonmedical reasons?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05

AN-5. On the average, how often in the past 12 months have you taken any analgesic for nonmedical reasons?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Did not use any analgesic for a nonmedical reason in the past 12 months ----- 93

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**MARIJUANA AND HASHISH--ANSWER SHEET #6**

**M-1.** About how old were you when you first had a chance to try marijuana or hash if you had wanted to?

Age when you first had a chance to try marijuana or hashish -----

Never had a chance to try marijuana or hashish in your life ----- 991

**M-2.** About how old were you the first time you actually used marijuana or hash, even once?

Age when you actually used marijuana or hash the first time -----

Never used marijuana or hashish in your life ----- 991

**M-3.** About how many times in your life have you used marijuana or hash?

1 or 2 times ----- 01

3 to 5 times ----- 02

6 to 10 times ----- 03

11 to 49 times ----- 04

50 to 99 times ----- 05

100 to 199 times ----- 06

200 or more times ----- 07

Never used marijuana or hashish in your life ----- 91

**M-4.** When was the most recent time that you used marijuana or hash?

Within the past week (7 days) ----- 01

More than 1 week ago but less than 1 month (30 days) ago ----- 02

1 or more months ago but less than 6 months ago ----- 03

6 or more months ago but less than 1 year ago ----- 04

1 or more years ago but less than 3 years ago ----- 05

3 or more years ago ----- 06

Never used marijuana or hashish in your life ----- 91

**(PLEASE TURN THE PAGE)**

**THE NEXT FIVE QUESTIONS ARE ABOUT MARIJUANA OR HASH USE IN THE PAST 30 DAYS.**

**M-5.** On about how many different days did you use marijuana or hash during the past 30 days?

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you used marijuana or hash in past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used marijuana or hash in your life but did not use any in the past 30 days ----- 93

Never used marijuana or hashish in your life ----- 91

**M-6.** On the days that you used marijuana, about how much did you smoke each day, on the average, during the past 30 days?

IF ANY, ENTER NUMBER(S) IN ONE OR BOTH SPACES FOR:

Average number of marijuana cigarettes or joints per day on the days you used marijuana in the past 30 days -----

Average number of full pipes or bongos per day on the days you used marijuana in the past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used marijuana in your life but did not smoke any marijuana in the past 30 days ----- 93

Never used marijuana in your life ----- 91

**M-7.** What is the total amount of marijuana that you used, in all, during the past 30 days?

1 to 10 joints (1/2 to 5 grams or up to 1/5 ounce) in the past 30 days ----- 01

11 to 20 joints (5-1/2 to 10 grams or 1/5 to 1/3 ounce) in the past 30 days ----- 02

About 1 ounce (21 to 85 joints or 11 to 42 grams) in the past 30 days ----- 03

About 2 ounces (86 to 145 joints or 43 to 72 grams) in the past 30 days ----- 04

3 to 4 ounces (146 to 255 joints or 73 to 127 grams) in the past 30 days ----- 05

5 to 6 ounces (256 to 370 joints or 128 to 185 grams) in the past 30 days ----- 06

More than 6 ounces in the past 30 days (WRITE IN THE AMOUNT OF MARIJUANA YOU USED DURING THE PAST 30 DAYS, IN OUNCES): \_\_\_\_\_ 77

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used marijuana in your life but did not use any marijuana in the past 30 days ----- 93

Never used marijuana in your life ----- 91

**(PLEASE GO TO THE NEXT PAGE)**

M-8. How did you obtain any marijuana that you used during the past 30 days?

PLEASE CIRCLE NUMBERS FOR ALL THE WAYS YOU OBTAINED MARIJUANA:

- Bought it from friends, acquaintances or family ----- 01
- Bought it from a dealer ----- 02
- Others shared with me ----- 03
- Given to me ----- 04
- Traded goods for it ----- 05
- Traded services for it ----- 06
- Stole it ----- 07
- Obtained it by trick or fraud ----- 08

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

- Used marijuana in your life but did not use any marijuana in the past 30 days ----- 93
- Never used marijuana in your life ----- 91

M-9. About how much money did all the marijuana you used in the past 30 days cost you? (Do not include money you spent for any marijuana that you sold or gave away.)

- Total cost of marijuana that you used in the past 30 days ----- \$
- Did not spend any money on the marijuana you used in the past 30 days ----- 0000
- Used marijuana in your life but did not use any marijuana in the past 30 days ----- 9993
- Never used marijuana in your life ----- 9991

M-11. Circle the numbers to the right of all the ways you have used marijuana in the past 12 months. (PLEASE CIRCLE ALL THAT APPLY.)

- Smoking marijuana cigarettes or joints ----- 01
- Smoking marijuana with a pipe or "bong" ----- 02
- Eating marijuana that's been baked in any kind of food ----- 03
- Chewing marijuana like chewing tobacco ----- 04
- Some other way (PLEASE DESCRIBE): \_\_\_\_\_  
\_\_\_\_\_ 05
- Used marijuana in your life but did not use any marijuana in the past 12 months ----- 93
- Never used marijuana in any form in your life ----- 91

M-12. Thinking back over your whole life, has there ever been a period when you used marijuana or hash daily or almost daily for two or more weeks?

- Yes ----- 01
- No ----- 02

(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)

**IN-1.** Circle the number to the right of each substance that you have ever sniffed or inhaled for kicks or to get high. (PLEASE CIRCLE NUMBERS FOR ALL THAT APPLY.)

- Gasoline or lighter fluids ----- 01
- Lighter gases (butane, propane) ----- 02
- Spray paints ----- 03
- Other aerosol sprays ----- 04
- Shoeshine liquid, glue, or toluene ----- 05
- Lacquer thinner or other paint solvents ----- 06
- Amyl nitrite, "poppers," locker room odorizer, "rush" ----- 07
- Halothane, ether, or other anesthetics ----- 08
- Nitrous oxide, "whippets" ----- 09
- Correction fluids, degreasers, cleaning fluids ----- 10
- Other substances you inhaled for kicks or to get high (SPECIFY): \_\_\_\_\_  
 \_\_\_\_\_ 11
- Inhaled a substance for kicks or to get high, but you don't know its name ----- 12
- Never used an inhalant for kicks or to get high in your life ----- 91

**IN-2.** About how old were you the first time you sniffed or inhaled or "huffed" one of these inhalants, even once, for kicks or to get high?

- Age when you first sniffed or inhaled one of these substances to get high \_\_\_\_\_
- Never used an inhalant for kicks or to get high in your life ----- 991

**IN-3.** About how many times in your life have you used an inhalant for kicks or to get high?

- 1 or 2 times ----- 01
- 3 to 5 times ----- 02
- 6 to 10 times ----- 03
- 11 to 49 times ----- 04
- 50 to 99 times ----- 05
- 100 to 199 times ----- 06
- 200 or more times ----- 07
- Never used an inhalant for kicks or to get high in your life ----- 91

(PLEASE TURN THE PAGE)

IN-4. When was the most recent time that you used an inhalant; that is, sniffed or inhaled something for kicks or to get high?

- Within the past week (7 days) ----- 01
- More than 1 week ago but less than 1 month (30 days) ago ----- 02
- 1 or more months ago but less than 6 months ago ----- 03
- 6 or more months ago but less than 1 year ago ----- 04
- 1 or more years ago but less than 3 years ago ----- 05
- 3 or more years ago ----- 06
- Never used an inhalant for kicks or to get high in your life ----- 91

**THE NEXT TWO QUESTIONS ARE ABOUT USE OF INHALANTS IN THE PAST 30 DAYS.**

IN-5. Circle the number to the right of each substance that you have sniffed or inhaled for kicks or to get high during the past 30 days. (PLEASE CIRCLE ALL THAT APPLY.)

IF ANY, CIRCLE NUMBERS FOR ALL SUBSTANCES YOU INHALED:

- Gasoline or lighter fluids ----- 01
- Lighter gases (butane, propane) ----- 02
- Spray paints ----- 03
- Other aerosol sprays ----- 04
- Shoeshine liquid, glue, or toluene ----- 05
- Lacquer thinner or other paint solvents ----- 06
- Amyl nitrite, "poppers," locker room odorizer, "rush" ----- 07
- Halothane, ether, or other anesthetics ----- 08
- Nitrous oxide, "whippets" ----- 09
- Correction fluids, degreasers, cleaning fluids ----- 10
- Other substances you inhaled for kicks or to get high (SPECIFY): \_\_\_\_\_  
\_\_\_\_\_ 11

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

- Inhaled something for kicks or to get high in your life but not in the past 30 days ----- 93
- Never used an inhalant for kicks or to get high in your life ----- 91

(PLEASE GO TO THE NEXT PAGE)

IN-6. During the past 30 days, on about how many different days did you use an inhalant for kicks or to get high?

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you used an inhalant for kicks/to get high in past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Inhaled something for kicks or to get high in your life but not during the past 30 days ----- 93

Never used an inhalant for kicks or to get high in your life ----- 91

**THE NEXT QUESTION IS ABOUT USE OF INHALANTS IN THE PAST 12 MONTHS.**

IN-7. On the average, how often in the past 12 months have you sniffed or inhaled any substance for kicks or to get high?

Daily in the past 12 months ----- 01

Almost daily or 3 to 6 days a week ----- 02

About 1 or 2 days a week ----- 03

Several times a month (about 25 to 51 days a year) ----- 04

1 to 2 times a month (12 to 24 days a year) ----- 05

Every other month or so (6 to 11 days a year) ----- 06

3 to 5 days in the past 12 months ----- 07

1 or 2 days in the past 12 months ----- 08

Inhaled something for kicks or to get high in your life but not in the past 12 months --- 93

Never used an inhalant for kicks or to get high in your life ----- 91

IN-8. Have you ever passed out from using any of these inhalants for kicks or to get high?

Yes ----- 01

No ----- 02

Never used an inhalant for kicks or to get high in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**COCAINE--ANSWER SHEET #8**

**THE QUESTIONS ON THIS ANSWER SHEET ARE ABOUT COCAINE IN ANY FORM, SUCH AS POWDER, "CRACK," FREE BASE, AND COCA PASTE.**

**CN-1. About how old were you when you first had a chance to try cocaine, in any form, if you had wanted to?**

Age when you first had a chance to try cocaine in any form -----

Never had a chance to try cocaine in any form ----- 991

**CN-2. About how old were you the first time you actually used cocaine, in any form, even once?**

Age when you first used cocaine in any form -----

Never used cocaine in any form in your life ----- 991

**CN-3. About how many times in your life have you used cocaine, in any form?**

1 or 2 times ----- 01

3 to 5 times ----- 02

6 to 10 times ----- 03

11 to 49 times ----- 04

50 to 99 times ----- 05

100 to 199 times ----- 06

200 or more times ----- 07

Never used cocaine in any form in your life ----- 91

**CN-4. When was the most recent time that you used cocaine, in any form?**

Within the past week (7 days) ----- 01

More than 1 week ago but less than 1 month (30 days) ago ----- 02

1 or more months ago but less than 6 months ago ----- 03

6 or more months ago but less than 1 year ago ----- 04

1 or more years ago but less than 3 years ago ----- 05

3 or more years ago ----- 06

Never used cocaine in any form in your life ----- 91

**(PLEASE TURN THE PAGE)**

**THE NEXT FOUR QUESTIONS ARE ABOUT COCAINE USE IN THE PAST 30 DAYS.**

**CN-5.** On about how many different days did you use cocaine during the past 30 days?

**IF ANY, ENTER NUMBER IN SPACES FOR:**

Number of days when you used cocaine in past 30 days -----

**IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:**

Used cocaine in your life but did not use any cocaine in the past 30 days ----- 93

Never used cocaine in any form in your life ----- 91

**CN-6.** How many grams of cocaine have you used in the past 30 days?

Used some cocaine, but less than 1/4 gram (about 4 big lines of powder or 1 to 3 rocks of "crack") ----- 01

About 1/4 gram (about 5 to 8 big lines of powder or a vial (4 to 5 rocks) of "crack") ----- 02

About 1/2 gram (about 9 to 16 big lines of powder or 1-1/2 to 3 vials (6 to 12 rocks) of "crack") ----- 03

About 1 gram (about 17 to 36 big lines of powder or 3 to 5 vials (13 to 25 rocks) of "crack") ----- 04

About 2 grams (about 37 to 60 big lines of powder or 6 to 8 vials (26 to 40 rocks) of "crack") ----- 05

About 3 grams (about 61 to 85 big lines of powder or 9 to 12 vials (41 to 60 rocks) of "crack") ----- 06

More than 3 grams in the past 30 days (WRITE IN THE AMOUNT OF COCAINE YOU USED DURING THE PAST 30 DAYS, IN GRAMS): \_\_\_\_\_ 77

**IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:**

Used cocaine in your life but did not use any cocaine in the past 30 days ----- 93

Never used cocaine in any form in your life ----- 91

**(PLEASE GO TO THE NEXT PAGE)**

CN-7. How did you obtain any cocaine that you used during the past 30 days?

PLEASE CIRCLE NUMBERS FOR ALL THE WAYS YOU OBTAINED COCAINE:

- Bought it from friends, acquaintances or family ----- 01
- Bought it from a dealer ----- 02
- Others shared with me ----- 03
- Given to me ----- 04
- Traded goods for it ----- 05
- Traded services for it ----- 06
- Stole it ----- 07
- Obtained it by trick or fraud ----- 08

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

- Used cocaine in your life but did not use any cocaine in the past 30 days ----- 93
- Never used cocaine in your life ----- 91

CN-8. About how much money did all the cocaine you used in the past 30 days cost you? (Do not include money you spent for any cocaine that you sold or gave away.)

- Total cost of cocaine that you used in the past 30 days ----- \$
- Did not spend any money on the cocaine you used in the past 30 days ----- 0000
- Used cocaine in your life but did not use any cocaine in the past 30 days ----- 9993
- Never used cocaine in any form in your life ----- 9991

**THE NEXT TWO QUESTIONS ARE ABOUT COCAINE USE IN THE PAST 12 MONTHS.**

CN-9. On the average, how often in the past 12 months have you used cocaine, in any form?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Used cocaine in your life but did not use any cocaine in the past 12 months ----- 93
- Never used cocaine in any form in your life ----- 91

(PLEASE TURN THE PAGE)

**CN-10.** Circle the numbers of all the ways you have used cocaine in the past 12 months. (PLEASE CIRCLE ALL THAT APPLY.)

- Sniffing through the nose ("snorting") ----- 01
- Swallowing or drinking ----- 02
- Injecting in a muscle or vein with a needle ----- 03
- Smoking or free basing ----- 04
- Some other way (PLEASE DESCRIBE): \_\_\_\_\_  
\_\_\_\_\_ 05
- Used cocaine in your life but did not use any cocaine in the past 12 months ----- 93
- Never used cocaine in any form in your life ----- 91

**CN-11.** When was the most recent time you used cocaine with a needle?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago but less than 10 years ago ----- 05
- 10 or more years ago ----- 06
- Used cocaine in your life but never with a needle ----- 93
- Never used cocaine in any form in your life ----- 91

**CN-12.** Thinking back over your whole life, has there ever been a period when you used cocaine, in any form, daily or almost daily for two or more weeks?

- Yes ----- 01
- No ----- 02

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**THE QUESTIONS ON THIS ANSWER SHEET REFER JUST TO "CRACK" (COCAINE IN ROCK OR CHUNK FORM) AND NOT THE OTHER FORMS OF COCAINE.**

**CK-1. When was the most recent time you used the form of cocaine known as "crack"?**

- Within the past week (7 days) ----- 01
- More than 1 week ago but less than 1 month (30 days) ago ----- 02
- 1 or more months ago but less than 6 months ago ----- 03
- 6 or more months ago but less than 1 year ago ----- 04
- 1 or more years ago but less than 3 years ago ----- 05
- 3 or more years ago ----- 06
- Never used "crack" in your life ----- 91

**THE NEXT THREE QUESTIONS ARE ABOUT USE OF "CRACK" IN THE PAST 30 DAYS.**

**CK-2. How many vials or small containers of "crack" have you used in the past 30 days?**

**IF ANY, ENTER NUMBER IN SPACES FOR:**

Number of vials or containers of "crack" you used in the  
past 30 days -----

**IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:**

- Used "crack" in your life but did not use any "crack" in the past 30 days ----- 993
- Never used "crack" in your life ----- 991

**CK-3. How did you obtain any "crack" that you used during the past 30 days?**

**PLEASE CIRCLE NUMBERS FOR ALL THE WAYS YOU OBTAINED "CRACK":**

- Bought it from friends, acquaintances or family ----- 01
- Bought it from a dealer ----- 02
- Others shared with me ----- 03
- Given to me ----- 04
- Traded goods for it ----- 05
- Traded services for it ----- 06
- Stole it ----- 07
- Obtained it by trick or fraud ----- 08

**IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:**

- Used crack in your life but did not use any crack in the past 30 days ----- 93
- Never used crack in your life ----- 91

**(PLEASE TURN THE ANSWER SHEET OVER)**

**CK-4.** About how much money did the "crack" you used in the past 30 days cost you? (Do not include money you spent for any "crack" you sold or gave away, or any money you spent for other forms of cocaine besides "crack.")

Total cost of "crack" you used in the past 30 days ----- \$ \_\_\_\_\_

Did not spend any money on the "crack" you used in the past 30 days ----- 0000

Used "crack" in your life but did not use any "crack" in the past 30 days ----- 9993

Never used "crack" in your life ----- 9991

**CK-5.** Thinking back over your whole life, has there ever been a period when you used "crack" daily or almost daily for two or more weeks?

Yes ----- 01

No ----- 02

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

HALLUCINOGENS--ANSWER SHEET #10

L-1. Which of the following hallucinogens have you ever used? (PLEASE CIRCLE THE NUMBERS TO THE RIGHT OF ALL YOU HAVE EVER USED, EVEN ONCE.)

- LSD ("acid," "white lightning") ----- 01  
 Peyote ----- 02  
 Mescaline ----- 03  
 Psilocybin (mushrooms) ----- 04  
 PCP ("angel dust," phencyclidine) ----- 05  
 "Ecstasy" (MDMA) ----- 06  
 Other hallucinogen (SPECIFY): \_\_\_\_\_ 07  
 Used a hallucinogen, but you don't know its name ----- 08  
 Never used any hallucinogen in your life ----- 91

L-2. About how old were you when you first had a chance to try LSD or PCP or another hallucinogen, if you had wanted to?

- Age when you first had a chance to try LSD, PCP, or another hallucinogen \_\_\_\_\_  
 Never had a chance to try LSD, PCP, or another hallucinogen ----- 991

L-3. About how old were you the first time you actually used LSD or PCP or another hallucinogen?

- Age when you first used LSD, PCP, or another hallucinogen ----- \_\_\_\_\_  
 Never used LSD, PCP, or another hallucinogen in your life ----- 991

L-4. About how many times in your life have you used LSD or PCP or another hallucinogen?

- 1 or 2 times ----- 01  
 3 to 5 times ----- 02  
 6 to 10 times ----- 03  
 11 to 49 times ----- 04  
 50 to 99 times ----- 05  
 100 to 199 times ----- 06  
 200 or more times ----- 07  
 Never used LSD, PCP, or another hallucinogen in your life ----- 91

(PLEASE TURN THE PAGE)

L-5. When was the most recent time that you used LSD or PCP or another hallucinogen?

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05
- Never used LSD, PCP, or another hallucinogen in your life ----- 91

**THE NEXT QUESTION IS ABOUT USE OF HALLUCINOGENS IN THE PAST 30 DAYS.**

L-6. On about how many different days did you use LSD or PCP or another hallucinogen during the past 30 days?

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you used LSD, PCP, or another hallucinogen  
in past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

- Used LSD, PCP, or another hallucinogen in your life but not in the past 30 days ----- 93
- Never used LSD, PCP, or another hallucinogen in your life ----- 91

**QUESTION L-7 IS ABOUT USE OF HALLUCINOGENS IN THE PAST 12 MONTHS.**

L-7. On the average, how often in the past 12 months have you used LSD or PCP or another hallucinogen?

- Daily in the past 12 months ----- 01
- Almost daily or 3 to 6 days a week ----- 02
- About 1 or 2 days a week ----- 03
- Several times a month (about 25 to 51 days a year) ----- 04
- 1 to 2 times a month (12 to 24 days a year) ----- 05
- Every other month or so (6 to 11 days a year) ----- 06
- 3 to 5 days in the past 12 months ----- 07
- 1 or 2 days in the past 12 months ----- 08
- Used LSD, PCP, or another hallucinogen in your life but not in the past 12 months ---- 93
- Never used LSD, PCP, or another hallucinogen in your life ----- 91

(PLEASE GO TO THE NEXT PAGE)

**THE NEXT QUESTION REFERS TO PCP ONLY.**

**L-8. When was the most recent time that you used PCP?**

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05
- Never used PCP in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

H-1. About how old were you when you first had a chance to try heroin if you had wanted to?

Age when you first had a chance to try heroin -----

Never had a chance to try heroin ----- 991

H-2. About how old were you the first time you actually used heroin?

Age when you first used heroin -----

Never used heroin in your life ----- 991

H-3. About how many times in your life have you used heroin?

1 or 2 times ----- 01

3 to 5 times ----- 02

6 to 10 times ----- 03

11 to 49 times ----- 04

50 to 99 times ----- 05

100 to 199 times ----- 06

200 or more times ----- 07

Never used heroin in your life ----- 91

H-4. When was the most recent time that you used heroin?

Within the past month (30 days) ----- 01

More than 1 month ago but less than 6 months ago ----- 02

6 or more months ago but less than 1 year ago ----- 03

1 or more years ago but less than 3 years ago ----- 04

3 or more years ago ----- 05

Never used heroin in your life ----- 91

**THE NEXT QUESTION IS ABOUT USE OF HEROIN IN THE PAST 30 DAYS.**

H-5. During the past 30 days, on about how many different days did you use heroin?

IF ANY, ENTER NUMBER IN SPACES FOR:

Number of days you used heroin in past 30 days -----

IF NONE, CIRCLE ONE NUMBER FOR BEST ANSWER:

Used heroin in your life but did not use any heroin in the past 30 days ----- 93

Never used heroin in your life ----- 91

**(PLEASE TURN THE ANSWER SHEET OVER)**

**THE LAST TWO QUESTIONS ARE ABOUT USE OF HEROIN WITH A NEEDLE.**

**H-6. Have you ever used heroin with a needle?**

- Yes, have used heroin with a needle ----- 01
- No (have used heroin, but not with a needle) ----- 02
- Never used heroin in your life ----- 91

**H-7. When was the most recent time you used heroin with a needle?**

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago but less than 10 years ago ----- 05
- 10 or more years ago ----- 06
- Used heroin in your life but never with a needle --- ----- 93
- Never used heroin in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**ALL QUESTIONS ON THIS ANSWER SHEET REFER TO THE PAST 12 MONTHS.**

**DR-1. During the past 12 months, for which drugs have you consciously tried to cut down on your use?  
(PLEASE CIRCLE ALL THAT APPLY.)**

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Did not try to cut down on any drug you used in the past 12 months ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

**DR-2. During the past 12 months, for which drugs have you been unable to cut down on your use, even though you tried? (PLEASE CIRCLE ALL THAT APPLY.)**

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Did not try to cut down on any drug you used in the past 12 months ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

**(PLEASE TURN THE PAGE)**

**DR-3.** During the past 12 months, for which drugs have you needed larger amounts to get the same effect; that is, for which drugs could you no longer get high on the same amount you used to use? (PLEASE CIRCLE ALL THAT APPLY.)

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Did not need larger amounts of any drug you used in the past 12 months ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

**DR-4.** During the past 12 months, which drugs have you used every day or almost daily for 2 or more weeks in a row? (PLEASE CIRCLE ALL THAT APPLY.)

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Used at least one drug in the past 12 months but not as often as every day or almost daily ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

(PLEASE GO TO THE NEXT PAGE)

**DR-5. Which drugs have you felt that you needed or were dependent on in the past 12 months? (PLEASE CIRCLE ALL THAT APPLY.)**

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Did not feel like you had to have any drug you used in the past 12 months ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

**DR-6. For which drugs have you had withdrawal symptoms; that is, you felt sick because you stopped or cut down on your use of them during the past 12 months? (PLEASE CIRCLE ALL THAT APPLY.)**

- Cigarettes ----- 01
- Alcohol ----- 02
- Sedatives ----- 03
- Tranquilizers ----- 04
- Stimulants ----- 05
- Analgesics ----- 06
- Marijuana ----- 07
- Inhalants ----- 08
- Cocaine (including "crack") ----- 09
- Hallucinogens ----- 10
- Heroin ----- 11
- Other opiates, morphine, codeine ----- 12
- Did not have withdrawal symptoms from cutting down on any drug you used in the past 12 months ----- 13
- Used at least one of the drugs listed above in your life but not in the past 12 months --- 93
- Never used any of the drugs listed above in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

<p><b>THE QUESTIONS ON THIS ANSWER SHEET ARE ABOUT NONMEDICAL USE OF DRUGS WITH A NEEDLE.</b></p>
---

- ND-1.** Have you ever used a needle to get any drug injected under your skin, into a muscle, or into a vein for nonmedical reasons?
- Yes, have used a needle to take a drug ----- 01
- No, have never used a needle to take a drug ----- 02
- 
- ND-2.** When was the most recent time you used any drug for nonmedical reasons with a needle?
- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago but less than 10 years ago ----- 05
- 10 or more years ago ----- 06
- Never used a needle to take any drug in your life ----- 93
- Never used any drug for nonmedical reasons in your life ----- 91
- 
- ND-3.** Circle the number to the right of each kind of drug you have ever used with a needle, for nonmedical reasons. (PLEASE CIRCLE ALL THAT APPLY.)
- Sedatives (barbiturates, sleeping pills, Seconal ("downers")) ----- 21
- Tranquilizers (antianxiety drugs like Librium and Valium) ----- 22
- Stimulants (amphetamines, Preludin ("uppers" or "speed"),  
methamphetamine ("crank" or "ice")) ----- 23
- Analgesics (pain killers like Darvon, Demerol, Talwin, Talacen) ----- 24
- Inhalants (toluene, paint thinner, amyl nitrite, "poppers," ether) ----- 25
- Cocaine ----- 26
- Hallucinogens like LSD, PCP, peyote, mescaline, "Ecstasy" ----- 27
- Heroin ----- 28
- Other opiates like morphine, codeine, Percodan ----- 29
- Anabolic steroids ----- 30
- Never used a needle to take any drug in your life ----- 93
- Never used any of the drugs listed above for nonmedical reasons in your life ----- 91

**(PLEASE TURN THE ANSWER SHEET OVER)**

**"SHARING A NEEDLE" MEANS USING A NEEDLE FOR INJECTING DRUGS WHEN YOU KNOW OR SUSPECT THAT THE NEEDLE HAS BEEN USED BY SOMEONE ELSE. IT ALSO MEANS SOMEONE ELSE INJECTING DRUGS WITH A NEEDLE YOU HAVE USED.**

**ND-4. Have you ever used a needle for injecting drugs when you knew or suspected that the needle had been used by someone else?**

- Yes, have used a needle after someone else used it ----- 01
- No, have not used a needle after someone else used it ----- 02
- Never used a needle to take any drug in your life ----- 93
- Never used any drug for nonmedical reasons in your life ----- 91

**ND-5. Has someone else ever injected drugs with a needle after you used the needle?**

- Yes, someone used a needle after I used it ----- 01
- No, no one has used a needle after I used it ----- 02
- Never used a needle to take any drug in your life ----- 93
- Never used any drug for nonmedical reasons in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**SP-1. During the past 12 months, have you been required by your employer to take a drug test?**

- Yes ----- 01
- No ----- 02
- Did not have a job during past 12 months ----- 03

**SP-2. During the past 12 months, did a drug test given to you by your employer indicate the presence of any drug?**

- Yes ----- 01
- No ----- 02
- Did not receive test in past 12 months ----- 03
- Did not have a job during past 12 months ----- 04

<p><b>THE NEXT TWO QUESTIONS ARE ABOUT THE SMOKABLE FORM OF METHAMPHETAMINE CALLED "ICE."</b></p>
---

**SP-3. Have you ever used the smokable form of methamphetamine called "ice"?**

- Yes ----- 01
- No ----- 02

**SP-4. When was the most recent time you used the smokable form of methamphetamine called "ice"?**

- Within the past month (30 days) ----- 01
- More than 1 month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago but less than 10 years ago ----- 05
- 10 or more years ago ----- 06
- Never used the smokable form of methamphetamine ("ice") in your life----- 91

<p><b>THE NEXT FOUR QUESTIONS ARE ABOUT USE OF ANABOLIC STEROIDS.</b></p>
---

**SP-5. About how old were you when you first had a chance to try anabolic steroids if you had wanted to?**

- Age when you first had a chance to try anabolic steroids----- [ ]
- Never had a chance to try anabolic steroids ----- 991

**(PLEASE TURN THE PAGE)**

**SP-6.** About how old were you the first time you actually tried anabolic steroids?

Age when you first tried anabolic steroids -----   
Never used anabolic steroids in your life ----- 991

**SP-7.** About how many times in your life have you used anabolic steroids?

1 or 2 times ----- 01  
3 to 5 times ----- 02  
6 to 10 times ----- 03  
11 to 49 times ----- 04  
50 to 99 times ----- 05  
100 to 199 times ----- 06  
200 or more times ----- 07  
Never used anabolic steroids in your life ----- 91

**SP-8.** When was the most recent time that you used anabolic steroids?

Within the past month (30 days) ----- 01  
More than 1 month ago but less than 6 months ago ----- 02  
6 or more months ago but less than 1 year ago ----- 03  
1 or more years ago but less than 3 years ago ----- 04  
3 or more years ago ----- 05  
Never used anabolic steroids in your life ----- 91

**THE NEXT QUESTION IS ABOUT DRUGS THAT HAVEN'T BEEN MENTIONED BEFORE.**

**SP-9.** Have you used any other illegal drugs in the past 12 months that have not been mentioned in any of the previous questions on these answer sheets? Please write the names of all of these drugs on the lines below. If you have not used any other illegal drugs, write the word "NONE."

_____	<input type="text"/>

(PLEASE GO TO THE NEXT PAGE)

**THE NEXT FIVE QUESTIONS ARE ABOUT ENCOUNTERS WITH THE POLICE OR SOMEONE CONNECTED WITH THE COURTS.**

**SP-10.** Not counting minor traffic violations, have you ever been arrested and booked for breaking a law? (Being "booked" means that you were taken into custody and processed by the police or by someone connected with the courts, even if you were then released.)

- Yes ----- 01  
 No ----- 02

**SP-11.** Not counting minor traffic violations, how many times in the past 12 months have you been arrested and booked for breaking a law? (IF NONE, WRITE IN ZERO.)

Number of times arrested and booked in past 12 months -----

**SP-12.** Not counting minor traffic violations, in the past 12 months, for what offenses listed below were you arrested and booked? (PLEASE CIRCLE ALL THAT APPLY.)

- Larceny or theft ----- 01  
 Burglary or breaking and entering ----- 02  
 Aggravated assault ----- 03  
 Other assault, such as simple assault or battery ----- 04  
 Motor vehicle theft ----- 05  
 Robbery ----- 06  
 Forcible rape ----- 07  
 Murder, homicide, or nonnegligent manslaughter ----- 08  
 Arson ----- 09  
 Driving under the influence ----- 10  
 Drunkenness or other liquor law violation ----- 11  
 Possession or sale of drugs ----- 12  
 Prostitution or commercialized sex ----- 13  
 Other property offenses, such as fraud, possessing stolen goods, vandalism ----- 14  
 Other offenses (PLEASE SPECIFY): \_\_\_\_\_ 15  
 Was not arrested and booked for any offense in the past 12 months ----- 93

**SP-13.** Were you on probation at any time in the past 12 months?

- Yes ----- 01  
 No ----- 02

**SP-14.** Were you on parole at any time in the past 12 months?

- Yes ----- 01  
 No ----- 02

(PLEASE TURN TO THE NEXT PAGE)

**SP-15.** This section deals with activities that may be against the law. Read each item, then circle the 01 if you have done the activity in the past 12 months. If you did not do the activity in the past 12 months, circle the 02.

(PLEASE CIRCLE ONE ANSWER NUMBER FOR EVERY QUESTION BELOW.)

- |   | <u>YES</u> | <u>NO</u> |
|---|------------|-----------|
| a. During the <u>past 12 months</u> , have you taken something from a store without paying for it? --   | 01         | 02        |
| b. During the <u>past 12 months</u> , have you, other than from a store, taken money or property that did not belong to you? -----                          | 01         | 02        |
| c. During the <u>past 12 months</u> , have you purposely damaged or destroyed property that did not belong to you? -----                                    | 01         | 02        |
| d. During the <u>past 12 months</u> , have you taken a car that didn't belong to someone in your family without the owner's permission? -----               | 01         | 02        |
| e. During the <u>past 12 months</u> , have you used a weapon, force, or strong-arm methods to get money or things from a person? -----                      | 01         | 02        |
| f. During the <u>past 12 months</u> , have you broken into a house or building to steal something or just to look around? -----                             | 01         | 02        |
| g. During the <u>past 12 months</u> , have you hit someone or gotten into a physical fight? -----   | 01         | 02        |
| h. During the <u>past 12 months</u> , have you hurt someone badly enough to need bandages or a doctor? -----  | 01         | 02        |
| i. During the <u>past 12 months</u> , have you used a knife or gun or some other thing (like a club) to get something from a person? -----                  | 01         | 02        |
| j. During the <u>past 12 months</u> , have you driven any kind of vehicle while you were under the influence of alcohol or illegal drugs? -----             | 01         | 02        |
| k. During the <u>past 12 months</u> , have you sold any illegal drugs? -----  | 01         | 02        |
| l. During the <u>past 12 months</u> , have you done anything else that would have gotten you into trouble with the police if they had known about it? ----- | 01         | 02        |

(PLEASE DESCRIBE): \_\_\_\_\_

(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)

**DRINKING EXPERIENCES--ANSWER SHEET #15**

**DE-1.** If you drank any alcohol (that is, beer, wine, or liquor) in the past 12 months, please circle an answer for each statement below. Circle the 01 if you had the experience in the past 12 months, or circle the 02 if you did not have the experience in the past 12 months.

If you did not drink <u>any</u> beer, wine, or liquor <u>in the past 12 months</u> , circle the 93 in the box to the right. Then tell the interviewer that you are finished with this answer sheet. Otherwise, circle an answer number for every statement below.	93
---	----

<u>In the past 12 months, ...</u>	<u>YES</u>	<u>NO</u>
a. I felt aggressive or cross while drinking -----	01	02
b. I got into a heated argument while drinking -----	01	02
c. I stayed away from work or school because of a hangover -----	01	02
d. I was high or a little drunk when on the job or at school -----	01	02
e. I lost a job, or nearly lost one, because of drinking -----	01	02
f. My wife/husband or girl/boyfriend told me that I should cut down on my drinking -----	01	02
g. A relative (other than my wife/husband) told me I should cut down on my drinking -----	01	02
h. Friends told me that I should cut down on my drinking -----	01	02
i. I tossed down several drinks pretty fast to get a quicker effect -----	01	02
j. I was afraid I might be an alcoholic or that I might become one -----	01	02
k. I stayed drunk for more than one day at a time -----	01	02
l. Once I started drinking, it was difficult for me to stop before I became completely intoxicated -----	01	02

**(PLEASE TURN THE ANSWER SHEET OVER)**

**In the past 12 months, ...**

**YES NO**

- m. I have awakened unable to remember some of the things I had done  
while drinking the day before ----- 01 02
- n. I had a quick drink or so when no one was looking ----- 01 02
- o. I often took a drink the first thing when I got up in the morning ----- 01 02
- p. My hands shook a lot after drinking the day before ----- 01 02
- q. Sometimes I got high or a little drunk when drinking by myself ----- 01 02
- r. Sometimes I kept on drinking after promising myself not to ----- 01 02

**DE-2.** In the past 12 months, what drugs listed below did you use on your own, that is, nonmedically, at the same time or within a couple hours of when you drank beer, wine, or liquor?  
(PLEASE CIRCLE ALL THAT APPLY.)

- Sedatives (barbiturates, sleeping pills, Seconal ("downers")) ----- 01
- Tranquilizers (antianxiety drugs like Librium and Valium) ----- 02
- Stimulants (amphetamines, Preludin ("uppers" or "speed")) ----- 03
- Analgesics (pain killers like Darvon, Demerol, Percodan,  
Tylenol with codeine) ----- 04
- Marijuana ----- 05
- Inhalants (glue, amyl nitrite, "poppers," aerosol sprays) ----- 06
- Cocaine (including "crack") ----- 07
- Hallucinogens like LSD, PCP, peyote, mescaline ----- 08
- Heroin ----- 09
- Used alcohol but did not use any of these kinds of drugs in the past 12 months at the  
same time or within a couple hours of drinking alcohol ----- 10
- Used alcohol in your life but did not drink beer, wine, or  
liquor in the past 12 months ----- 93
- Never had a drink of beer, wine, or liquor in your life ----- 91

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**DRUG PROBLEMS--ANSWER SHEET #16**

**DP-1.** If you have ever used cigarettes, alcohol, or any of the other substances listed on the card, please circle an answer for each question below. If you had any of these problems in the past 12 months from your use of any of the substances listed on the card, please circle the 01 for "yes" and write in the names of the substances you think probably caused the problem. If you did not have the problem in the past 12 months, circle the 02.

If you have **NEVER** used cigarettes, alcohol, or any of the other substances listed on the card **IN YOUR LIFETIME**, circle the 91 in the box to the right.  Then tell the interviewer that you are finished. Otherwise, circle an answer number for **EVERY** statement.

91

As a result of drug use at any time in your life, did you, in the past 12 months ...

**WRITE NAMES OF DRUGS THAT CAUSED THE PROBLEM**

- a. Become depressed or lose interest in things? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02
  
- b. Have arguments and fights with family or friends? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02
  
- c. Feel completely alone and isolated? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02
  
- d. Feel very nervous and anxious? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02
  
- e. Have health problems? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02
  
- f. Find it difficult to think clearly? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

**(PLEASE TURN THE ANSWER SHEET OVER)**

As a result of drug use at any time in your life,  
did you, in the past 12 months ...

WRITE NAMES OF DRUGS THAT CAUSED THE PROBLEM

g. Feel irritable and upset? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

h. Get less work done than usual at school  
or on the job? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

i. Feel suspicious and distrustful of people? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

j. Find it harder to handle your problems? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

k. Have to get emergency medical help? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

l. Have someone suggest you seek treatment? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

m. Drive unsafely? Yes ----- 01 → Drug(s) that caused problem: \_\_\_\_\_  
No ----- 02

(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)

TR-1. During the past 12 months, were you referred to any type of drug treatment through an employee assistance program?  
Yes ----- 01  
No ----- 02

TR-2. During the past 12 months, have you gone to a clinic, self-help group, counselor, doctor or other professional to get help to stop smoking cigarettes?  
Yes ----- 01  
No ----- 02

TR-3. During the past 12 months, have you gotten any treatment for drinking--such as from a clinic, self-help group, counselor, doctor or other professional?  
Yes ----- 01  
No ----- 02

**IN THE REST OF THE QUESTIONS ON THIS ANSWER SHEET, WE ARE INTERESTED IN TREATMENT FOR USE OF OTHER DRUGS; THAT IS, DRUGS NOT INCLUDING CIGARETTES OR ALCOHOL.**

TR-4. During the past 12 months, have you received treatment for other drug use, not counting cigarettes or alcohol?  
Yes ----- 01  
No ----- 02

TR-5. During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in an emergency room?  
Yes ----- 01  
No ----- 02

TR-6. During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in a hospital as an inpatient?  
Yes ----- 01  
No ----- 02

(PLEASE TURN THE PAGE)

- TR-7.** During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in a private doctor's office?
- Yes ----- 01
- No ----- 02
- TR-8.** During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in a drug treatment or rehabilitation facility?
- Yes ----- 01
- No ----- 02
- TR-9.** During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in a mental health center or facility?
- Yes ----- 01
- No ----- 02
- TR-10.** During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in a self-help group?
- Yes ----- 01
- No ----- 02
- TR-11.** During the past 12 months, have you received treatment for use of any other drug, not counting cigarettes or alcohol, in some other place?
- Yes (PLEASE DESCRIBE): \_\_\_\_\_ 01
- No ----- 02
- TR-12.** When was the last time you received treatment or counseling for use of any other drug, not counting cigarettes or alcohol?
- Within the past month ----- 01
- More than one month ago but less than 6 months ago ----- 02
- 6 or more months ago but less than 1 year ago ----- 03
- 1 or more years ago but less than 3 years ago ----- 04
- 3 or more years ago ----- 05
- Never received treatment or counseling for drug use ----- 93

(PLEASE GO TO THE NEXT PAGE)

If you never received treatment or counseling for drug use, circle the 93 in the box to the right.  
 Then tell the interviewer that you are finished with this answer sheet.  
 Otherwise, continue with question TR-13 below.

93

**TR-13.** Where did you receive treatment the last time you were treated for other drug use, not counting cigarettes or alcohol?

- In an emergency room ----- 01
- In a hospital as an inpatient ----- 02
- In a private doctor's office ----- 03
- In a drug treatment or rehabilitation facility ----- 04
- In a mental health center or facility ----- 05
- In a self-help group ----- 06
- In some other place (PLEASE DESCRIBE THIS OTHER PLACE) ----- 07

**TR-14.** How important were each of the following reasons to you for seeking treatment the last time you received treatment or counseling for drug use? (CIRCLE ONE NUMBER FOR EACH REASON.)

VERY      SOMEWHAT      NOT AT ALL  
IMPORTANT      IMPORTANT      IMPORTANT

- a. Wanted to change lifestyle ----- 01----- 02----- 03
- b. Had family responsibilities ----- 01----- 02----- 03
- c. Fear of being jailed ----- 01----- 02----- 03
- d. Drugs were too costly ----- 01----- 02----- 03
- e. Occurrence of a significant personal or special event ----- 01----- 02----- 03
- f. Pressure from family (or close friends) ----- 01----- 02----- 03
- g. Had concerns about health ----- 01----- 02----- 03
- h. Had concerns about job ----- 01----- 02----- 03
- i. Sent to jail ----- 01----- 02----- 03
- j. Availability of services ----- 01----- 02----- 03
- k. Bad quality of drugs ----- 01----- 02----- 03
- l. Drugs not available ----- 01----- 02----- 03
- m. Some other reason ----- 01----- 02----- 03  
 (PLEASE DESCRIBE): \_\_\_\_\_ 04

(PLEASE TURN TO THE NEXT PAGE)

**TR-15. What was the outcome of the treatment or counseling you last received? (PLEASE CIRCLE ONLY THE ONE NUMBER FOR THE BEST ANSWER.)**

- Still in treatment ----- 01
- Successfully completed treatment ----- 02
- Had a problem with program ----- 03
- Couldn't afford to continue treatment ----- 04
- Family needed me ----- 05
- Began using drug(s) again ----- 06
- Other (PLEASE SPECIFY): \_\_\_\_\_ 07

**TR-16. How was the last treatment or counseling for drug use paid for? (PLEASE CIRCLE ALL THAT APPLY.)**

- Health insurance ----- 01
- Your own savings or earnings ----- 02
- Family members paid ----- 03
- Your employer paid ----- 04
- Medicare or Medicaid ----- 05
- Treatment was free ----- 06
- Other (PLEASE DESCRIBE): \_\_\_\_\_ 07

**(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)**

**R-1.** How much do you think people risk harming themselves physically and in other ways when they do each of the following activities?

(If you're not sure, circle the number for the amount of risk that comes closest to what you think might be true for that activity. CIRCLE ONE NUMBER ON EACH LINE.)

How much do people risk harming themselves physically and in other ways when they ...	<u>NO RISK</u>	<u>SLIGHT RISK</u>	<u>MODERATE RISK</u>	<u>GREAT RISK</u>
a. Smoke one or more packs of cigarettes per day? -----	01	02	03	04
b. Try marijuana once or twice? -----	01	02	03	04
c. Smoke marijuana occasionally? -----	01	02	03	04
d. Smoke marijuana regularly? -----	01	02	03	04
e. Try PCP once or twice? -----	01	02	03	04
f. Use PCP regularly? -----	01	02	03	04
g. Try heroin once or twice? -----	01	02	03	04
h. Use heroin regularly? -----	01	02	03	04
i. Try cocaine once or twice? -----	01	02	03	04
j. Use cocaine occasionally? -----	01	02	03	04
k. Use cocaine regularly? -----	01	02	03	04
l. Use "crack" occasionally? -----	01	02	03	04
m. Use anabolic steroids occasionally? -----	01	02	03	04
n. Use anabolic steroids regularly? -----	01	02	03	04

**(PLEASE TURN THE ANSWER SHEET OVER)**

R-1. How much do you think people risk harming themselves physically and in other ways when they do each of the following activities?

How much do people risk harming themselves physically and in other ways when they ...

NO RISK      SLIGHT RISK      MODERATE RISK      GREAT RISK

- o. Take one or two drinks nearly every day? ----- 01 ----- 02 ----- 03 ----- 04
- p. Take four or five drinks nearly every day? ----- 01 ----- 02 ----- 03 ----- 04
- q. Have five or more drinks once or twice a week? ----- 01 ----- 02 ----- 03 ----- 04

R-2. How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some? (CIRCLE ONE NUMBER ON EACH LINE.)

How difficult or easy would it be for you to get some ...

PROBABLY IMPOSSIBLE      VERY DIFFICULT      FAIRLY DIFFICULT      FAIRLY EASY      VERY EASY

- a. Marijuana ----- 01 ----- 02 ----- 03 ----- 04 ----- 05
- b. LSD ----- 01 ----- 02 ----- 03 ----- 04 ----- 05
- c. PCP ----- 01 ----- 02 ----- 03 ----- 04 ----- 05
- d. Cocaine or "crack" ----- 01 ----- 02 ----- 03 ----- 04 ----- 05
- e. Heroin ----- 01 ----- 02 ----- 03 ----- 04 ----- 05

R-3. In the past month, has someone approached you to sell you an illegal drug?

- Yes ----- 01
- No ----- 02

OFTEN      OCCASIONALLY      RARELY      NEVER

R-4. How often do you see people who are drunk or high on drugs in your neighborhood? ----- 01 ----- 02 ----- 03 ----- 04

R-5. How often do you see people selling drugs in your neighborhood? ----- 01 ----- 02 ----- 03 ----- 04

(PLEASE TELL THE INTERVIEWER WHEN YOU ARE FINISHED)

**Substance Abuse and Mental Health Services Administration  
Office of Applied Studies**

**DRUG ABUSE SURVEY PUBLICATIONS**

**National Household Survey on Drug Abuse (NHSDA)**

The NHSDA is the primary source of information on the incidence and prevalence of drug abuse among the U.S. civilian noninstitutionalized population 12 years of age and older. This survey has been conducted every 1 to 3 years since 1971. Reports based on the NHSDA data include:

- *Population Estimates Reports*
- *Highlights Reports*
- *Main Findings Reports*
- *Advance Reports*

**Drug Abuse Warning Network (DAWN)**

DAWN is an ongoing data system begun in the early 1970s that collects information on the health consequences of drug abuse as seen in hospital emergency room episodes and medical examiner cases. Reports published using DAWN data include:

- *Annual Emergency Room Data*
- *Annual Medical Examiner Data*
- *Advance Reports*

**National Drug and Alcoholism Treatment Unit Survey (NDATUS)**

NDATUS provides data on drug abuse and alcoholism treatment and prevention facilities nationwide. This survey began in the early 1970s and is conducted every 1 to 3 years. Reports based on NDATUS include:

- *National Directory of Drug Abuse and Alcoholism Treatment and Prevention Programs*
- *Main Findings Reports*

***For further information about publications on drug abuse research and statistics, please contact:***

National Clearinghouse for Alcohol and Drug Information  
Post Office Box 2345  
Rockville, Maryland 20852  
1-800-729-6686 (Nationwide) or (301) 468-2600 (Local calls)

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Substance Abuse and Mental Health Services Administration  
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