Results from the 2009 National Survey on Drug Use and Health: Volume II. Technical Appendices and Selected Prevalence Tables

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Appendix A: Description of the Survey

A.1   Sample Design

The 2009 National Survey on Drug Use and Health (NSDUH)[1] is part of a coordinated 5-year sample design providing estimates for all 50 States plus the District of Columbia for the years 2005 through 2009. The respondent universe is the civilian, noninstitutionalized population aged 12 years old or older residing within the United States. The survey includes persons living in noninstitutionalized group quarters (e.g., shelters, rooming/boarding houses, college dormitories, migratory workers' camps, halfway houses), and civilians living on military bases. Persons excluded from the survey include persons with no fixed household address (e.g., homeless and/or transient persons not in shelters), active-duty military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term hospitals.

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

For the 50-State design, 8 States were designated as large sample States (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) with target sample sizes of 3,600. In 2009, sample sizes in these States ranged from 3,557 to 3,707. For the remaining 42 States and the District of Columbia, the target sample size was 900. Sample sizes in these States ranged from 886 to 984 in 2009. This approach ensures there is sufficient sample in every State to support small area estimation (SAE)[2] while at the same time maintaining efficiency for national estimates.

States were first stratified into a total of 900 State sampling (SS) regions (48 regions in each large sample State and 12 regions in each small sample State). These regions were contiguous geographic areas designed to yield the same number of interviews on average.[3] Unlike the 1999 through 2001 NHSDAs and the 2002 through 2004 NSDUHs in which the first-stage sampling units were clusters of census blocks called area segments, the first stage of

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

[2] SAE is a hierarchical Bayes modeling technique used to make State-level estimates for approximately 20 measures related to substance use. For more details, see the *State Estimates of Substance Use from the 2007-2008 National Surveys on Drug Use and Health* (Hughes, Muhuri, Sathe, & Spagnola, 2010).

[3] Sampling areas were defined using 2000 census geography. Dwelling units (DUs) and population counts were obtained from the 2000 census data supplemented with revised population counts from Claritas.

selection for the 2005 through 2009 NSDUHs was census tracts.[4] This stage was included to contain sample segments within a single census tract to the extent possible.[5]

Within each SS region, 48 census tracts were selected with probability proportional to population size. Within sampled census tracts, adjacent census blocks were combined to form the second-stage sampling units or area segments. One area segment was selected within each sampled census tract with probability proportional to population size to support the 5-year sample and any supplemental studies that the Substance Abuse and Mental Health Services Administration (SAMHSA) may choose to field. Of these segments, 24 were designated for the coordinated 5-year sample and 24 were designated as "reserve" segments. Eight sample segments per SS region were fielded during the 2009 survey year.

These sampled segments were allocated equally into four separate samples, one for each 3-month period (calendar quarter) during the year. That is, a sample was selected from two segments in each calendar quarter so that the survey was essentially continuous in the field. In each of the area segments, a listing of all addresses was made from which a national sample of 195,132 addresses was selected. Of the selected addresses, 161,321 were determined to be eligible sample units. In these sample units (which can be either households or units within group quarters), sample persons were randomly selected using an automated screening procedure programmed in a handheld computer carried by the interviewers. The number of sample units completing the screening was 143,565. Youths aged 12 to 17 years and young adults aged 18 to 25 years were oversampled at this stage, with 12 to 17 year olds sampled at a rate of 86.2 percent and 18 to 25 year olds at a rate of 73.5 percent on average, when they were present in the sampled households or group quarters. Persons in age groups 26 or older were sampled at rates of 28.5 percent or less, with persons in the eldest age group (50 years or older) sampled at a rate of 8.2 percent on average. The overall population sampling rates were 0.09 percent for 12 to 17 year olds, 0.07 percent for 18 to 25 year olds, 0.02 percent for 26 to 34 year olds, 0.02 percent for 35 to 49 year olds, and 0.01 percent for those 50 or older. Because of the large sample size, there was no need to oversample racial/ethnic groups, as was done on surveys prior to 1999. Nationwide, 85,429 persons were selected. Consistent with previous surveys in this series, the final respondent sample of 68,700 persons was representative of the U.S. general population (since 1991, the civilian, noninstitutionalized population) aged 12 or older. In addition, State samples were representative of their respective State populations. More detailed information on the disposition of the national screening and interview sample can be found in Appendix B.

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

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[4] Census tracts are relatively permanent statistical subdivisions of counties and provide a stable set of geographic units across decennial census periods.
[5] Some census tracts had to be aggregated in order to meet the minimum DU requirement of 150 DUs in urban areas and 100 DUs in rural areas.

More information on the sample design can be found in the 2009 NSDUH sample design report by Morton, Martin, Chromy, Foster, and Hirsch (2010).

A.2   Data Collection Methodology

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

Introductory letters are sent to sampled addresses, followed by an interviewer visit. When contacting a dwelling unit (DU), the field interviewer (FI) asks to speak with an adult resident (aged 18 or older) of the household who can serve as the screening respondent. Using a handheld computer, the FI completes a 5-minute procedure with the screening respondent that involves listing all household members along with their basic demographic data. The computer uses the demographic data in a preprogrammed selection algorithm to select zero to two sample persons, depending on the composition of the household. This selection process is designed to provide the necessary sample sizes for the specified population age groupings. In areas where a third or more of the households contain Spanish-speaking residents, the initial introductory letters written in English are mailed with a Spanish version on the back. All interviewers carry copies of this letter in Spanish. If the interviewer is not certified bilingual, he or she will use preprinted Spanish cards to attempt to find someone in the household who speaks English and who can serve as the screening respondent or who can translate for the screening respondent. If no one is available, the interviewer will schedule a time when a Spanish-speaking interviewer can come to the address. In households where a language other than Spanish is encountered, another language card is used to attempt to find someone who speaks English to complete the screening.

The NSDUH interview is available in English and Spanish, and both versions have the same content. If the sample person prefers to complete the interview in Spanish, a certified bilingual interviewer is sent to the address to conduct the interview. Because the interview is not translated into any other language, if a sample person does not speak English or Spanish, the interview is not conducted.

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

The NSDUH interview consists of core and noncore (i.e., supplemental) sections. A core set of questions critical for basic trend measurement of prevalence estimates remains in the survey every year and comprises the first part of the interview. Noncore questions, or modules, that can be revised, dropped, or added from year to year make up the remainder of the interview. The core consists of initial demographic items (which are interviewer-administered) and self-

administered questions pertaining to the use of tobacco, alcohol, marijuana, cocaine, crack cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives. Topics in the remaining noncore self-administered sections include (but are not limited to) injection drug use, perceived risks of substance use, substance dependence or abuse, arrests, treatment for substance use problems, pregnancy and health care issues, and mental health issues. Noncore demographic questions (which are interviewer-administered and follow the ACASI questions) address such topics as immigration, current school enrollment, employment and workplace issues, health insurance coverage, and income. It should be noted that some of the noncore portions of the interview have remained in the survey, relatively unchanged, from year to year (e.g., current health insurance coverage, employment).

Thus, the interview begins in CAPI mode with the FI reading the questions from the computer screen and entering the respondent's replies into the computer. The interview then transitions to the ACASI mode for the sensitive questions. In this mode, the respondent can read the questions silently on the computer screen and/or listen to the questions read through headphones and enter his or her responses directly into the computer. At the conclusion of the ACASI section, the interview returns to the CAPI mode with the FI completing the questionnaire. Each respondent who completes a full interview is given a $30 cash payment as a token of appreciation for his or her time.

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

After the data are transmitted to RTI, cases are selected for verification. The verification process involves contacting respondents to verify the quality of an FI's work based on information that respondents provide at the end of screening (if no one is selected for an interview at the DU or the entire DU is ineligible for the study) or at the end of the interview. For screening, the adult DU member who served as the screening respondent provides his or her first name and telephone number to the FI, who enters the information in a handheld computer and transmits the data to RTI. For completed interviews, respondents write their home telephone number and mailing address on a quality control form and seal the form in a preaddressed envelope that FIs mail back to RTI. All contact information is kept completely separate from the answers provided during the screening or interview.

Samples of respondents who completed screenings or interviews are randomly selected for verification. These cases are called by telephone interviewers who ask scripted questions designed to determine the accuracy and quality of the data collected. Any cases discovered to have a problem or discrepancy are flagged and routed to a small specialized team of telephone interviewers who recontact respondents for further investigation of the issue(s). Depending on the amount of an FI's work that cannot be verified through telephone verification, including bad telephone numbers (e.g., incorrect number, disconnected, not in service), a field verification may be conducted. Field verifications involve another FI returning to the sampled DU to verify the accuracy and quality of the data in person. If the verification procedures identify situations in which an FI has falsified data, the FI is terminated. All cases completed that quarter by the FI who falsified data are reworked by the FI conducting the field verification.

A.3   Data Processing

Computers at RTI direct the information to a raw data file (i.e., in which no logical editing of the data had been done) that consists of one record for each completed interview. Cases are retained only if respondents provided data on lifetime use of cigarettes and at least nine other substances in the core section of the questionnaire. Written responses to questions (e.g., names of other drugs that were used) are assigned numeric codes as part of the data processing procedures. Even though editing and consistency checks are done by the CAI program during the interview, additional, more complex edits and consistency checks are completed at RTI. Additionally, statistical imputation is used to replace missing or ambiguous values after editing for some key variables. Analysis weights are created so that estimates will be representative of the target population.

A.3.1   Data Coding and Logical Editing

With the exception of industry and occupation data, coding of written answers that respondents or interviewers typed was performed at RTI for the 2009 NSDUH. These written answers include mentions of drugs that respondents had used or other responses that did not fit a previous response option (subsequently referred to as "OTHER, Specify" data). Coding of the "OTHER, Specify" variables was accomplished through computer-assisted survey procedures and the use of a secure Web site that allowed for coding and review of the data. The computer-assisted procedures entailed a database check for a given "OTHER, Specify" variable that contained typed entries and the associated numeric codes. If an exact match was found between the typed response and an entry in the system, the computer-assisted procedures assigned the appropriate numeric code. Typed responses that did not match an existing entry were coded through the Web-based coding system. Data on the industries in which respondents worked and respondents' occupations were assigned numeric industry and occupation codes by staff at the U.S. Census Bureau.

As noted above, the CAI program included checks that alerted respondents or interviewers when an entered answer was inconsistent with a previous answer in a given module. In this way, the inconsistency could be resolved while the interview was in progress. However, not every inconsistency was resolved during the interview, and the CAI program did not include checks for every possible inconsistency that might have occurred in the data.

Therefore, the first important step in processing the raw NSDUH data was logical editing of the data. Logical editing involved using data from within a respondent's record to (a) reduce the amount of item nonresponse (i.e., missing data) in interview records, including identification of items that were legitimately skipped; (b) make related data elements consistent with each other; and (c) identify ambiguities or inconsistencies to be resolved through statistical imputation procedures (see Section A.3.2).

For example, if respondents reported that they never used a given drug, the CAI logic skipped them out of all remaining questions about use of that drug. In the editing procedures, the skipped variables were assigned codes to indicate that the respondents were lifetime nonusers. Similarly, respondents were instructed in the prescription psychotherapeutics modules (i.e., pain relievers, tranquilizers, stimulants, and sedatives) not to report the use of over-the-counter (OTC)

drugs. Therefore, if a respondent's only report of lifetime use of a particular type of "prescription" psychotherapeutic drug was for an OTC drug, the respondent was logically inferred never to have been a nonmedical user of the prescription drugs in that psychotherapeutic category.

In addition, respondents could report that they were lifetime users of a drug but not provide specific information on when they last used it. In this situation, a temporary "indefinite" value for the most recent period of use was assigned to the edited recency-of-use variable (e.g., Used at some point in the lifetime LOGICALLY ASSIGNED), and a final, specific value was statistically imputed. The editing procedures for key drug use variables also involved identifying inconsistencies between related variables so that these inconsistencies could be resolved through statistical imputation. For example, if a respondent reported last using a drug more than 12 months ago and also reported first using it at his or her current age, both of those responses could not be true. In this example, the inconsistent period of most recent use was replaced with an "indefinite" value, and the inconsistent age at first use was replaced with a missing data code. These indefinite or missing values were subsequently imputed through statistical procedures to yield consistent data for the related measures, as discussed in the next section.

A.3.2 Statistical Imputation

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

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

is accomplished on several response variables at once. Variables requiring imputation using PMN are the core demographic variables, core drug use variables (recency of use, frequency of use, and age at first use), income, health insurance, and noncore demographic variables for work status, immigrant status, and the household roster. A weighted regression imputation is used to impute some of the missing values in the nicotine dependence variables.

In the modeling stage of PMN, the model chosen depends on the nature of the response variable *Y*. In the 2009 NSDUH, the models included binomial logistic regression, multinomial logistic regression, Poisson regression, and ordinary linear regression, where the models incorporated the sampling design weights.

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

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

Whenever possible, missing or ambiguous values for more than one response variable are considered at a time. In this (multivariate) case, the distance metric is a Mahalanobis distance (Manly, 1986) rather than a relative Euclidean distance. Whether the imputation is univariate or multivariate, only missing or ambiguous values are replaced, and donors are restricted to be logically consistent with the response variables that are not missing. Furthermore, donors are restricted to satisfy "likeness constraints" whenever possible. That is, donors are required to have the same values for variables highly correlated with the response. If no donors are available who meet these conditions, these likeness constraints can be loosened. For example, donors for the age at first use variable are required to be of the same age as recipients, if at all possible. Further details on the PMN methodology are provided by Singh, Grau, and Folsom (2001, 2002). Details of the PMN methodology and imputation procedures for 2009 also will appear in the *2009 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2008 NSDUH Methodological Resource Book* (RTI International, 2010).

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

A.3.3 Development of Analysis Weights

The general approach to developing and calibrating analysis weights involved developing design-based weights as the product of the inverse of the selection probabilities at each selection stage. Similar to the 2007 and 2008 NSDUHs, the 2009 NSDUH used a four-stage sample selection scheme in which an extra selection stage of census tracts was added before the selection of a segment. Thus, the design-based weights, d_k, for the 2009 NSDUH incorporated an extra layer of sampling selection to reflect the sample design change. Adjustment factors, $a_k(\lambda)$, then were applied to the design-based weights to adjust for nonresponse, to poststratify to known population control totals, and to control for extreme weights when necessary. In view of the importance of State-level estimates with the 50-State design, it was necessary to control for a much larger number of known population totals. Several other modifications to the general weight adjustment strategy that had been used in past surveys also were implemented for the first time beginning with the 1999 CAI sample.

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

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

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

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

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

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

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

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

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

Consistent with the surveys from 1999 onward, control of extreme weights through separate bounds for adjustment factors was incorporated into the GEM calibration processes for both nonresponse and poststratification. This is unlike the traditional method of winsorization in which extreme weights are truncated at prespecified levels and the trimmed portions of weights are distributed to the nontruncated cases. In GEM, it is possible to set bounds around the prespecified levels for extreme weights, and then the calibration process provides an objective way of deciding the extent of adjustment (or truncation) within the specified bounds. A step was added to poststratify the household-level weights to obtain census-consistent estimates based on the household rosters from all screened households; these household roster-based estimates then provided the control totals needed to calibrate the respondent pair weights for subsequent planned analyses. An additional step poststratified the selected person sample to conform to the adjusted roster estimates. This additional step takes advantage of the inherent two-phase nature of the NSDUH design. The final step poststratified the respondent person sample to external census data (defined within the State whenever possible, as discussed above). More detailed information about the weighting procedures for 2009 will appear in the *2009 NSDUH*

Methodological Resource Book, which is in process. Until that volume becomes available, refer to the *2008 NSDUH Methodological Resource Book* (RTI International, 2010).

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

Appendix B: Statistical Methods and Measurement

B.1   Target Population

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

B.2   Sampling Error and Statistical Significance

This report includes tables for national estimates (see Appendices F and G) that were drawn from a more comprehensive set of tables referred to as "detailed tables."[6] The national estimates, along with the associated standard errors (SEs), were computed for all detailed tables, including those in this report, using a multiprocedure package, SUDAAN® Software for Statistical Analysis of Correlated Data. SUDAAN was designed for the statistical analysis of data collected using stratified, multistage cluster sampling designs, as well as other observational and experimental studies involving repeated measures or studies subject to cluster correlation effects (RTI International, 2008). The final, nonresponse-adjusted, and poststratified analysis weights were used in SUDAAN to compute unbiased design-based drug use estimates.

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

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

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

B.2.1 Variance Estimation for Totals

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

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

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

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

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

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

This approach is theoretically correct when the domain size estimates, $\hat{N}_d$, are among those forced to match their respective U.S. Census Bureau population estimates through the weight calibration process. In these cases, $\hat{N}_d$ is not subject to a sampling error induced by the NSDUH design. For a more detailed explanation of the weight calibration process, see Section A.3.3 in Appendix A. In addition, more detailed information about the weighting procedures for 2009 will appear in the *2009 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2008 NSDUH Methodological Resource Book* (RTI International, 2010).

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

For various subsets of estimates, the above approach yielded an underestimate of the variance of a total because $\hat{N}_d$ was subject to considerable variation. Since the 2005 NSDUH report, a "mixed" method approach has been implemented for all detailed tables to improve the accuracy of SEs and to better reflect the effects of poststratification on the variance of total estimates. This approach assigns the method of SE calculation to domains (subgroups for which the estimates were calculated) within tables so that all estimates among a select set of domains with fixed $\hat{N}_d$ were calculated using the formula above, and all other estimates were calculated directly in SUDAAN, regardless of other estimates within the same table. The set of domains considered controlled (i.e., those with a fixed $\hat{N}_d$) was restricted to main effects and two-way interactions in order to maintain continuity between years. Domains consisting of three-way interactions may be controlled in a single year but not necessarily in preceding or subsequent years. The use of such SEs did not affect the SE estimates for the corresponding proportions presented in the same sets of tables because all SEs for means and proportions are calculated directly in SUDAAN. As a result of the use of this mixed-method approach, the SEs for the total estimates within many detailed tables were calculated differently from those in NSDUH reports prior to the 2005 report.

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

B.2.2 Suppression Criteria for Unreliable Estimates

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

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

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

or

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

Using a first-order Taylor series approximation to estimate $\text{RSE}[-1\text{n}(\hat{p})]$ and $\text{RSE}[-1\text{n}(1-\hat{p})]$, the following equation was derived and used for computational purposes when developing a suppression rule dependent on effective sample size:

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

or

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

The separate formulas for $\hat{p} \le .5$ and $\hat{p} > .5$ produce a symmetric suppression rule; that is, if $\hat{p}$ is suppressed, $1-\hat{p}$ will be suppressed as well (see Figure B.1). When $.05 < \hat{p} < .95$, the symmetric properties of the rule produce a local minimum of 50 at $\hat{p} = .2$ and at $\hat{p} = .8$. Using the minimum for the suppression rule would mean that estimates of $\hat{p}$ between .05 and .95 would be suppressed if their corresponding effective sample sizes were less than 50. Within this same interval, a local maximum of 68 is found at $\hat{p} = .5$. To simplify requirements and maintain a conservative suppression rule, estimates of $\hat{p}$ between .05 and .95 were suppressed if they had an effective sample size below 68.

In addition, a minimum nominal sample size suppression criterion ($n = 100$) that protects against unreliable estimates caused by small design effects and small nominal sample sizes was employed; Table B.2 shows a formula for calculating design effects. Prevalence estimates also were suppressed if they were close to 0 or 100 percent (i.e., if $\hat{p} < .00005$ or if $\hat{p} \ge .99995$).

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

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

B.2.3 Statistical Significance of Differences

This section describes the methods used to compare prevalence estimates in this report. Customarily, the observed difference between estimates is evaluated in terms of its statistical significance. Statistical significance is based on the *p* value of the test statistic and refers to the probability that a difference as large as that observed would occur because of random variability in the estimates if there were no difference in the prevalence estimates for the population groups

Figure B.1 Required Effective Sample in the 2009 NSDUH as a Function of the Proportion Estimated
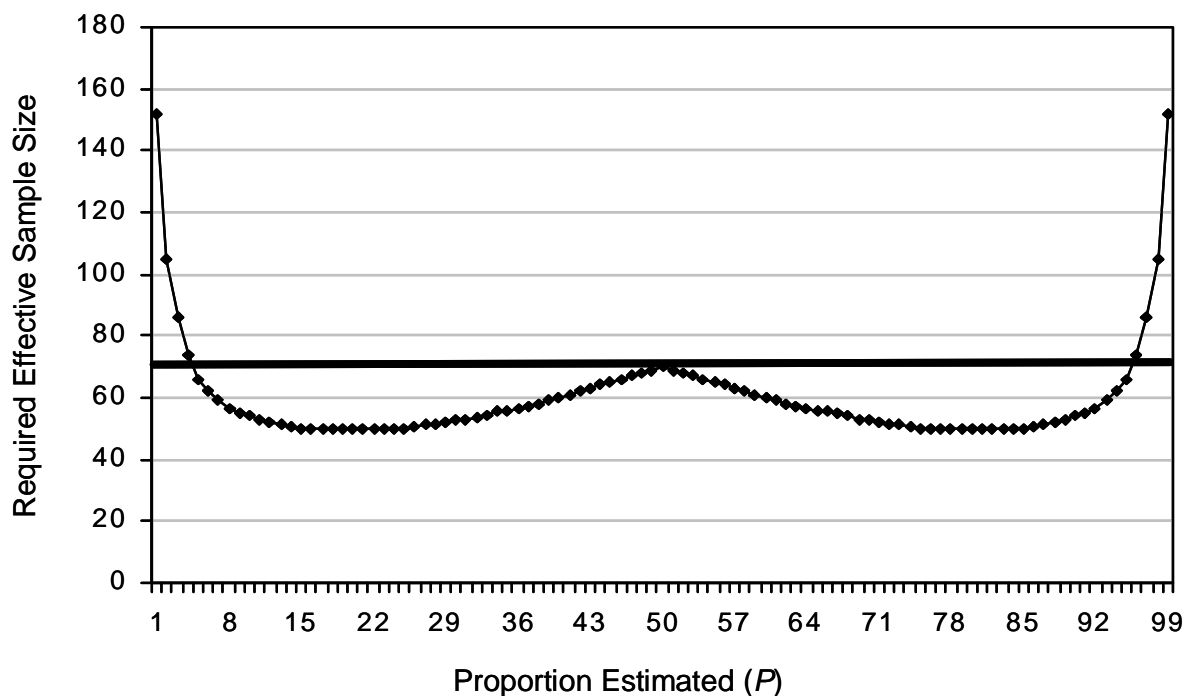
being compared. The significance of observed differences in this report is reported at the .05 level. When comparing prevalence estimates, the null hypothesis (no difference between prevalence estimates) was tested against the alternative hypothesis (there is a difference in prevalence estimates) using the standard difference in proportions test expressed as

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

where $\hat{p}_1$ = first prevalence estimate, $\hat{p}_2$ = second prevalence estimate, $\text{var}(\hat{p}_1)$ = variance of first prevalence estimate, $\text{var}(\hat{p}_2)$ = variance of second prevalence estimate, and $\text{cov}(\hat{p}_1, \hat{p}_2)$ = covariance between $\hat{p}_1$ and $\hat{p}_2$. In cases where significance tests between years were performed, the prevalence estimate from the earlier year (e.g., 2002, 2003, 2004, 2005, 2006, 2007, or 2008) becomes the first prevalence estimate, and the prevalence estimate from the later year (e.g., 2003, 2004, 2005, 2006, 2007, 2008, or 2009) becomes the second prevalence estimate.

Under the null hypothesis, Z is asymptotically distributed as a normal random variable. Therefore, calculated values of Z can be referred to the unit normal distribution to determine the

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

When comparing population subgroups across three or more levels of a categorical variable, log-linear chi-square tests of independence of the subgroups and the prevalence variables were conducted using SUDAAN in order to first control the error level for multiple comparisons. If Shah's Wald *F* test (transformed from the standard Wald chi-square) indicated overall significant differences, the significance of each particular pairwise comparison of interest was tested using SUDAAN analytic procedures to properly account for the sample design (RTI International, 2008). Using the published estimates and SEs to perform independent *t* tests for the difference of proportions usually will provide the same results as tests performed in SUDAAN. However, where the significance level is borderline, results may differ for two reasons: (1) the covariance term is included in SUDAAN tests, whereas it is not included in independent *t* tests; and (2) the reduced number of significant digits shown in the published estimates may cause rounding errors in the independent *t* tests.

As part of a comparative analysis discussed in Chapter 8, prevalence estimates from the Monitoring the Future (MTF) study, sponsored by the National Institute on Drug Abuse (NIDA), were presented for recency measures of selected substances (see Tables 8.1 and 8.2). The analyses focused on prevalence estimates for 8th and 10th graders and prevalence estimates for young adults aged 19 to 24 for 2002 through 2009. Estimates for the 8th and 10th grade students were calculated using MTF data as the simple average of the 8th and 10th grade estimates. Estimates for young adults aged 19 to 24 were calculated using MTF data as the simple average of three modal age groups: 19 and 20 years, 21 and 22 years, and 23 and 24 years. Published results were not available from NIDA for significant differences in prevalence estimates between years for these subgroups, so testing was performed using information that was available.

For the 8th and 10th grade average estimates, tests of differences were performed between 2009 and the 7 prior years. Estimates for persons in grade 8 and grade 10 were considered independent, simplifying the calculation of variances for the combined grades. Across years, the estimates for 2009 involved samples independent of those in 2002, 2003, 2004, 2005, 2006, and 2007, but from 2008 to 2009 the sample of schools overlapped 50 percent, creating a covariance in the estimates. Design effects published in Johnston et al. (2009b) for adjacent and nonadjacent year testing were used.

For the 19- to 24-year-old age group, tests of differences were done assuming independent samples between years an odd number of years apart because two distinct cohorts a year apart were monitored longitudinally at 2-year intervals. This is appropriate for comparisons of 2002, 2004, 2006, and 2008 with 2009. However, this results in conservative tests for comparisons of 2003, 2005, and 2007 data with 2009 data because it does not take into account covariances associated with repeated observations from the longitudinal samples. Estimates of covariances were not available.

As an example, the difference between the 2008 and 2009 averages of prevalence estimates for persons in grades 8 and 10 can be expressed as

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

where $\overline{p}_1 = (\hat{p}_{11} + \hat{p}_{12})/2$, $\hat{p}_{11}$ and $\hat{p}_{12}$ are the prevalence estimates for the 8th and 10th grades, respectively, for 2008; and $\overline{p}_2$ is defined similarly for 2009. The variance of a prevalence estimate $\hat{p}$ can be written as

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

where n is the sample size and D is the appropriate design effect obtained from the sampling design. In the MTF study, design effects were available for comparisons between adjacent-year (i.e., 2008 vs. 2009) estimates and nonadjacent-year (i.e., 2002 vs. 2009, 2003 vs. 2009, 2004 vs. 2009, 2005 vs. 2009, 2006 vs. 2009, and 2007 vs. 2009) estimates; therefore, the variance of the difference between 2 years of estimates for a particular grade can be expressed as

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

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

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

The test statistic can therefore be written as

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

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

B.3   Other Information on Data Accuracy

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

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

B.3.1 Screening and Interview Response Rate Patterns

In 2009, respondents continued to receive a $30 incentive in an effort to maximize response rates. The weighted screening response rate (SRR) is defined as the weighted number of successfully screened households[7] divided by the weighted number of eligible households (as defined in Table B.3), or

$$SRR = \frac{\sum w_{hh} complete_{hh}}{\sum w_{hh} eligible_{hh}},$$

where w_{hh} is the inverse of the unconditional probability of selection for the household and excludes all adjustments for nonresponse and poststratification defined in Section A.3.3 of Appendix A. Of the 161,321 eligible households sampled for the 2009 NSDUH, 143,565 were screened successfully, for a weighted screening response rate of 88.8 percent (Table B.3). At the person level, the weighted interview response rate (IRR) is defined as the weighted number of respondents divided by the weighted number of selected persons (see Table B.4), or

$$IRR = \frac{\sum w_i complete_i}{\sum w_i selected_i},$$

where w_i is the inverse of the probability of selection for the person and includes household-level nonresponse and poststratification adjustments (adjustments 1, 2, and 3 in Section A.3.3 of Appendix A). To be considered a completed interview, a respondent must provide enough data to pass the usable case rule.[8] In the 143,565 screened households, a total of 85,429 sample persons were selected, and completed interviews were obtained from 68,700 of these sample persons, for a weighted IRR of 75.7 percent (Table B.4). A total of 11,585 (17.0 percent) sample persons were classified as refusals or parental refusals, 3,024 (3.5 percent) were not available or never at home, and 2,120 (3.8 percent) did not participate for various other reasons, such as physical or mental incompetence or language barrier (see Table B.4, which also shows the distribution of the selected sample by interview code and age group). Among demographic subgroups, the weighted IRR was higher among 12 to 17 year olds (85.7 percent), females (77.1 percent), blacks (80.7 percent), persons in the South (77.4 percent), and residents of nonmetropolitan areas (77.9 percent) than among other related groups (Table B.5).

The overall weighted response rate, defined as the product of the weighted screening response rate and weighted interview response rate or

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[7] A successfully screened household is one in which all screening questionnaire items were answered by an adult resident of the household and either zero, one, or two household members were selected for the NSDUH interview.

[8] The usable case rule requires that a respondent answer "yes" or "no" to the question on lifetime use of cigarettes and "yes" or "no" to at least nine additional lifetime use questions.

$$ORR = SRR \times IRR$$

was 67.2 percent in 2009. Nonresponse bias can be expressed as the product of the nonresponse rate $(1 - R)$ and the difference between the characteristic of interest between respondents and nonrespondents in the population $(P_r - P_{nr})$. By maximizing NSDUH response rates, it is hoped that the bias due to the difference between the estimates from respondents and nonrespondents is minimized. Drug use surveys are particularly vulnerable to nonresponse because of the difficult nature of accessing heavy drug users. In a study that matched 1990 census data to 1990 NHSDA nonrespondents,[9] it was found that populations with low response rates did not always have high drug use rates. For example, although some populations were found to have low response rates and high drug use rates (e.g., residents of large metropolitan areas and males), other populations had low response rates and low drug use rates (e.g., older adults and high-income populations). Therefore, many of the potential sources of bias tend to cancel each other in estimates of overall prevalence (Gfroerer, Lessler, & Parsley, 1997a).

B.3.2 Inconsistent Responses and Item Nonresponse

Among survey participants, item response rates were generally very high for most drug use items. However, respondents could give inconclusive or inconsistent information about whether they ever used a given drug (i.e., "yes" or "no") and, if they had used a drug, when they last used it; the latter information is needed to identify those lifetime users of a drug who used it in the past year or past month. In addition, respondents could give inconsistent responses to items such as when they first used a drug compared with their most recent use of a drug. These missing or inconsistent responses first are resolved where possible through a logical editing process. Additionally, missing or inconsistent responses are imputed using statistical methodology. These imputation procedures in NSDUH are based on responses to multiple questions, so that the maximum amount of information is used in determining whether a respondent is classified as a user or nonuser, and if the respondent is classified as a user, whether the respondent is classified as having used in the past year or the past month. For example, ambiguous data on the most recent use of cocaine are statistically imputed based on a respondent's data for use (or most recent use) of tobacco products, alcohol, inhalants, marijuana, hallucinogens, and nonmedical use of prescription psychotherapeutic drugs. Nevertheless, editing and imputation of missing responses are potential sources of measurement error. For more information on editing and statistical imputation, see Sections A.3.1 and A.3.2 of Appendix A. Details of the editing and imputation procedures for 2009 also will appear in the *2009 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2008 NSDUH Methodological Resource Book* (RTI International, 2010).

B.3.3 Data Reliability

A reliability study was conducted as part of the 2006 NSDUH to assess the reliability of responses to the NSDUH questionnaire. An interview/reinterview method was employed in which 3,136 individuals were interviewed on two occasions during 2006 generally 5 to 15 days apart; the initial interviews in the reliability study were a subset of the main study interviews.

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

The reliability of the responses was assessed by comparing the responses of the first interview with the responses from the reinterview. Responses from the first interview and reinterview that were analyzed for response consistency were raw data that had been only minimally edited for ease of analysis and had not been imputed (see Sections A.3.1 and A.3.2 in this report).

Results for the reliability of selected variables related to substance use and demographic characteristics are presented in Table B.6. Reliability is expressed in the table by estimates of Cohen's kappa (κ) (Cohen, 1960), which can be interpreted according to benchmarks proposed by Landis and Koch (1977, p. 165):

- poor agreement for kappas less than 0.00,

- slight agreement for kappas of 0.00 to 0.20,

- fair agreement for kappas of 0.21 to 0.40,

- moderate agreement for kappas of 0.41 to 0.60,

- substantial agreement for kappas of 0.61 to 0.80, and

- almost perfect agreement for kappas of 0.81 to 1.00.

The kappa values for the lifetime and past year substance use variables (marijuana use, alcohol use, and cigarette use) all showed almost perfect response consistency (Table B.6). The value obtained for the substance dependence or abuse measure in the past year showed substantial agreement (0.67), while the substance abuse treatment variable showed almost perfect consistency in both the lifetime and past year. The variables for age at first use of marijuana and perceived great risk of smoking marijuana once a month showed substantial agreement (0.74 and 0.68, respectively). The demographic variables showed almost perfect agreement, ranging from 1.00 for gender to 0.95 for current enrollment in school. For further information on the reliability of a wide range of measures contained in NSDUH, see the complete methodology report (Chromy et al., 2010).

B.3.4 Validity of Self-Reported Substance Use

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

these procedures often are impractical or too costly for general population epidemiological studies (SRNT Subcommittee on Biochemical Verification, 2002).

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

B.4   Measurement Issues

Several measurement issues associated with the 2009 NSDUH may be of interest and are discussed in this section. Specifically, these issues include the methods for measuring incidence; nicotine (cigarette) dependence; and substance dependence and abuse.

B.4.1 Incidence

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

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

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

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

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

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

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

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

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

Because NSDUH is a survey of persons aged 12 years old or older at the time of the interview, younger individuals in the sample dwelling units are not eligible for selection into the NSDUH sample. Some of these younger persons may have initiated substance use during the past year. As a result, past year initiate estimates suffer from undercoverage if a user assumes that these estimates reflect all initial users instead of only for those above the age of 11. For earlier years, data can be obtained retrospectively based on the age at and date of first use. As an example, persons who were 12 years old on the date of their interview in the 2009 survey may report having initiated use of cigarettes between 1 and 2 years ago; these persons would have been past year initiates reported in the 2008 survey had persons who were 11 years old on the

date of the 2008 interview been allowed to participate in the survey. Similarly, estimates of past year use by younger persons (age 10 or younger) can be derived from the current survey, but they apply to initiation in prior years and not the survey year.

To get an impression of the potential undercoverage in the current year, reports of substance use initiation reported by persons aged 12 or older were estimated for the years in which these persons would have been 1 to 11 years younger. These estimates do not necessarily reflect behavior by persons 1 to 11 years younger in the current survey. Instead, the data for the 11 year olds reflect initiation in the year prior to the current survey; the data for the 10 year olds reflect behavior between the 12th and 23rd months prior to this year's survey, and so on. A very rough way to adjust for the difference in the years that the estimate pertains to without considering changes in the population is to apply an adjustment factor to each age-based estimate of past year initiates. This adjustment factor can be based on a ratio of lifetime users aged 12 to 17 in the current survey year to the same estimate for the prior applicable survey year. To illustrate the calculation, consider past year use of alcohol. In the 2009 survey, 100,376 persons 12 years old were estimated to have initiated use of alcohol between 1 and 2 years earlier. These persons would have been past year initiates in the 2008 survey conducted on the same dates had the 2008 survey covered younger persons. The estimated number of lifetime users currently aged 12 to 17 was 9,382,813 for 2009 and 9,540,037 for 2008, indicating fewer overall initiates of alcohol use among persons aged 17 or younger in 2009. Thus, an adjusted estimate of initiation of alcohol use by persons who were 11 years old in 2009 is given by

$$\left(\textit{Estimated Past Year Initiates Aged 11}\right)_{2008} \times \frac{\left(\textit{Estimated Lifetime Users Aged 12 to 17}\right)_{2009}}{\left(\textit{Estimated Lifetime Users Aged 12 to 17}\right)_{2008}}.$$

This yielded an adjusted estimate of 98,722 persons 11 years old on a 2009 survey date and initiating use of alcohol in the past year:

$$100,376 * \frac{9,382,813}{9,540,037} = 98,722.$$

A similar procedure was used to adjust the estimated number of past year initiates among persons who would have been 10 years old on the date of the interview in 2007 and for younger persons in earlier years. The overall adjusted estimate for past year initiates of alcohol use by persons 11 years of age or younger on the date of the interview was 230,373, or about 5.1 percent of the estimate based on past year initiation by persons 12 or older only (230,373 ÷ 4,560,449 = 0.0505).

Based on similar analyses, the estimated undercoverage of past year initiates was 4.8 percent for cigarettes, 1.2 percent for marijuana, and 18.7 percent for inhalants. These 2009 results are comparable with undercoverage estimates presented in prior reports using data from the 2005 through 2008 surveys.

The undercoverage of past year initiates aged 11 or younger also affects the mean age at first use estimate. An adjusted estimate of the mean age at first use was calculated using a weighted estimate of the mean age at first use based on the current survey and the numbers of

persons aged 11 or younger in the past year obtained in the aforementioned analysis for estimating undercoverage of past year initiates. Analysis results showed that the mean age at first use was changed from 16.9 to 16.5 (or a decrease of 2.4 percent) for alcohol, from 17.5 to 17.0 (or a decrease of 2.6 percent) for cigarettes, from 17.0 to 16.9 (or a decrease of 0.4 percent) for marijuana, and from 16.9 to 15.6 (or a decrease of 7.7 percent) for inhalants. The percentage decreases reported above are comparable with results generated in prior survey years.

B.4.2 Nicotine (Cigarette) Dependence

The 2009 NSDUH's CAI instrumentation included questions designed to measure nicotine dependence among current cigarette smokers. Nicotine dependence is based on criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) (Shiffman, Hickcox, Gnys, Paty, & Kassel, 1995; Shiffman, Waters, & Hickcox, 2004) and the Fagerstrom Test of Nicotine Dependence (FTND) (Fagerstrom, 1978; Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991). The above-mentioned criteria were first used to measure nicotine dependence in NSDUH in 2003.

The conceptual roots of the NDSS (Edwards & Gross, 1976) are similar to those behind the American Psychiatric Association (APA) *Diagnostic and Statistical Manual of Mental Disorders,* 4th edition (DSM-IV), concept of dependence (APA, 1994). The 2009 NSDUH contained 19 NDSS questions that addressed five aspects of dependence:

1. Smoking drive (compulsion to smoke driven by nicotine craving and withdrawal)
    a. After not smoking for a while, you need to smoke in order to feel less restless and irritable.
    b. When you don't smoke for a few hours, you start to crave cigarettes.
    c. You sometimes have strong cravings for a cigarette where it feels like you're in the grip of a force you can't control.
    d. You feel a sense of control over your smoking - that is, you can "take it or leave it" at any time.
    e. You sometimes worry that you will run out of cigarettes.

2. Nicotine tolerance
    a. Since you started smoking, the amount you smoke has increased.
    b. Compared to when you first started smoking, you need to smoke a lot more now in order to be satisfied.
    c. Compared to when you first started smoking, you can smoke much, much more now before you start to feel anything.

3. Continuous smoking
    a. You smoke cigarettes fairly regularly throughout the day.
    b. You smoke about the same amount on weekends as on weekdays.
    c. You smoke just about the same number of cigarettes from day to day.

d. It's hard to say how many cigarettes you smoke per day because the number often changes.

e. It's normal for you to smoke several cigarettes in an hour, then not have another one until hours later.

4. Behavioral priority (preferring smoking over other reinforcing activities)

a. You tend to avoid places that don't allow smoking, even if you would otherwise enjoy them.

b. There are times when you choose not to be around your friends who don't smoke because they won't like it if you smoke.

c. Even if you're traveling a long distance, you'd rather not travel by airplane because you wouldn't be allowed to smoke.

5. Stereotypy (fixed patterns of smoking)

a. Do you have any friends who do not smoke cigarettes?

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

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

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

To optimize the number of respondents who could be classified for nicotine dependence, imputation was utilized for all respondents who answered all but 1 of the 17 nicotine dependence questions that were used in the NDSS algorithm. The imputation was based on weighted least square regressions using the other 16 NDSS items as covariates in the model. Details of the imputation procedures in the 2009 survey for the nicotine dependence variables will appear in the *2009 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2008 NSDUH Methodological Resource Book* (RTI International, 2010).

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

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

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

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

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

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

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

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

B.4.3   Illicit Drug and Alcohol Dependence and Abuse

The 2009 NSDUH CAI instrumentation included questions that were designed to measure dependence on and abuse of illicit drugs and alcohol. For these substances,[10] dependence and abuse questions were based on the criteria in the DSM-IV (APA, 1994).

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

1. Spent a great deal of time over a period of a month getting, using, or getting over the effects of the substance.

2. Used the substance more often than intended or was unable to keep set limits on the substance use.

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

3. Needed to use the substance more than before to get desired effects or noticed that the same amount of substance use had less effect than before.

4. Inability to cut down or stop using the substance every time tried or wanted to.

5. Continued to use the substance even though it was causing problems with emotions, nerves, mental health, or physical problems.

6. The substance use reduced or eliminated involvement or participation in important activities.

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

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

1. Serious problems at home, work, or school caused by the substance, such as neglecting your children, missing work or school, doing a poor job at work or school, or losing a job or dropping out of school.

2. Used the substance regularly and then did something that might have put you in physical danger.

3. Use of the substance caused you to do things that repeatedly got you in trouble with the law.

4. Had problems with family or friends that were probably caused by using the substance and continued to use the substance even though you thought the substance use caused these problems.

Criteria used to determine whether a respondent was asked the dependence and abuse questions during the interview included responses from the core substance use questions and the frequency of substance use questions, as well as the noncore substance use questions. Missing or incomplete responses in the core substance use and frequency of substance use questions were imputed. However, the imputation process did not take into account reported data in the noncore (i.e., substance dependence and abuse) CAI modules. This may have resulted in responses to the dependence and abuse questions that were inconsistent with the imputed substance use or frequency of substance use.

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

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

In 2005, two new questions were added to the noncore special drugs module about past year methamphetamine use: "Have you ever, even once, used methamphetamine?" and "Have you ever, even once, used a needle to inject methamphetamine?" In 2006, an additional follow-up question was added to the noncore special drugs module confirming prior responses about methamphetamine use: "Earlier, the computer recorded that you have never used methamphetamine. Which answer is correct?" The responses to these new questions were used in the skip logic for the stimulant dependence and abuse questions. Based on the decisions made during the methamphetamine analysis,[11] respondents who indicated past year methamphetamine use solely from these new special drug use questions (i.e., did not indicate methamphetamine use from the core drug module or other questions in the special drugs module) were categorized as NOT having past year stimulant dependence or abuse regardless of how they answered the dependence and abuse questions. Furthermore, if these same respondents were categorized as not having past year dependence on or abuse of any other substance (e.g., pain relievers, tranquilizers, or sedatives for the psychotherapeutic drug grouping), then they were categorized as NOT having past year dependence on or abuse of psychotherapeutics, illicit drugs, illicit drugs or alcohol, and illicit drugs and alcohol.

In 2008, questionnaire logic for determining hallucinogen, stimulant, and sedative dependence or abuse was modified. The revised skip logic used information collected in the noncore special drugs module in addition to that collected in questions from the core drug modules. Respondents were asked about hallucinogen dependence and abuse if they additionally reported in the special drugs module using Ketamine, DMT, AMT, Foxy, or *Salvia divinorum*; stimulant dependence and abuse if they reported additionally using Adderall®; and sedative dependence and abuse if they reported additionally using Ambien®. Complying with the previous decision to exclude respondents whose methamphetamine use was based solely on responses in a noncore module from being classified as having stimulant dependence or abuse, respondents who indicated past year hallucinogen, stimulant, or sedative use based solely on these special drug questions were categorized as NOT having past year dependence on or abuse of the relevant substance regardless of how they answered the dependence and abuse questions.

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

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[11] See Section B.4.8 in the *Results from the 2008 National Survey on Drug Use and Health: National Findings* (OAS, 2009) for the methamphetamine analysis decisions.

Table B.1 Demographic and Geographic Domains Forced to Match Their Respective U.S. Census Bureau Population Estimates through the Weight Calibration Process, 2009

Main Effects	Two-Way Interactions

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

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

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2009.

Table B.2   Summary of 2009 NSDUH Suppression Rules

Estimate	Suppress if:
Prevalence Rate, $\hat{p}$, with Nominal Sample Size, n, and Design Effect, $deff$ $$\left(deff = \frac{n\left[SE(\hat{p})\right]^2}{\hat{p}(1-\hat{p})} \right)$$	(1) The estimated prevalence rate, $\hat{p}$, is $< .00005$ or $\geq .99995$, or (2) $\dfrac{SE(\hat{p}) \ / \ \hat{p}}{-\ln(\hat{p})} > .175$ when $\hat{p} \leq .5$, or $\dfrac{SE(\hat{p}) \ / \ (1-\hat{p})}{-\ln(1-\hat{p})} > .175$ when $\hat{p} > .5$, or (3) Effective $n < 68$, where Effective $n = \dfrac{n}{deff} = \dfrac{\hat{p}(1-\hat{p})}{\left[SE(\hat{p})\right]^2}$, or (4) $n < 100$. Note: The rounding portion of this suppression rule for prevalence rates will produce some estimates that round at one decimal place to 0.0 or 100.0 percent but are not suppressed from the tables.
Estimated Number (Numerator of $\hat{p}$)	The estimated prevalence rate, $\hat{p}$, is suppressed. Note: In some instances when $\hat{p}$ is not suppressed, the estimated number may appear as a 0 in the tables. This means that the estimate is greater than 0 but less than 500 (estimated numbers are shown in thousands).
Mean Age at First Use, $\bar{x}$, with Nominal Sample Size, n	(1) $RSE(\bar{x}) > .5$, or (2) $n < 10$.

deff = design effect; RSE = relative standard error; SE = standard error.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2009.

Table B.3   Weighted Percentages and Sample Sizes for 2008 and 2009 NSDUHs, by Final Screening Result Code

Final Screening Result Code	Sample Size 2008	Sample Size 2009	Weighted Percentage 2008	Weighted Percentage 2009
TOTAL SAMPLE	194,815	195,132	100.00	100.00
Ineligible Cases	34,682	33,811	17.50	17.27
Eligible Cases	160,133	161,321	82.50	82.73
INELIGIBLES	34,682	33,811	17.50	17.27
10 – Vacant	19,308	18,933	56.04	55.68
13 - Not a Primary Residence	7,189	7,279	20.63	22.15
18 - Not a Dwelling Unit	2,582	2,547	7.32	7.35
22 - All Military Personnel	340	347	1.01	1.09
Other, Ineligible[1]	5,263	4,705	14.99	13.74
ELIGIBLE CASES	160,133	161,321	82.50	82.73
Screening Complete	142,938	143,565	89.04	88.77
30 - No One Selected	83,422	84,727	51.22	51.78
31 - One Selected	32,213	31,874	20.30	19.79
32 - Two Selected	27,303	26,964	17.52	17.20
Screening Not Complete	17,195	17,756	10.96	11.23
11 - No One Home	3,111	2,951	1.82	1.76
12 - Respondent Unavailable	401	451	0.26	0.27
14 - Physically or Mentally Incompetent	358	419	0.23	0.28
15 - Language Barrier—Hispanic	91	107	0.05	0.06
16 - Language Barrier—Other	468	579	0.33	0.41
17 - Refusal	11,611	11,910	7.47	7.60
21 - Other, Access Denied[2]	1,113	1,269	0.77	0.79
24 - Other, Eligible	14	15	0.01	0.01
27 - Segment Not Accessible	0	0	0.00	0.00
33 - Screener Not Returned	15	23	0.01	0.01
39 - Fraudulent Case	13	27	0.01	0.03
44 - Electronic Screening Problem	0	5	0.00	0.00

[1] Examples of "Other, Ineligible" cases are those in which all residents lived in the dwelling unit for less than half of the calendar quarter and dwelling units that were listed in error.

[2] Other, Access Denied" includes all dwelling units to which the field interviewer was denied access, including locked or guarded buildings, gated communities, and other controlled access situations.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table B.4 Weighted Percentages and Sample Sizes for 2008 and 2009 NSDUHs, by Final Interview Code

Final Interview Code	12+ Sample Size 2008	12+ Sample Size 2009	12+ Weighted Percentage 2008	12+ Weighted Percentage 2009	12-17 Sample Size 2008	12-17 Sample Size 2009	12-17 Weighted Percentage 2008	12-17 Weighted Percentage 2009	18+ Sample Size 2008	18+ Sample Size 2009	18+ Weighted Percentage 2008	18+ Weighted Percentage 2009
TOTAL	86,435	85,429	100.00	100.00	26,501	26,377	100.00	100.00	59,934	59,052	100.00	100.00
70 - Interview Complete	68,736	68,700	74.45	75.68	22,559	22,644	84.73	85.73	46,177	46,056	73.29	74.59
71 - No One at Dwelling Unit	1,366	1,252	1.46	1.56	230	202	0.78	0.71	1,136	1,050	1.54	1.65
72 - Respondent Unavailable	1,940	1,772	2.23	1.96	363	324	1.38	1.07	1,577	1,448	2.33	2.05
73 - Break-Off	68	21	0.11	0.03	10	4	0.04	0.02	58	17	0.12	0.03
74 - Physically/ Mentally Incompetent	876	847	1.88	1.83	205	208	0.77	0.78	671	639	2.01	1.94
75 - Language Barrier – Hispanic	199	155	0.23	0.23	7	7	0.03	0.03	192	148	0.25	0.25
76 -Language Barrier – Other	383	430	1.00	1.08	39	29	0.18	0.11	344	401	1.10	1.18
77 - Refusal	9,883	9,498	16.87	16.15	765	756	2.77	2.92	9,118	8,742	18.46	17.60
78 - Parental Refusal	2,192	2,087	0.88	0.80	2,192	2,087	8.71	8.16	0	0	0.00	0.00
91 – Fraudulent Case	10	6	0.01	0.01	0	1	0.00	0.01	10	5	0.01	0.01
Other[1]	782	661	0.86	0.67	131	115	0.61	0.46	651	546	0.89	0.69

[1] "Other" includes eligible person moved, data not received from field, too dangerous to interview, access to building denied, computer problem, and interviewed wrong household member.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table B.5 Response Rates and Sample Sizes for 2008 and 2009 NSDUHs, by Demographic Characteristics

Demographic Characteristic	Selected Persons 2008	Selected Persons 2009	Completed Interviews 2008	Completed Interviews 2009	Weighted Response Rate 2008	Weighted Response Rate 2009
TOTAL	86,435	85,429	68,736	68,700	74.45%	75.68%
AGE IN YEARS						
12-17	26,501	26,377	22,559	22,644	84.73%	85.73%
18-25	29,091	28,444	23,468	23,248	80.67%	81.70%
26 or Older	30,843	30,608	22,709	22,808	72.00%	73.34%
GENDER						
Male	42,460	42,008	33,120	33,282	72.39%	74.21%
Female	43,975	43,421	35,616	35,418	76.37%	77.07%
RACE/ETHNICITY						
Hispanic	13,079	12,779	10,395	10,502	74.61%	78.70%
White	56,842	56,052	45,003	44,601	74.43%	75.14%
Black	9,947	9,804	8,327	8,315	78.75%	80.70%
All Other Races	6,567	6,794	5,011	5,282	66.66%	65.91%
REGION						
Northeast	17,336	17,503	13,594	13,772	72.48%	73.44%
Midwest	24,383	23,827	19,314	19,133	74.93%	75.97%
South	25,641	25,560	20,877	20,976	76.59%	77.39%
West	19,075	18,539	14,951	14,819	72.24%	74.50%
COUNTY TYPE						
Large Metropolitan	38,682	38,216	30,133	30,160	72.46%	73.97%
Small Metropolitan	29,254	29,404	23,478	23,926	76.40%	77.55%
Nonmetropolitan	18,499	17,809	15,125	14,614	77.19%	77.92%

Note: Estimates are based on demographic information obtained from screener data and are not consistent with estimates on demographic characteristics presented in the 2008 and 2009 sets of detailed tables.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table B.6   Kappa Statistics for Selected Substance Use, Substance Use Treatment, and Demographic Variables for Persons Aged 12 or Older: 2006 NSDUH Reliability Study

Variable[1]	Lifetime	Past Year	At Time of Survey
SUBSTANCE USE AND RELATED VARIABLES			
Marijuana Use	0.93	0.82	NA
Alcohol Use	0.83	0.90	NA
Cigarette Use	0.92	0.93	NA
Age at First Use of Marijuana	NA	NA	0.74
Perceived Great Risk of Smoking Marijuana Once a Month	NA	NA	0.68
Substance Dependence or Abuse[2]	--	0.67	NA
Substance Use Treatment[3]	0.89	0.87	NA
DEMOGRAPHIC CHARACTERISTIC VARIABLES			
Gender	NA	NA	1.00
Hispanic, Latino, or Spanish Origin or Descent	NA	NA	0.99
Currently Enrolled in Any School	NA	NA	0.95
Currently Married[4]	NA	NA	0.97

-- Not available.

NA: Not applicable.

[1] Variables used in the analysis were raw variables that had been only minimally edited for ease in analysis and had not been imputed.

[2] Substance dependence or abuse is dependence on or abuse of illicit drugs or alcohol and is based on definitions in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Dependence or abuse estimates presented in the Reliability Study are among past year users only, which differ from estimates in the NSDUH detailed tables for the total population. Also, unlike the standard definition of abuse used in the NSDUH detailed tables, abuse was defined independently from dependence in the Reliability Study, meaning that a respondent could be classified as having dependence and as having abused.

[3] Received Substance Use Treatment refers to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. It includes treatment received at any location, such as a hospital, rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. Substance Use Treatment questions were asked only of respondents who previously indicated ever using alcohol or drugs and having ever received treatment for alcohol or drug use.

[4] Aged 15 or older.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 Reliability Study (*n* = 3,136).

Appendix C: Key Definitions, 2009

        This appendix provides definitions for many of the measures and terms used in this report on the 2009 National Survey on Drug Use and Health (NSDUH). Where relevant, cross-references also are provided. For some key terms, specific question wording, including "feeder questions" that precede the question(s), is provided for clarity.

Abuse	Abuse of illicit drugs or alcohol was defined as meeting one or more of the four criteria for abuse included in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (American Psychiatric Association [APA], 1994) and if the definition for dependence was not met for that substance. Additional criteria for alcohol and marijuana abuse include the use of these substances on 6 or more days in the past 12 months. These questions have been included in the survey since 2000. Responses to the dependence or abuse questions based only on the past year use of methamphetamine, Ambien®, Adderall®, or specific hallucinogens from the routing patterns added between 2005 and 2008 were not included in these measures. See Section B.4.3 of Appendix B for additional details.
	SEE: "Dependence," "Need for Illicit Drug or Alcohol Use Treatment," and "Prevalence."
Adult Education	SEE: "Education."
Age	Age of the respondent was defined as "age at time of interview." The interview program calculated the respondent's age from the date of birth and interview date. The interview program prompts the interviewer to confirm the respondent's age after it has been calculated.
Alcohol Use	Measures of use of alcohol in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last drank an alcoholic beverage?"
	Feeder question: "The next questions are about alcoholic beverages, such as, beer, wine, brandy, and mixed drinks. Listed on the next screen are examples of the types of beverages we are interested in. Please review this list carefully before you answer these questions. These questions are about drinks of alcoholic beverages. Throughout these questions, by a 'drink,' we mean a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor,

or a mixed drink with liquor in it. We are not asking about times when you only had a sip or two from a drink. Have you ever, even once, had a drink of any type of alcoholic beverage? Please do not include times when you only had a sip or two from a drink."

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

Alcohol Use in Combination with Illicit Drug Use

Respondents who reported drinking at least one alcoholic beverage within the past 30 days were asked what other drugs were used while they were drinking or were used within a couple of hours of drinking. Respondents were presented with a list of up to 10 possible drugs, depending on which drugs they previously reported using in the past month. The 10 possible drugs were marijuana or hashish, cocaine or crack, heroin, hallucinogens, inhalants, prescription pain relievers, prescription tranquilizers, prescription stimulants, methamphetamine, and prescription sedatives. A respondent was defined as having Alcohol Use in Combination with Illicit Drug Use if he or she reported using any 1 of the 10 drugs above with his or her last alcohol use or within a couple of hours of drinking.

NOTE: Respondents were defined as having used methamphetamine with their most recent use of alcohol in the past month if they reported methamphetamine use in the core stimulants module. They also were included if they reported use in the noncore special drugs module and said they had not reported methamphetamine use in the core module because they did not think of it as a prescription drug.

SEE: "Alcohol Use," "Core," "Illicit Drugs," and "Noncore."

American Indian or Alaska Native

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

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

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

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

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

SEE: "Age."

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

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

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

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

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

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

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

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

Cash Assistance   Cash assistance was defined as receipt of direct monetary payments due to low income, such as Temporary Assistance for Needy Families (TANF), welfare, or other public assistance. Since 2008, all respondents have received a single question asking whether anyone in the family received cash assistance from a State or county welfare program.

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

SEE: "Welfare Assistance."

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

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

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

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

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

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

Cocaine Use

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

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

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

College Enrollment Status

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

Core

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

SEE: "Noncore."

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

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

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

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

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

Current Use   Any reported use of a specific substance in the past 30 days.

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

Delinquent Behavior   Youths aged 12 to 17 were asked a series of six questions: "During the past 12 months, how many times have you . . . stolen or tried to steal anything worth more than $50?" "sold illegal drugs?"

"attacked someone with the intent to seriously hurt them?" "gotten into a serious fight at school or work?" "taken part in a fight where a group of your friends fought against another group?" and "carried a handgun?"

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

Dependence

Dependence on illicit drugs or alcohol was defined as meeting three out of seven dependence criteria (for substances that included questions to measure a withdrawal criterion) or three out of six dependence criteria (for substances that did not include withdrawal questions) for that substance, based on criteria included in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (APA, 1994). Additional criteria for alcohol and marijuana dependence since 2000 included the use of these substances on 6 or more days in the past 12 months. These criteria were not used to define Nicotine (Cigarette) Dependence, which used a different series of items. Responses to the dependence or abuse questions based only on the past year use of methamphetamine, Ambien®, Adderall®, or specific hallucinogens from the routing patterns added between 2005 and 2008 were not included in these measures. See Section B.4.3 in Appendix B for additional details.

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

Driving Under the Influence

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

SEE: "Prevalence."

Ecstasy Use

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

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

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

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

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

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

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

   Other   "Other" includes all responses defined as not being in the labor force, including being a student,

keeping house or caring for children full time, retired, disabled, or other miscellaneous work statuses. Respondents who reported that they did not have a job and did not want one also were classified as not being in the labor force. Similarly, respondents who reported not having a job and looking for work also were classified as not being in the labor force if they did not report making specific efforts to find work in the past 30 days. Those respondents who reported having no job and provided no additional information could not have their labor force status determined and were therefore assigned to the "Other" employment category.

Ethnicity   SEE: "Race/Ethnicity."

Ever Use   SEE: "Lifetime Use."

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

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

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

Family Income   Family income was ascertained by asking respondents about their total personal income and total family income, based on the following questions: "Of these income groups, which category best represents (your /SAMPLE MEMBER's) total personal income during [the previous calendar year]?" and "Of these income groups, which category best represents (your/SAMPLE

MEMBER's) total combined family income during [the previous calendar year]?" Family is defined as any related member in the household, including all foster relationships and unmarried partners (including same-sex partners). It excludes roommates, boarders, and other nonrelatives.

NOTE: If no other family members were living with the respondent, total family income was based on information about the respondent's total personal income. For youths aged 12 to 17 and those respondents who were unable to respond to the insurance or income questions, proxy responses were accepted from a household member identified as being better able to give the correct information about insurance and income.

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

Food Stamps

Food stamps are government-issued coupons that can be used to purchase food. Instead of coupons, some States issue a special card that can be used like a credit card to purchase food in grocery stores. Since 2008, all respondents have received a single question asking whether anyone in the family received food stamps.

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

SEE: "Welfare Assistance."

Gang Fighting

Youths aged 12 to 17 were asked how many times during the past 12 months they had taken part in a fight where a group of their friends fought against another group. Response alternatives were (1) 0 times, (2) 1 or 2 times, (3) 3 to 5 times, (4) 6 to 9 times, or (5) 10 or more times.

SEE: "Delinquent Behavior" and "Stealing."

Geographic Division

Data are presented for nine geographic divisions within the four geographic regions. Within the ***Northeast Region*** are the *New England Division* (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) and the *Middle Atlantic Division* (New Jersey, New York, Pennsylvania). Within the ***Midwest Region*** are the *East North Central Division* (Illinois,

Indiana, Michigan, Ohio, Wisconsin) and the *West North Central Division* (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota). Within the **South Region** are the *South Atlantic Division* (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia), the *East South Central Division* (Alabama, Kentucky, Mississippi, Tennessee), and the *West South Central Division* (Arkansas, Louisiana, Oklahoma, Texas). Within the **West Region** are the *Mountain Division* (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming) and the *Pacific Division* (Alaska, California, Hawaii, Oregon, Washington).

SEE: "Region."

Hallucinogen Use

Measures of use of hallucinogens in the respondent's lifetime, the past year, and the past month were developed from responses to the core question about recency of use: "How long has it been since you last used any hallucinogen?" Responses to noncore questions about the use of the following drugs, which were added to the survey in 2006, were not included in these measures: ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), 5-MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy"), and *Salvia divinorum*.

Feeder questions: "The next questions are about substances called hallucinogens. These drugs often cause people to see or experience things that are not real... Have you ever, even once, used LSD, also called *acid*? Have you ever, even once, used PCP, also called *angel dust* or phencyclidine? Have you ever, even once, used peyote? Have you ever, even once, used mescaline? Have you ever, even once, used psilocybin, found in mushrooms? Have you ever, even once, used *Ecstasy*, also known as MDMA? Have you ever, even once used any other hallucinogen besides the ones that have been listed?"

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

Health Insurance Status

A series of questions was asked to identify whether respondents currently were covered by Medicare, Medicaid, the State Children's Health Insurance Program (SCHIP), military health care (such as TRICARE or CHAMPUS), private health insurance, or any kind of health insurance (if respondents reported not being covered by any of the above). If respondents did not currently have

health insurance coverage, questions were asked to determine the length of time they were without coverage and the reasons for not being covered.

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

SEE: "Medicaid" and "Medicare."

Heavy Use of Alcohol

Heavy use of alcohol was defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on each of 5 or more days in the past 30 days. Heavy alcohol users also were defined as binge users of alcohol.

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

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

Heroin Use

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

Feeder question: "These next questions are about heroin. Have you ever, even once, used heroin?"

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

Hispanic

Hispanic was defined as anyone of Hispanic, Latino, or Spanish origin. Respondents were classified as Hispanic in the race/ethnicity measure regardless of race.

SEE: "American Indian or Alaska Native," "Asian," "Black," "Race/Ethnicity," "Two or More Races," and "White."

Illicit Drugs

Illicit drugs include marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. Illicit drug use refers to use of any of these drugs based on

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responses to questions only in the core sections and does not include data from the noncore methamphetamine items that were added in 2005 and 2006. Responses to questions about the use of the following drugs, which were added to the survey beginning in 2006, were not included in these measures: GHB (gamma hydroxybutyrate), Adderall®, Ambien®, nonprescription cough or cold medicines, ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), 5-MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy"), and *Salvia divinorum.*

SEE: "Core," "Current Use," "Lifetime Use," "Noncore," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," and "Recency of Use."

Illicit Drugs Other Than Marijuana

These drugs include cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. This measure includes marijuana users who used any of the above drugs in addition to using marijuana, as well as users of those drugs who have not used marijuana. The measure for illicit drugs other than marijuana is defined based on responses to questions only in the core sections and does not include responses based on the noncore methamphetamine items that were added in 2005 and 2006. Responses to questions about the use of the following drugs, which were added to the survey beginning in 2006, were not included in these measures: GHB (gamma hydroxybutyrate), Adderall®, Ambien®, nonprescription cough or cold medicines, ketamine, DMT (dimethyltryptamine), AMT (alpha-methyltryptamine), and 5-MeO-DIPT (5-methoxy-diisopropyltryptamine, also known as "Foxy"), and *Salvia divinorum.*

SEE: "Core," "Current Use," "Lifetime Use," "Noncore," "Past Month Use," "Past Year Use," "Prevalence," "Psychotherapeutic Drugs," and "Recency of Use."

Incidence

Substance use incidence refers to the use of a substance for the first time (new use). Incidence estimates are based on questions about age at first use of substances, year and month of first use for recent initiates, the respondent's date of birth, and the interview date.

Incidence statistics in this report reflect first use occurring within the 12 months prior to the interview. This is referred to as past year incidence. For these statistics, respondents who are immigrants are

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included regardless of whether their first use occurred inside or outside the United States. See Section B.4.1 in Appendix B for additional details.

Income   SEE: "Family Income."

Inhalant Use   Measures of use of inhalants in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any inhalant for kicks or to get high?"

Feeder questions: "These next questions are about liquids, sprays, and gases that people sniff or inhale to get high or to make them feel good... Have you ever, even once, inhaled [INHALANT NAME] for kicks or to get high?" Respondents were asked about the following inhalants: (a) amyl nitrite, "poppers," locker room odorizers, or "rush"; (b) correction fluid, degreaser, or cleaning fluid; (c) gasoline or lighter fluid; (d) glue, shoe polish, or toluene; (e) halothane, ether, or other anesthetics; (f) lacquer thinner or other paint solvents; (g) lighter gases, such as butane or propane; (h) nitrous oxide or whippits; (i) spray paints; (j) some other aerosol spray; and (k) any other inhalants besides the ones that have been listed.

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

Large Metro   SEE: "County Type."

**Lifetime Daily
Cigarette Use**   A respondent was defined as being a lifetime daily cigarette user if he or she ever had a period in his or her life of smoking part or all of a cigarette every day for at least 30 days.

SEE: "Cigarette Use" and "Past Month Daily Cigarette Use."

Lifetime Use   Lifetime use indicates use of a specific substance at least once in the respondent's lifetime. This measure includes respondents who also reported last using the substance in the past 30 days or past 12 months.

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

Location of Most Recent Underage Alcohol Use

Respondents aged 12 to 20 who reported drinking at least one alcoholic beverage within the past 30 days were asked to indicate where they drank alcoholic beverages the last time they drank. The possible locations were (1) in a car or other vehicle; (2) at the respondent's home; (3) at someone else's home; (4) at a park, on a beach, or in a parking lot; (5) in a restaurant, bar, or club; (6) at a concert or sports game; (7) at school; or (8) some other place. Those who reported "some other place" were asked to write in a response indicating the specific location.

SEE: "Alcohol Use."

Low Precision

Prevalence estimates based on only a few respondents or with relatively large standard errors were not shown in the tables, but have been replaced with an asterisk (*) and noted as "low precision." These estimates have been omitted because one cannot place a high degree of confidence in their accuracy. See Table B.2 in Appendix B for a complete list of the rules used to determine low precision.

LSD Use

Measures of use of lysergic acid diethylamide (LSD) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used LSD?"

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

Marijuana Use

Measures of use of marijuana in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used marijuana or hashish?" Responses to questions about use of cigars with marijuana in them (blunts) were not included in these measures.

Feeder question: "The next questions are about marijuana and hashish. Marijuana is also called pot or grass. Marijuana is usually smoked, either in cigarettes called joints, or in a pipe. It is sometimes cooked in food. Hashish is a form of marijuana that is also called *hash*. It is usually smoked in a pipe. Another form of hashish is hash oil. Have you ever, even once, used marijuana or hashish?"

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Medicaid

Medicaid is a public assistance program that pays for medical care for low-income and disabled persons. Respondents were asked specifically about the Medicaid program in the State where they lived. Respondents aged 12 to 19 were asked specifically about the State Children's Health Insurance Program (SCHIP) in their State. Respondents aged 12 to 19 who reported that they were covered by the SCHIP in their State also were classified as being covered by Medicaid. Respondents aged 65 or older who reported that they were covered by Medicaid were asked to verify that their answer was correct.

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

Medicare

Medicare is a health insurance program for persons aged 65 or older and for certain disabled persons. Respondents under the age of 65 who reported that they were covered by Medicare were asked to verify that their answer was correct.

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

Methamphetamine Use

Measures of use of methamphetamine (also known as crank, crystal, ice, or speed), Desoxyn[®], or Methedrine[®] in the respondent's lifetime, the past year, and the past month were developed from responses to the core question about recency of use: "How long has it been since you last used methamphetamine, Desoxyn, or Methedrine?" In this report, estimates for the methamphetamine use measures from 2006 onward also include responses based on the noncore methamphetamine use items that were added in 2005 and 2006; estimates for 2002 through 2005 have been adjusted to make them comparable with estimates from

2006 onward that include responses to the noncore methamphetamine items.

SEE: "Core," "Current Use," "Lifetime Use," "Noncore," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," "Source of Psychotherapeutic Drugs," and "Stimulant Use."

Midwest Region

The States included are those in the East North Central Division—Illinois, Indiana, Michigan, Ohio, and Wisconsin—and the West North Central Division—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

SEE: "Geographic Division" and "Region."

Native Hawaiian or Other Pacific Islander

Native Hawaiian or Other Pacific Islander, not of Hispanic, Latino, or Spanish origin; does not include respondents reporting two or more races. (Respondents reporting that they were Native Hawaiian or Other Pacific Islander and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

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

Need for Alcohol Use Treatment

Respondents were classified as needing treatment for an alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on alcohol; (2) abuse of alcohol; or (3) received treatment for alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Need for Illicit Drug or Alcohol Use Treatment

Respondents were classified as needing treatment for an illicit drug or alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs or alcohol; (2) abuse of illicit drugs or alcohol; or (3) received treatment for illicit drug or alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Need for Illicit Drug Use Treatment

Respondents were classified as needing treatment for an illicit drug use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs; (2) abuse of illicit drugs; or (3) received treatment for illicit drug use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center).

SEE: "Abuse," "Dependence," "Prevalence," "Specialty Substance Use Treatment Facility," and "Treatment for a Substance Use Problem."

Nicotine (Cigarette) Dependence

A respondent was defined as having nicotine (cigarette) dependence if he or she met either the dependence criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) or the Fagerstrom Test of Nicotine Dependence (FTND). See Section B.4.2 of Appendix B for additional details.

SEE: "Cigarette Use," "Dependence," and "Prevalence."

Noncash Assistance

Noncash assistance refers to assistance that is not in the form of direct monetary payments due to low income, such as help getting a job, placement in an education or job training program, or help with transportation, child care, or housing. Since 2008, all respondents have received a single question asking whether anyone in the family received noncash assistance.

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

SEE: "Cash Assistance" and "Welfare Assistance."

Noncore

A core set of unaltered questions (consisting of demographic items and modules on the use of tobacco, alcohol, marijuana, cocaine, crack cocaine, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, and sedatives) is critical for basic trend measurement of prevalence estimates. This core set remains in the survey every year and comprises the first part of the interview.

Supplemental or "noncore" questions, or modules, can be revised, dropped, or added from year to year and make up the latter part of the interview. Supplemental topics in the remaining self-administered sections include (but are not limited to) injection drug use, perceived risks of substance use, substance dependence or abuse, arrests, treatment for substance use problems, pregnancy and health care issues, and mental health issues. Supplemental demographic questions (which are interviewer-administered and follow the audio computer-assisted self-interviewing [ACASI] questions) address such topics as immigration, current school enrollment, employment and workplace issues, health insurance coverage, and income. It should be noted that some of the supplemental portions of the interview have remained in the survey, relatively unchanged, from year to year (e.g., current health insurance coverage, employment).

SEE: "Core."

Nonmedical Use of Psychotherapeutics

A core section of the interview instrument deals with nonmedical use of four classes of prescription-type psychotherapeutics: pain relievers, sedatives, stimulants, and tranquilizers. Nonmedical use is defined as use of at least one of these medications without a prescription belonging to the respondent or use that occurred simply for the experience or feeling the drug caused. In this report, estimates for the measures of nonmedical use of psychotherapeutics from 2006 onward also include responses based on the noncore methamphetamine use items that were added in 2005 and 2006; estimates for 2002 through 2005 have been adjusted to make them comparable with estimates from 2006 onward that include responses to the noncore methamphetamine items. Responses to questions about the nonmedical use of Adderall® (a stimulant) and Ambien® (a sedative), which were added to the survey in 2006, were not included in these measures.

Measures of use of nonmedical psychotherapeutic agents in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription [pain reliever, sedative, stimulant, or tranquilizer] that was not prescribed for you or that you took only for the experience or feeling it caused?"

Feeder question: "Now we have some questions about drugs that people are supposed to take only if they have a prescription from a doctor. We are only interested in your use of a drug if the drug was

not prescribed for you, or if you took the drug only for the experience or feeling it caused."

NOTE: The pill card contains pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium®, Librium®, and other tranquilizers are shown when the section on tranquilizers is introduced.

SEE: "Core," "Current Use," "Lifetime Use," "Methamphetamine Use," "Noncore," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Nonmetro   SEE: "County Type."

Northeast Region   The States included are those in the New England Division—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont—and the Middle Atlantic Division—New Jersey, New York, and Pennsylvania.

SEE: "Geographic Division" and "Region."

OxyContin® Use   Measures of use of the prescription pain reliever OxyContin® in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used OxyContin that was not prescribed for you or that you took only for the experience or feeling it caused?"

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

Pain Reliever Use   Measures of the nonmedical use of prescription-type pain relievers in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription pain reliever that was not prescribed for you, or that you took only for the experience or feeling it caused?"

Feeder question: "These questions are about the use of pain relievers. We are not interested in your use of *over-the-counter* pain relievers such as aspirin, Tylenol, or Advil that can be bought

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in drug stores or grocery stores without a doctor's prescription. Card A shows pictures of some different types of prescription pain relievers and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription pain relievers that were not prescribed for you or that you took only for the experience or feeling they caused."

The following prescription pain relievers were listed on Pill Card A (Pain Relievers): (1) Darvocet®, Darvon®, or Tylenol® with Codeine; (2) Percocet®, Percodan®, or Tylox®; (3) Vicodin®, Lortab®, or Lorcet®/Lorcet Plus®; (4) Codeine; (5) Demerol®; (6) Dilaudid®; (7) Fioricet®; (8) Fiorinal®; (9) Hydrocodone; (10) Methadone; (11) Morphine; (12) OxyContin®; (13) Phenaphen® with Codeine; (14) Propoxyphene; (15) SK-65®; (16) Stadol® (no picture); (17) Talacen®; (18) Talwin®; (19) Talwin NX®; (20) Tramadol (no picture); and (21) Ultram®.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "OxyContin® Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Past Month Daily Cigarette Use

A respondent was defined as being a past month daily cigarette user if he or she smoked part or all of a cigarette on each of the past 30 days.

Feeder question: "Now think about the past 30 days – that is, from [DATEFILL] up to and including today. During the past 30 days, have you smoked part or all of a cigarette?"

SEE: "Cigarette Use" and "Lifetime Daily Cigarette Use."

Past Month Use

This measure indicates use of a specific substance in the 30 days prior to the interview. Respondents who indicated past month use of a specific substance also were classified as lifetime and past year users.

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

Past Year Incidence   SEE: "Incidence."

Past Year Use	This measure indicates use of a specific substance in the 12 months prior to the interview. This definition includes those respondents who last used the substance in the 30 days prior to the interview. Respondents who indicated past year use of a specific substance also were classified as lifetime users.
	SEE: "Current Use," "Lifetime Use," "Past Month Use," "Prevalence," and "Recency of Use."
PCP Use	Measures of use of phencyclidine (PCP) in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used PCP?"
	SEE: "Current Use," "Ecstasy Use," "Hallucinogen Use," "Lifetime Use," "LSD Use," "Past Month Use," "Past Year Use," "Prevalence," and "Recency of Use."
Perceived Availability	Respondents were asked to assess how difficult or easy it would be for them to get various illicit drugs if they wanted these drugs. Response alternatives were (1) probably impossible, (2) very difficult, (3) fairly difficult, (4) fairly easy, and (5) very easy.
Perceived Need for Alcohol Use Treatment	Respondents were classified as perceiving a need for alcohol use treatment if they reported feeling a need for alcohol use treatment when asked, "During the past 12 months, did you need treatment or counseling for your alcohol use?" or if they indicated feeling a need for additional treatment specifically for alcohol use when asked, "During the past 12 months, for which of the following drugs did you need additional treatment or counseling?"
	SEE: "Prevalence" and "Treatment for a Substance Use Problem."
Perceived Need for Illicit Drug or Alcohol Use Treatment	Respondents were classified as perceiving a need for illicit drug or alcohol use treatment if they were classified as either perceiving a need for illicit drug use treatment or perceiving a need for alcohol use treatment.
	SEE: "Perceived Need for Alcohol Use Treatment" and "Perceived Need for Illicit Drug Use Treatment."

Perceived Need for
Illicit Drug Use Treatment   Respondents were classified as perceiving a need for illicit drug use treatment if they reported feeling a need for treatment for the use of one or more drugs when asked specifically about each of the individual drugs they had indicated using, "During the past 12 months, did you need treatment or counseling for your use of (drug)?" They also were classified as perceiving a need for illicit drug use treatment if they indicated feeling a need for additional treatment specifically for the use of one or more drugs when asked, "During the past 12 months, for which of the following drugs did you need additional treatment or counseling?" The response list of drugs included marijuana/hashish, cocaine or crack, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, sedatives, or some other drug.

       SEE: "Prevalence" and "Treatment for a Substance Use Problem."

Perceived Risk/
Harmfulness   Respondents were asked to assess the extent to which people risk harming themselves physically and in other ways when they use various illicit drugs, alcohol, and cigarettes, with various levels of frequency. Response alternatives were (1) no risk, (2) slight risk, (3) moderate risk, and (4) great risk.

Percentages   In this report, all of the tables contain percentages based on weighted data.

       SEE: "Rounding."

Pill Cards   The pill cards contain pictures and names of specific drugs within each psychotherapeutic category. For example, pictures and the names of Valium[®], Librium[®], and other tranquilizers are shown when the questionnaire section on tranquilizers is introduced.

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

Poverty Level (% of
U.S. Census Bureau
Poverty Threshold)   This measure is a comparison of a respondent's total family income with the U.S. Census Bureau's poverty thresholds (both measured in dollar amounts) in order to determine the poverty status of the

respondent and his or her family. Information on family income, size, and composition (i.e., number of children) and the respondent's age is used to determine the respondent's poverty level. The poverty level is calculated as a percentage of the poverty threshold by dividing the respondent's reported total family income by the appropriate poverty threshold amount. Thus, if a family's total income is less than the family's poverty threshold, then that family and every individual in it is considered to be in poverty (i.e., less than 100 percent of the U.S. census poverty threshold). Accordingly, if a family's total income is greater than the poverty threshold but less than twice the poverty threshold, then that family and every individual in it is classified as being 100 to 199 percent of the U.S. census poverty threshold. Because of changes in the creation of the poverty-level measure in 2006, estimates are not comparable with similar estimates published in NSDUH reports prior to 2006.

SEE: "Family Income."

Prevalence
Prevalence is a general term used to describe the estimates for lifetime, past year, and past month substance use, dependence or abuse, or other behaviors of interest within a given period (e.g., the past 12 months). Other behaviors of interest include delinquent behavior, driving under the influence of alcohol or drugs, perceived need for alcohol or illicit drug use treatment, and treatment for a substance use problem.

SEE: "Abuse," "Current Use," "Delinquent Behavior," "Dependence," "Driving Under the Influence," "Need for Illicit Drug or Alcohol Use Treatment," "Nicotine (Cigarette) Dependence," "Perceived Need for Alcohol Use Treatment," "Perceived Need for Illicit Drug or Alcohol Use Treatment," "Perceived Need for Illicit Drug Use Treatment," "Recency of Use," and "Treatment for a Substance Use Problem."

Prior Year Marijuana Use
A respondent was defined as engaging in prior year marijuana use if he or she used marijuana or hashish 12 to 23 months prior to the interview date. Prior Year Marijuana Use is different from Past Year Marijuana Use because Past Year Marijuana Use indicates use in the past 12 calendar months prior to the interview date, whereas Prior Year Marijuana Use is defined as using marijuana in the year prior to the past year (12 calendar months prior to the interview date) or within 12 to 23 months prior to the interview date.

SEE: "Marijuana Use."

Psychotherapeutic Drugs   Psychotherapeutic drugs are prescription-type medications with legitimate medical uses as pain relievers, tranquilizers, stimulants, and sedatives. The interview instrument covers nonmedical use of these drugs, which involves use without a prescription belonging to the respondent or use that occurred simply for the experience or feeling the drug caused. In this report, estimates for psychotherapeutic drug measures from 2006 onward include responses based on the core questions about nonmedical use of psychotherapeutics and the noncore methamphetamine use items that were added in 2005 and 2006; estimates for 2002 through 2005 have been adjusted to make them comparable with estimates from 2006 onward that include responses to the noncore methamphetamine items.

SEE: "Core," "Current Use," "Lifetime Use," "Methamphetamine Use," "Noncore," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Race/Ethnicity   Race/ethnicity is used to refer to the respondent's self-classification of racial and ethnic origin and identification. For Hispanic origin, respondents were asked, "Are you of Hispanic, Latino, or Spanish origin or descent?" For race, respondents were asked, "Which of these groups best describes you?" Response alternatives were (1) white, (2) black/African American, (3) American Indian or Alaska Native, (4) Native Hawaiian, (5) Other Pacific Islander, (6) Asian, and (7) Other. Categories for a combined race/ethnicity variable included Hispanic; non-Hispanic groups where respondents indicated only one race (white, black, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Asian); and non-Hispanic groups where respondents reported two or more races. These categories are based on classifications developed by the U.S. Census Bureau.

SEE: "American Indian or Alaska Native," "Asian," "Black," "Hispanic," "Native Hawaiian or Other Pacific Islander," "Two or More Races," and "White."

Recency of Use   The recency question for each substance was the source for the lifetime, past year, and past month prevalence estimates.

The question was essentially the same for all classes of substances. The question was: "How long has it been since you last used [substance name]?" For the four classes of psychotherapeutics, the phrase "that was not prescribed for you or only for the experience or feeling it caused" was added after the name of the drug.

For tobacco products (cigarettes, snuff, chewing tobacco, or cigars), a question first was asked about use in the past 30 days. If the respondent did not use the product in the past 30 days, the recency question was asked as above, with the response alternatives (1) more than 30 days ago but within the past 12 months; (2) more than 12 months ago but within the past 3 years; and (3) more than 3 years ago. For the remaining substances, the response alternatives were (1) within the past 30 days; (2) more than 30 days ago but within the past 12 months; and (3) more than 12 months ago.

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

Region
Four regions, Northeast, Midwest, South, and West, are based on classifications developed by the U.S. Census Bureau.

SEE: "Geographic Division," "Midwest Region," "Northeast Region," "South Region," and "West Region."

Rounding
The decision rules for the rounding of percentages were as follows. If the second number to the right of the decimal point was greater than or equal to 5, the first number to the right of the decimal point was rounded up to the next higher number. If the second number to the right of the decimal point was less than 5, the first number to the right of the decimal point remained the same. Thus, a prevalence estimate of 16.55 percent would be rounded to 16.6 percent, while an estimate of 16.44 percent would be rounded to 16.4 percent. Although the percentages in the tables generally total 100 percent, the use of rounding sometimes produces a total of slightly less than or more than 100 percent.

SEE: "Percentages."

Sedative Use
Measures of the nonmedical use of prescription-type sedatives in the respondent's lifetime, the past year, and the past month were developed from responses to the core question about recency of use: "How long has it been since you last used any prescription sedative that was not prescribed for you, or that you took only for the experience or feeling it caused?" Responses to noncore

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questions about use of the prescription sedative Ambien[®], which were added to the survey in 2006, were not included in these measures.

Feeder question: "These next questions ask about the use of sedatives or barbiturates. These drugs are also called *downers* or *sleeping pills*. People take these drugs to help them relax or to help them sleep. We are not interested in the use of *over-the-counter* sedatives such as Sominex, Unisom, Nytol, or Benadryl that can be bought in drug stores or grocery stores without a doctor's prescription. Card D shows pictures of different kinds of prescription sedatives and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription sedatives that were not prescribed for you or that you took only for the experience or feeling they caused."

The following prescription sedatives were listed on Pill Card D (Sedatives): (1) Methaqualone (includes Sopor[®], Quaalude[®]) (no picture); (2) Nembutal[®], Pentobarbital (no picture), Seconal[®], Secobarbital (no picture), or Butalbital (no picture); (3) Restoril[®] or Temazepam; (4) Amytal[®]; (5) Butisol[®]; (6) Chloral Hydrate (no picture); (7) Dalmane[®]; (8) Halcion[®]; (9) Phenobarbital; (10) Placidyl[®]; and (11) Tuinal[®].

SEE: "Core," "Current Use," "Lifetime Use," "Noncore," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Source of Psychotherapeutic Drugs," "Stimulant Use," and "Tranquilizer Use."

Self-Help Group

NSDUH has collected data on self-help groups because they may be potential locations of treatment for a substance use problem. Respondents who reported that they received treatment for their use of alcohol or drugs in the past 12 months were asked whether they received treatment in a self-help group, such as Alcoholics Anonymous or Narcotics Anonymous; these groups were not considered specialty substance use treatment facilities. Beginning with the 2006 survey, respondents also were asked whether they attended self-help groups in the past 12 months to receive help for their alcohol or drug use, regardless of whether they previously reported receiving any treatment in the past 12 months.

SEE: "Specialty Substance Use Treatment Facility" and "Treatment for a Substance Use Problem."

Significance	For tables in which trends over time were shown, statistically significant differences between estimates from two different time points (e.g., 2008 and 2009) were identified at two levels: 0.05 and 0.01. Thus, estimates with different values that did not meet the criteria for statistical significance were not considered to be different from one another. In the text of this report, a significance level of 0.05 was used to determine whether estimates from different demographic subgroups were statistically different.
Small Metro	SEE: "County Type."
Smokeless Tobacco Use	Measures of use of smokeless tobacco in the respondent's lifetime, the past year, and the past month were developed from responses to the questions about snuff and chewing tobacco use in the past 30 days and the recency of use (if not in the past 30 days): "Now think about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you used snuff, even once?" "How long has it been since you last used snuff?" "Now think about the past 30 days—that is, from [DATEFILL] up to and including today. During the past 30 days, have you used chewing tobacco, even once?" and "How long has it been since you last used chewing tobacco?"
	Feeder questions: "These next questions are about your use of snuff, sometimes called dip... Have you ever used snuff, even once?" and "These next questions are only about chewing tobacco... Have you ever used chewing tobacco, even once?"
	SEE: "Cigar Use," "Cigarette Use," "Current Use," "Lifetime Use," "Past Month Use," "Past Year Use," "Prevalence," "Recency of Use," and "Tobacco Product Use."
Social Context of Most Recent Alcohol Use	Respondents aged 12 to 20 who reported drinking at least one alcoholic beverage within the past 30 days were asked if they were alone, with one other person, or with more than one person the last time they drank.
	SEE: "Alcohol Use."
Source of Alcohol for Most Recent Underage Alcohol Use	Respondents aged 12 to 20 who reported drinking at least one alcoholic beverage within the past 30 days were asked questions pertaining to the source of the alcohol for their most recent alcohol use. The sources were (1) purchased it himself or herself; (2) it was

purchased by someone else; (3) received it from a parent or guardian; (4) received it from another family member aged 21 or older; (5) received it from an unrelated person aged 21 or older; (6) received it from someone under age 21; (7) took it from own home; (8) took it from someone else's home; or (9) got it some other way.

The questions on the source of last alcohol use are presented in two categories: (a) respondent paid (he or she purchased the alcohol or gave someone else money to purchase the alcohol), and (b) respondent did not pay (he or she received the alcohol for free from someone or took the alcohol from his or her own or someone else's home).

SEE: "Alcohol Use."

Source of Psychotherapeutic Drugs

There are two measures of the source of psychotherapeutic drugs (prescription pain relievers, prescription tranquilizers, prescription stimulants, methamphetamine, and prescription sedatives) used nonmedically: (a) how respondents obtained these drugs the last time they used them nonmedically and (b) how respondents obtained these drugs for any nonmedical use in the past month. Beginning in 2006, respondents who reported that they obtained these drugs from a friend or relative for free were asked how the friend or relative obtained them. For all of these drugs except methamphetamine, response options for the source of the medications were as follows: (a) got a prescription from just one doctor; (b) got prescriptions from more than one doctor; (c) wrote a fake prescription; (d) stole from a doctor's office, clinic, hospital, or pharmacy; (e) got from a friend or relative for free; (f) bought from a friend or relative; (g) took from a friend or relative without asking; (h) bought from a drug dealer or other stranger; (i) bought on the Internet; and (j) got in some other way (includes other sources specified by respondents). Methamphetamine users were presented with options (e) through (j) only.

If respondents last used a psychotherapeutic drug nonmedically in the past 30 days and reported getting that drug from only one source, the source of the psychotherapeutic drug for the most recent use measure was based on that answer. For respondents who reported getting a psychotherapeutic drug from multiple sources in the past 30 days or who last misused that drug more than 30 days ago but in the past 12 months, the source of the psychotherapeutic drug for the most recent use measure was based on their answer to

a question about how they got that drug the last time they used it nonmedically. The source of the psychotherapeutic drug for any use in the past month was based only on the answer to the question about sources in the past 30 days.

Measures of the source of methamphetamine differ from all other measures regarding the source of psychotherapeutic drugs in that they include respondents who reported methamphetamine use in the stimulants module and respondents who reported methamphetamine use in the special drugs module who did not initially report methamphetamine use in the stimulants module because they did not consider it to be a prescription drug. All other measures of the source of psychotherapeutic drugs only include respondents who reported psychotherapeutic drug use in their respective core drug modules.

Feeder questions from the drug modules: "Earlier, the computer recorded that, during the past 30 days, you used [prescription pain relievers, prescription tranquilizers, prescription stimulants, methamphetamine, prescription sedatives] that were not prescribed for you or that you took only for the experience or feeling it caused. How did you get these [fill in relevant drug name from above]? Please enter all the ways that you got the [fill in relevant drug name from above] you used in the past 30 days."

"Now think about the last time you used [a prescription pain reliever, a prescription tranquilizer, a prescription stimulant, methamphetamine, a prescription sedative] that was not prescribed for you or that you took only for the experience or feeling it caused. How did you get this [fill in relevant drug name from above]?"

Feeder questions from the special drugs module: "Earlier, the computer recorded that you have never used Methamphetamine, Desoxyn, or Methedrine."

"Why did you report earlier that you had never used Methamphetamine?"

SEE: "Core," "Methamphetamine Use," "Noncore," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Psychotherapeutic Drugs," "Sedative Use," "Stimulant Use," and "Tranquilizer Use."

South Region   The States included are those in the South Atlantic Division—Delaware, District of Columbia, Florida, Georgia, Maryland, North

Carolina, South Carolina, Virginia, and West Virginia; the East South Central Division—Alabama, Kentucky, Mississippi, and Tennessee; and the West South Central Division—Arkansas, Louisiana, Oklahoma, and Texas.

SEE: "Geographic Division" and "Region."

Specialty Substance Use Treatment Facility

Defined as a drug or alcohol rehabilitation facility (inpatient or outpatient), a hospital (inpatient services only), or a mental health center.

SEE: "Need for Illicit Drug or Alcohol Use Treatment," "Self-Help Group," and "Treatment for a Substance Use Problem."

Stealing

Respondents were asked how many times during the past 12 months they had stolen or tried to steal anything worth more than $50. Response alternatives were (1) 0 times, (2) 1 or 2 times, (3) 3 to 5 times, (4) 6 to 9 times, or (5) 10 or more times.

This item was asked of the 12 to 17 age group and of those aged 18 or older.

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

Stimulant Use

Measures of nonmedical use of prescription-type stimulants in the respondent's lifetime, the past year, and the past month were developed from responses to the core questions about recency of use: "How long has it been since you last used any prescription stimulant that was not prescribed for you or that you took only for the experience or feeling it caused?" and "How long has it been since you last used Methamphetamine, Desoxyn, or Methedrine?" In this report, estimates for the stimulant use measures from 2006 onward included responses based on the noncore methamphetamine use items that were added in 2005 and 2006; estimates for 2002 through 2005 have been adjusted to make them comparable with estimates from 2006 onward that include responses to the noncore methamphetamine items. However, measures of stimulant use do not include data from noncore questions added to the survey in 2006 about the use of the prescription stimulant Adderall®.

Feeder question: "These next questions are about the use of drugs such as amphetamines that are known as stimulants, *upper*s, or *speed*. People sometimes take these drugs to lose weight, to stay

awake, or for attention deficit disorders. We are not interested in the use of *over-the-counter* stimulants such as Dexatrim or No-Doz that can be bought in drug stores or grocery stores without a doctor's prescription. Card C shows pictures of some different kinds of prescription stimulants and lists the names of some others. These pictures show only pills, but we are interested in your use of any form of prescription stimulants that were not prescribed for you or that you took only for the experience or feeling it caused."

The following prescription stimulants were listed on Pill Card C (Stimulants): (1) Methamphetamine (crank, crystal, ice, or speed) (no picture), Desoxyn®, or Methedrine® (no picture); (2) Amphetamines (no picture), Benzedrine®, Biphetamine®, Fastin®, or Phentermine; (3) Ritalin® or Methylphenidate; (4) Cylert®; (5) Dexedrine®; (6) Dextroamphetamine (no picture); (7) Didrex®; (8) Eskatrol®; (9) Ionamin®; (10); Mazanor®; (11) Obedrin-LA® (no picture); (12) Plegine®; (13) Preludin®; (14) Sanorex®; and (15) Tenuate®.

SEE: "Core," "Current Use," "Lifetime Use," "Methamphetamine Use," "Noncore," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," and "Tranquilizer Use."

Substance Use Treatment   SEE: "Treatment for a Substance Use Problem."

Supplemental Security Income (SSI)   Supplemental Security Income (SSI) is a governmental program that makes assistance payments to low-income, aged, blind, and disabled persons. Since 2008, all respondents have received a single question asking whether anyone in the family received SSI.

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

SEE: "Welfare Assistance."

Tobacco Product Use   This measure indicates use of any tobacco product: cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. Tobacco product use in the past year includes past month pipe tobacco use. Tobacco

product use in the past year does not include use of pipe tobacco more than 30 days ago but within 12 months of the interview because the survey did not capture this information. Measures of tobacco product use in the respondent's lifetime, the past year, or the past month also do not include use of cigars with marijuana in them (blunts).

SEE: "Blunts," "Cigar Use," "Cigarette Use," and "Smokeless Tobacco Use."

Total Family Income   SEE: "Family Income."

Tranquilizer Use   Measures of the nonmedical use of prescription-type tranquilizers in the respondent's lifetime, the past year, and the past month were developed from responses to the question about recency of use: "How long has it been since you last used any prescription tranquilizer that was not prescribed for you, or that you took only for the experience or feeling it caused?"

Feeder question: "These next questions ask about the use of tranquilizers. Tranquilizers are usually prescribed to relax people, to calm people down, to relieve anxiety, or to relax muscle spasms. Some people call tranquilizers *nerve pills*. Card B shows pictures of some different kinds of prescription tranquilizers. These pictures show only pills, but we are interested in your use of any form of prescription tranquilizers that were not prescribed for you, or that you took only for the experience or feeling they caused."

The following prescription tranquilizers were listed on Pill Card B (Tranquilizers): (1) Klonopin® or Clonazepam; (2) Xanax®, Alprazolam, Ativan®, or Lorazepam; (3) Valium® or Diazepam; (4) Atarax®; (5) BuSpar®; (6) Equanil®; (7) Flexeril®; (8) Librium®; (9) Limbitrol®; (10) Meprobamate; (11) Miltown®; (12) Rohypnol®; (13) Serax®; (14) Soma®; (15) Tranxene®; and (16) Vistaril®.

SEE: "Current Use," "Lifetime Use," "Nonmedical Use of Psychotherapeutics," "Pain Reliever Use," "Past Month Use," "Past Year Use," "Pill Cards," "Prevalence," "Psychotherapeutic Drugs," "Recency of Use," "Sedative Use," "Source of Psychotherapeutic Drugs," and "Stimulant Use."

**Treatment for a
Substance Use Problem**   Respondents were asked whether they had received treatment for illicit drug use, alcohol use, or both illicit drug and alcohol use in

the past 12 months in any of the following locations: a hospital overnight as an inpatient, a residential drug or alcohol rehabilitation facility where they stayed overnight, a drug or alcohol rehabilitation facility as an outpatient, a mental health facility as an outpatient, an emergency room, a private doctor's office, a prison or jail, a self-help group, or some other place.

SEE: "Alcohol Use," "Illicit Drugs," "Need for Illicit Drug or Alcohol Use Treatment," "Prevalence," "Self-Help Group," and "Specialty Substance Use Treatment Facility."

Two or More Races

Respondents were asked to report which racial group describes them. Response alternatives were (1) white, (2) black or African American, (3) American Indian or Alaska Native, (4) Native Hawaiian, (5) Other Pacific Islander, (6) Asian, and (7) Other. Respondents were allowed to choose more than one of these groups. Persons who chose both the "Native Hawaiian" and "Other Pacific Islander" categories (and no additional categories) were classified in a single category: Native Hawaiian or Other Pacific Islander. Otherwise, persons reporting two or more of the above groups and that they were not of Hispanic, Latino, or Spanish origin were included in a "Two or More Races" category. This category does not include respondents who reported more than one Asian subgroup but who reported "Asian" as their only race. Respondents reporting two or more races and reporting that they were of Hispanic, Latino, or Spanish origin were classified as Hispanic.

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

Welfare Assistance

Household participation in one or more government (welfare) assistance programs during the prior calendar year was defined as one or more family members receiving Supplemental Security Income (SSI), food stamps, cash, or noncash assistance. SSI provides payments to low-income, aged, blind, and disabled persons. Food stamps are government-issued coupons used to purchase food. Cash assistance refers to cash payments through Temporary Assistance for Needy Families (TANF), welfare, or other public assistance. Noncash assistance refers to services, such as help getting a job, placement in an education or job-training program, or help with transportation, child care, or housing. Since 2008, all respondents have received single versions of the welfare assistance questions that asked whether anyone in the household received each of the welfare services described above.

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

SEE: "Cash Assistance," "Food Stamps," "Noncash Assistance," and "Supplemental Security Income (SSI)."

West Region   The States included are those in the Mountain Division—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and the Pacific Division—Alaska, California, Hawaii, Oregon, and Washington.

SEE: "Geographic Division" and "Region."

White   White, not of Hispanic, Spanish, or Latino origin; does not include respondents reporting two or more races. (Respondents reporting that they were white and of Hispanic, Latino, or Spanish origin were classified as Hispanic.)

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

Appendix D: Other Sources of Data

A variety of surveys and data systems other than the National Survey on Drug Use and Health (NSDUH) collect data on substance use. It is useful to consider the results of these other studies when discussing NSDUH data. This appendix briefly describes several of these other data systems and presents selected comparisons with NSDUH results. In addition, this appendix describes surveys on substance use of populations not covered by NSDUH. Descriptions of these surveys are presented in alphabetical order.

When considering the information presented here, it is important to understand the methodological differences between the different surveys and the impact that these differences could have on estimates of the presence of substance use. Several studies have compared NSDUH estimates with estimates from other studies and have evaluated how differences may have been affected by differences in survey methodology (Gfroerer, Wright, & Kopstein, 1997b; Grucza, Abbacchi, Przybeck, & Gfroerer, 2007; Hennessy & Ginsberg, 2001; Miller et al., 2004). These comparisons suggest that the goals and approaches of surveys are often different, making comparisons between them difficult. Some methodological differences that have been identified as affecting comparisons include populations covered, sampling methods, modes of data collection, questionnaires, and estimation methods.

D.1   Other National Surveys of Substance Use

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a State-based system of health surveys that collect information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The BRFSS surveys are cross-sectional telephone surveys conducted by State health departments with technical and methodological assistance from the Centers for Disease Control and Prevention (CDC). Every year, States conduct monthly telephone surveys of noninstitutionalized adults (aged 18 or older) using random-digit-dialing methods. Since 1994, BRFSS has collected data from all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam using a computer-assisted telephone interviewing (CATI) design. More than 350,000 adults are interviewed each year. National data are calculated using a median score across States. BRFSS includes questions on alcohol consumption and tobacco use.

NSDUH and BRFSS rates of current alcohol use have been generally similar, but NSDUH has shown consistently higher rates of binge drinking than BRFSS. The use of audio computer-assisted self-interviewing (ACASI) in NSDUH, which is considered to be more anonymous and yields higher reporting of sensitive behaviors, was offered as an explanation for the lower binge rates in BRFSS (Miller et al., 2004).

Because BRFSS uses CATI, it may yield lower reports of sensitive behaviors than NSDUH, which employs face-to-face data collection with ACASI for questions about these

behaviors. Response rates also are higher in NSDUH than BRFSS, which could have resulted in differential nonresponse bias patterns in the two surveys.

For further details, see the CDC Web site at http://www.cdc.gov/brfss/ (CDC, 2010a).

Harvard School of Public Health's College Alcohol Study (CAS)

The Harvard School of Public Health's College Alcohol Study (CAS) is a survey of students at 4-year colleges and universities in 40 States. The study surveyed a random sample of students at the same colleges in 1993, 1997, 1999, and 2001. The schools and students were selected to provide nationally representative samples of schools and students. In 1993, a national sample of 195 colleges was selected from the American Council on Education's list of accredited 4-year colleges by using probability proportionate to size of enrollment; of the 195 colleges, 140 agreed to participate, for a school-level response rate of 72 percent (Wechsler, Dowdall, Davenport, & Castillo, 1995). Of these 140 colleges, 130 participated in 1997, 128 in 1999, and 120 in 2001. Student-level response rates to the two-stage mail survey were 70 percent in 1993, 59 percent in 1997 and 1999, and 52 percent in 2001. The researchers provided a short survey to nonrespondents in order to better weight the data (Wechsler et al., 2002). In 2005, sampled colleges with high levels of heavy alcohol use were surveyed again. CAS provides information on the use of alcohol, illicit drugs, and tobacco.

For further details, see the CAS Web site at http://www.hsph.harvard.edu/cas/ (Harvard School of Public Health, 2005).

Monitoring the Future (MTF)

The Monitoring the Future (MTF) study is an ongoing study of substance use trends and related attitudes among America's secondary school students, college students, and adults through age 50. The study is conducted annually by the Institute for Social Research at the University of Michigan through grants awarded by the National Institute on Drug Abuse (NIDA). The MTF and NSDUH are the Federal Government's largest and primary tools for tracking youth substance use. The MTF is composed of three substudies: (a) an annual survey of high school seniors initiated in 1975; (b) ongoing panel studies of representative samples from each graduating class that have been conducted by mail since 1976; and (c) annual surveys of 8th and 10th graders initiated in 1991. In the spring, students complete a self-administered, machine-readable questionnaire during a regular class period. An average of about 400 public and private schools and about 50,000 students are sampled annually. The latest MTF was conducted in 2009 (Johnston, O'Malley, Bachman, & Schulenberg, 2010b). The MTF provides information on the use of alcohol, illicit drugs, and tobacco.

Comparisons between the MTF estimates and estimates based on students sampled in NSDUH generally have shown NSDUH substance use prevalence levels to be lower than MTF estimates (Table D.1).[12] The lower prevalences in NSDUH may be due to more underreporting in the household setting as compared with the MTF school setting. However, the MTF does not survey dropouts, a group that NSDUH has shown to have higher rates of illicit drug use

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[12] To examine estimates that are comparable with MTF data, NSDUH estimates presented in Table D.1 are based on data collected in the first 6 months of the survey year and are subset to ages 12 to 20.

(Gfroerer et al., 1997b). Both surveys showed that rates of substance use were generally stable between 2008 and 2009.

For further details, see the MTF Web site at http://www.monitoringthefuture.org/ (University of Michigan, 2010).

National Comorbidity Survey (NCS)

The National Comorbidity Survey (NCS) was sponsored by the National Institute of Mental Health (NIMH), NIDA, and the W.T. Grant Foundation. It was designed to measure in the general population the prevalence of the illnesses described in the *Diagnostic and Statistical Manual of Mental Disorders*, 3rd edition revised (DSM-III-R) (American Psychiatric Association [APA], 1987). The first wave of the NCS was a household survey collecting data from 8,098 respondents aged 15 to 54 in a face-to-face interview using paper-and-pencil interviewing (PAPI). These responses were weighted to produce nationally representative estimates. A random sample of 4,414 respondents also was administered an additional module that captured information on nicotine dependence. The interviews took place between 1990 and 1992. The NCS used a modified version of the Composite International Diagnostic Interview (the University of Michigan [UM]-CIDI) to generate DSM-III-R diagnoses.

There have been several recent follow-ups to and replications of the original NCS, including a 10-year follow-up of the baseline sample (NCS-2), a replication study conducted in 2001 and 2002 with a newly recruited nationally representative sample of 9,282 respondents aged 18 or older (NCS-R), and an adolescent sample with a targeted recruitment of more than 10,000 adolescents aged 13 to 17 (NCS-A) along with their parents.

The NCS provides information on the use of alcohol, illicit drugs, and tobacco and on substance dependence or abuse. The NCS-R used an updated version of the CIDI that was designed to capture diagnoses of substance abuse or dependence using current DSM-IV criteria (APA, 1994). Interviews were conducted using computer-assisted personal interviewing (CAPI). It should be noted that in several NCS-R studies (Kessler et al., 2005a; Kessler, Chiu, Demler, Merikangas, & Walters, 2005b), the diagnosis for abuse also includes those who meet the diagnosis for dependence. In contrast, NSDUH follows DSM-IV guidelines and measures abuse and dependence separately. To make the NCS definition of abuse comparable with that of NSDUH, the rate for dependence must be subtracted from the rate for abuse. Rates of alcohol dependence or abuse and rates of illicit drug dependence or abuse were generally lower in NCS-R than in NSDUH (Kessler et al., 2003a, 2003b).

For further details, see the NCS Web site at http://www.hcp.med.harvard.edu/ncs/ (Harvard School of Medicine, 2005).

National Health Interview Survey (NHIS)

The National Health Interview Survey (NHIS) is a continuous nationwide sample survey that collects data using personal household interviews through an interviewer-administered CAPI system. The survey is sponsored by the National Center for Health Statistics (NCHS) and provides national estimates of selected health measures, including cigarette smoking and alcohol use among persons aged 18 or older. NHIS data have been collected since 1957. In 2008, data

were derived from three core components of the survey: the Family Core, which collects information from all family members aged 18 or older in each household; the Sample Adult Core, which collects information from one adult aged 18 or older in each family; and the Sample Child Core, which collects information on youths under age 18 from a knowledgeable family member in households with a child, usually a parent. In 2008, NHIS data were based on 74,236 persons in the Family Core, 21,781 adults in the Sample Adult Core, and 8,815 children in the Sample Child Core (NCHS, Division of Health Interview Statistics, 2009).

For further details, see the NCHS Web site at http://www.cdc.gov/nchs/nhis.htm (CDC, 2010b).

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

The National Longitudinal Alcohol Epidemiologic Survey (NLAES) was conducted in 1991 and 1992 by the U.S. Bureau of the Census for the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Face-to-face, interviewer-administered interviews were conducted with 42,862 respondents aged 18 or older in the contiguous United States. Despite the survey name, the design was cross-sectional.

The National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) was conducted in 2001 and 2002, also by the U.S. Bureau of the Census for NIAAA, using a computerized interviewer-administered interview. The NESARC sample was designed to make inferences for persons aged 18 or older in the civilian, noninstitutionalized population of the United States, including Alaska, Hawaii, and the District of Columbia, and including persons living in noninstitutional group quarters. NESARC was designed to be a longitudinal survey. The first wave was conducted in 2001 and 2002, with a final sample size of 43,093 respondents aged 18 or older. The second wave was conducted in 2004 and 2005 (Grant & Dawson, 2006).

The study contains comprehensive assessments of drug use, dependence, and abuse and associated mental disorders. NESARC included an extensive set of questions, based on DSM-IV criteria (APA, 1994), designed to assess the presence of symptoms of alcohol and drug dependence and abuse in persons' lifetimes and during the prior 12 months. In addition, DSM-IV diagnoses of major mental disorders were generated using the Alcohol Use Disorder and Associated Disabilities Interview Schedule-version 4 (AUDADIS-IV), which is a structured diagnostic interview that captures major DSM-IV axis I and axis II disorders.

Recent research indicates that (a) prevalence estimates for substance use were generally higher in NSDUH than in NESARC; (b) rates of past year substance use disorder (SUD) for cocaine and heroin use were higher in NSDUH than in NESARC; (c) rates of past year SUD for use of alcohol, marijuana, and hallucinogens were similar between NSDUH and NESARC; and (d) prevalence estimates for past year SUD conditional on past year use were substantially lower in NSDUH for the use of marijuana, hallucinogens, and cocaine (Grucza et al., 2007). A number of methodological variables might have contributed to such discrepancies, including factors related to privacy and anonymity (questions about sensitive topics in NSDUH are self-administered, while similar questions are interviewer administered in NESARC, which may have resulted in higher use estimates in NSDUH) and differences in SUD diagnostic instrumentation

(which may have resulted in higher SUD prevalence among past year substance users in NESARC).

For further details about NLAES, see NIAAA (2009); for an overview of NESARC findings, see Caetano (2006).

National Longitudinal Study of Adolescent Health (Add Health)

The National Longitudinal Study of Adolescent Health (Add Health) was conducted to measure the effects of family, peer group, school, neighborhood, religious institution, and community influences on health risks, such as tobacco, drug, and alcohol use. Initiated in 1994 and supported by grants from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) with cofunding from 21 other Federal agencies and foundations, Add Health is the largest, most comprehensive survey of adolescents ever undertaken. The study began with an in-school questionnaire administered to a nationally representative sample of students in grades 7 to 12 and followed up with a series of in-home interviews in 1994-1995, 2001-2002, and 2007-2008. In Wave I, conducted in 1994-1995, about 90,000 students in grades 7 to 12 were surveyed at 144 schools around the United States using brief, machine-readable questionnaires during a regular class period. Interviews also were conducted with about 20,000 students and their parents in the students' homes using a combined CAPI and ACASI design. In Wave 2, conducted in 1996, about 15,000 students in grades 8 to 12 were interviewed a second time in their homes. In Wave III in 2001 and 2002, about 15,000 of the original Add Health respondents, then aged 18 to 26, were reinterviewed to investigate how adolescent experiences and behaviors are related to outcomes during the transition to adulthood. Wave IV was conducted in 2007-2008 when the approximately 15,000 respondents were aged 24 to 32. The study provides information on the use of alcohol, illicit drugs, and tobacco.

For further details, see the Add Health Web site at http://www.cpc.unc.edu/projects/addhealth (University of North Carolina, Carolina Population Center, n.d.).

National Survey of Parents and Youth (NSPY)

The National Survey of Parents and Youth (NSPY) was sponsored by NIDA to evaluate the Office of National Drug Control Policy's (ONDCP's) National Youth Anti-Drug Media Campaign. NSPY was a national, household-based survey of youths aged 9 to 18 years old and their parents. Data were collected using a combination of computer-assisted interviewing technologies, including CAPI for nonsensitive portions of the survey and ACASI for the sensitive portions. The study provides information on the use of alcohol, illicit drugs, and tobacco.

NSPY employed a panel survey design with four rounds consisting of nine waves of data collection for youths between November 1999 and June 2004. Round 1 was conducted in three waves between November 1999 and June 2001 and included 8,117 youths aged 9 to 18 and 7,620 of their parents (Waves 1-3). Rounds 2, 3, and 4 were follow-up data collections, each of which was conducted in two waves. Round 2 was conducted from July 2001 to June 2002 (Waves 4-5); Round 3 was conducted from July 2002 to June 2003 (Waves 6-7); and Round 4 was conducted

from July 2003 to June 2004 (Waves 8-9). Wave 9 from Round 4 was conducted between January and June 2004 with 3,143 youths and 2,381 parents.

Data from NSPY and NSDUH produced similar estimates of marijuana use for youths. For example, Wave 9 of NSPY data indicated that 16.7 percent of youths aged 12 to 18 had used marijuana in the past year, and the 2004 NSDUH yielded an estimate of 17.1 percent among this age group for this time period (Orwin et al., 2006). One explanation for the similarity in estimates is that both surveys used ACASI.

Partnership Attitude Tracking Study (PATS)

The Partnership Attitude Tracking Study (PATS), an annual national research study that tracks attitudes about illegal drugs, is sponsored by the Partnership for a Drug-Free America (PDFA). PATS consists of two nationally representative samples—a teenage sample for students in grades 7 through 12 and a parent sample. Adolescents complete self-administered, machine-readable questionnaires during a regular class period with their teacher remaining in the room. In 2002, PATS included questions on prescription drug abuse, and in 2005, it included questions on the use of over-the-counter cough medicine to get high. The teenage sample is administered to approximately 7,000 youths annually. The latest PATS surveys of teenagers and parents were conducted in 2009. In 2009, 3,287 teenagers were surveyed nationwide in the 21st wave of the survey conducted since 1987, and 804 caregivers of children in grades 9 to 12 were surveyed (PDFA, 2010b).

In general, NSDUH estimates of substance use prevalence for adolescents are lower than PATS estimates for youths in that age group. The differences in prevalence estimates are likely to be due to the different study designs. The youth portion of PATS is a school-based survey, which may elicit more reporting of sensitive behaviors than the home-based NSDUH. In addition, the most recent PATS survey was conducted with a sample of students in the 9th through 12th grades, which was a slightly older sample than that of the NSDUH 12- to 17-year-old sample (PDFA, 2010b).

For further details, see the PDFA Web site at http://www.drugfree.org/ (PDFA, 2010a).

Youth Risk Behavior Survey (YRBS)

The Youth Risk Behavior Survey (YRBS) is a component of the CDC's Youth Risk Behavior Surveillance System (YRBSS), which measures the prevalence of six priority health risk behavior categories: (a) behaviors that contribute to unintentional injuries and violence; (b) tobacco use; (c) alcohol and other drug use; (d) sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection; (e) unhealthy dietary behaviors; and (f) physical inactivity. The YRBSS includes national, State, territorial, tribal, and local school-based surveys of high school students conducted every 2 years. The national school-based survey uses a three-stage cluster sample design to produce a nationally representative sample of students in grades 9 through 12 who attend public and private schools. The State and local surveys use a two-stage cluster sample design to produce representative samples of public school students in grades 9 through 12 in their jurisdictions. The YRBS is conducted during the spring, with students completing a self-

administered, machine-readable questionnaire during a regular class period. The latest YRBS was conducted in 2009.

In general, the YRBS school-based survey has found higher rates of substance use for youths than those found in NSDUH (Table D.2).[13] The lower prevalence rates in NSDUH are likely due to the differences in study design; specifically, the YRBS is school-based, which likely has resulted in higher rates of reported use as compared with the home-based NSDUH.

For further details, see the CDC Web site at http://www.cdc.gov/HealthyYouth/yrbs/ (CDC, 2010c).

D.2 Surveys of Populations Not Covered by NSDUH

Department of Defense (DoD) Survey of Health Related Behaviors Among Active Duty Military Personnel

The 2008 Department of Defense (DoD) Survey of Health Related Behaviors Among Active Duty Military Personnel was the 10th in a series of studies conducted since 1980. The sample consisted of 28,546 active-duty Armed Forces personnel worldwide who anonymously completed self-administered questionnaires that assessed substance use and other health behaviors. Members of the Coast Guard were included for the first time in the 2008 survey. (Bray et al., 2009). The survey provides information about the use of alcohol, illicit drugs, and tobacco.

In recent administrations of this survey, comparisons with NSDUH data have consistently shown that, even after accounting for demographic differences between the military and civilian populations, the military personnel had higher rates of heavy alcohol use than their civilian counterparts, similar rates of cigarette use, and lower rates of illicit drug use.

For further details, see the DoD Lifestyle Assessment Program (DLAP) Web site at https://dlap.rti.org/ (DoD & RTI International, 2010).

Survey of Inmates in State and Federal Correctional Facilities (SISCF, SIFCF)

The Survey of Inmates in State Correctional Facilities (SISCF) and the Survey of Inmates in Federal Correctional Facilities (SIFCF) are conducted every 5 years using the same data collection instrument. The two surveys provide nationally representative data on State prison inmates and sentenced Federal inmates held in federally owned and operated facilities. The Survey of State Inmates was conducted in 1974, 1979, 1986, 1991, 1997, and 2004, and the Survey of Federal Inmates in 1991, 1997, and 2004. The SISCF is conducted for the Bureau of Justice Statistics (BJS) by the U.S. Census Bureau, which also conducts the SIFCF for the BJS and the Federal Bureau of Prisons (FBOP). Both surveys provide information about current offense and criminal history, family background and personal characteristics, prior drug and alcohol use and treatment, gun possession, and prison treatment, programs, and services. The surveys are the only national source of detailed information on criminal offenders, particularly

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[13] To examine estimates that are comparable with YRBS data, NSDUH estimates presented in Table D.2 are based on data collected in the first 6 months of the survey year and are subset to ages 12 to 20.

special populations such as drug and alcohol users and offenders who have mental health problems. Systematic random sampling was used to select the inmates, and the survey was administered through CAPI. In 2004, 14,499 State prisoners in 287 State prisons and 3,686 Federal prisoners in 39 Federal prisons were interviewed.

Prior drug use among State prisoners remained stable on all measures between 1997 and 2004, while the percentage of Federal inmates who reported prior drug use rose on most measures (Mumola & Karberg, 2006). For the first time, half of Federal inmates reported drug use in the month before their offense. In 2004, measures of drug dependence and abuse based on criteria in DSM-IV (APA, 1994) were introduced, and 53 percent of the State and 45 percent of Federal prisoners met the DSM-IV criteria for drug abuse or dependence. The survey results indicate substantially higher rates of drug use among State and Federal prisoners as compared with NSDUH's rates for the general household population.

For further details, see BJS's "All Data Collections" Web page at http://bjs.ojp.usdoj.gov/index.cfm?ty=dca (BJS, 2010).

Table D.1   Use of Specific Substances in Lifetime, Past Year, and Past Month among 8th, 10th, and 12th Graders in NSDUH and MTF: Percentages, 2008 and 2009

Drug/Current Grade Level	MTF Lifetime (2008)	MTF Lifetime (2009)	MTF Past Year (2008)	MTF Past Year (2009)	MTF Past Month (2008)	MTF Past Month (2009)	NSDUH Lifetime (2008)	NSDUH Lifetime (2009)	NSDUH Past Year (2008)	NSDUH Past Year (2009)	NSDUH Past Month (2008)	NSDUH Past Month (2009)
Marijuana												
8th Grade	14.6	15.7	10.9	11.8	5.8	6.5	7.4	7.4	6.4	6.0	2.3	2.9
10th Grade	29.9	32.3	23.9	26.7	13.8	15.9	24.4	24.0	19.2	18.8	8.6	10.1
12th Grade	42.6	42.0	32.4	32.8	19.4	20.6	35.4	37.3	27.8	28.9	13.6	15.9
Cocaine												
8th Grade	3.0	2.6	1.8	1.6	0.8	0.8	0.8	0.5	0.4	0.3	0.3	0.1
10th Grade	4.5	4.6	3.0	2.7	1.2[a]	0.9	2.5	2.1	1.9	1.1	0.7	0.3
12th Grade	7.2[a]	6.0	4.4[a]	3.4	1.9[a]	1.3	6.5	5.1	4.2	3.1	1.4	1.0
Inhalants												
8th Grade	15.7	14.9	8.9	8.1	4.1	3.8	11.8	10.1	5.2	4.5	1.2	1.0
10th Grade	12.8	12.3	5.9	6.1	2.1[b]	2.2	9.8	9.9	3.0	3.3	0.7	0.6
12th Grade	9.9	9.5	3.8	3.4	1.4	1.2	8.0	8.6	1.7	2.3	0.3	0.5
Cigarettes												
8th Grade	20.5	20.1	--	--	6.8	6.5	15.2	13.4	8.0	8.5	4.4	4.6
10th Grade	31.7	32.7	--	--	12.3	13.1	32.5	28.5	21.6	19.4	12.7	11.5
12th Grade	44.7	43.6	--	--	20.4	20.1	45.2	43.7	35.3	32.2	23.4	21.4
Alcohol												
8th Grade	38.9[a]	36.6	32.1	30.3	15.9	14.9	27.8	26.4	17.8	18.7	7.7	7.0
10th Grade	58.3	59.1	52.5	52.8	28.8	30.4	55.3	52.9	45.7	44.0	20.8	21.1
12th Grade	71.9	72.3	65.5	66.2	43.1	43.5	69.5	67.9	60.1	59.4	36.6	36.7

MTF = Monitoring the Future.

-- Not available.

NOTE: NSDUH data have been drawn from January to June of each survey year and subset to persons aged 12 to 20 to be more comparable with MTF data.

[a] Difference between estimate and 2009 estimate is statistically significant at the .05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the .01 level.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009 (January-June).
        The Monitoring the Future Study, University of Michigan, 2008 and 2009.

Table D.2 Lifetime and Past Month Substance Use among Students in Grades 9 to 12 in YRBS and NSDUH: Percentages, 2005, 2007, and 2009

Substance/ Period of Use	YRBS (2005)	YRBS (2007)	YRBS (2009)	NSDUH (2005)	NSDUH (2007)	NSDUH (2009)
Marijuana						
Lifetime Use	38.4	38.1	36.8	28.1	26.3	27.6
Past Month Use	20.2	19.7	20.8	11.2	10.9	11.9
Cocaine						
Lifetime Use	7.6[a]	7.2	6.4	3.8[a]	3.8[b]	2.8
Past Month Use	3.4	3.3	2.8	0.8[a]	0.6	0.4
Ecstasy						
Lifetime Use	6.3	5.8	6.7	2.8	2.9	3.2
Past Month Use	--	--	--	0.4[a]	0.4[a]	0.8
Inhalants						
Lifetime Use	12.4	13.3[a]	11.7	12.0[a]	10.7	10.1
Past Month Use	--	--	--	1.1[a]	1.1[b]	0.6
Cigarettes						
Lifetime Use	54.3[b]	50.3[a]	46.3	39.0[b]	35.1	33.5
Past Month Use	23.0[a]	20.0	19.5	17.0[b]	15.4	14.7
Alcohol						
Lifetime Use	74.3	75.0	72.5	57.5	57.5	56.1
Past Month Use	43.3	44.7[a]	41.8	26.0	26.3	25.7

YRBS = Youth Risk Behavior Survey.

-- Not available.

NOTE: NSDUH data have been drawn from January to June of each survey year and subset to persons aged 12 to 20 to be more comparable with YRBS data. Statistical tests for the YRBS were conducted using the "Youth Online" tool (see http://www.cdc.gov/HealthyYouth/yrbs/). Results of testing for statistical significance in this table may differ from published YRBS reports of change.

[a] Difference between estimate and 2009 estimate is statistically significant at the .05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the .01 level.

Sources: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, January-June for 2005, 2007, and 2009.
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Appendix F: Sample Size and Population Tables

Table F.1   Survey Sample Size for Respondents Aged 12 or Older, by Gender and Detailed Age Category: 2008 and 2009

Age Category	Total (2008)	Total (2009)	Male (2008)	Male (2009)	Female (2008)	Female (2009)
TOTAL	68,736	68,700	33,119	33,275	35,617	35,425
12	3,486	3,399	1,747	1,698	1,739	1,701
13	3,677	3,652	1,871	1,818	1,806	1,834
14	3,788	3,832	2,018	1,966	1,770	1,866
15	3,820	3,956	1,962	2,054	1,858	1,902
16	3,945	3,863	2,013	2,017	1,932	1,846
17	3,830	3,924	1,906	1,967	1,924	1,957
18	3,364	3,392	1,644	1,704	1,720	1,688
19	3,009	3,105	1,495	1,544	1,514	1,561
20	2,762	2,810	1,371	1,351	1,391	1,459
21	2,867	2,786	1,374	1,364	1,493	1,422
22	2,823	2,753	1,356	1,303	1,467	1,450
23	2,877	2,806	1,349	1,323	1,528	1,483
24	2,779	2,775	1,304	1,313	1,475	1,462
25	2,724	2,577	1,273	1,202	1,451	1,375
26-29	3,232	3,175	1,514	1,476	1,718	1,699
30-34	3,373	3,449	1,542	1,641	1,831	1,808
35-39	3,118	3,090	1,396	1,479	1,722	1,611
40-44	3,179	3,172	1,428	1,437	1,751	1,735
45-49	3,474	3,434	1,560	1,558	1,914	1,876
50-54	1,601	1,640	753	761	848	879
55-59	1,360	1,386	641	634	719	752
60-64	1,121	1,135	508	503	613	632
65 or Older	2,527	2,589	1,094	1,162	1,433	1,427

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table F.2   Numbers (in Thousands) of Persons Aged 12 or Older, by Gender and Detailed Age Category: 2008 and 2009

Age Category	Total (2008)	Total (2009)	Male (2008)	Male (2009)	Female (2008)	Female (2009)
TOTAL	249,815	251,816	121,261	122,291	128,554	129,524
12	3,847	3,666	1,916	1,837	1,932	1,830
13	3,938	3,848	2,018	1,925	1,921	1,923
14	4,099	4,138	2,143	2,084	1,956	2,054
15	4,359	4,400	2,277	2,320	2,081	2,080
16	4,330	4,204	2,157	2,240	2,172	1,964
17	4,319	4,352	2,197	2,162	2,122	2,190
18	4,899	4,955	2,512	2,577	2,387	2,378
19	4,353	4,570	2,296	2,378	2,057	2,192
20	3,965	4,120	2,013	2,128	1,953	1,992
21	3,983	4,146	1,980	2,077	2,002	2,069
22	4,033	4,036	1,997	1,995	2,035	2,041
23	4,082	4,014	2,027	1,984	2,054	2,030
24	3,849	4,117	1,898	1,961	1,951	2,156
25	3,776	3,622	1,842	1,787	1,933	1,835
26-29	17,072	16,805	8,775	8,301	8,297	8,504
30-34	18,562	19,409	9,001	9,769	9,561	9,640
35-39	20,253	19,869	9,799	10,116	10,454	9,753
40-44	21,426	20,850	10,517	10,081	10,909	10,769
45-49	22,519	22,447	11,286	10,920	11,233	11,528
50-54	21,993	22,269	10,421	10,857	11,572	11,413
55-59	17,792	18,529	8,912	9,054	8,880	9,476
60-64	15,113	15,473	7,244	7,340	7,869	8,133
65 or Older	37,255	37,974	16,033	16,398	21,222	21,576

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table F.3   Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Demographic Characteristics: 2008 and 2009

Demographic Characteristic	Total (2008)	Total (2009)	Aged 12-17 (2008)	Aged 12-17 (2009)	Aged 18-25 (2008)	Aged 18-25 (2009)	Aged 26+ (2008)	Aged 26+ (2009)
TOTAL	68,736	68,700	22,546	22,626	23,205	23,004	22,985	23,070
GENDER								
Male	33,119	33,275	11,517	11,520	11,166	11,104	10,436	10,651
Female	35,617	35,425	11,029	11,106	12,039	11,900	12,549	12,419
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	58,045	57,923	18,627	18,723	19,332	19,102	20,086	20,098
White	44,256	43,950	13,667	13,682	14,503	14,205	16,086	16,063
Black or African American	8,407	8,357	3,037	3,024	2,931	2,969	2,439	2,364
American Indian or Alaska Native	929	869	329	307	328	306	272	256
Native Hawaiian or Other Pacific Islander	277	250	90	79	106	94	81	77
Asian	2,247	2,402	618	715	840	849	789	838
Two or More Races	1,929	2,095	886	916	624	679	419	500
Hispanic or Latino	10,691	10,777	3,919	3,903	3,873	3,902	2,899	2,972
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	21,547	21,420	7,102	6,934	7,048	6,962	7,397	7,524
Female, White, Not Hispanic	22,709	22,530	6,565	6,748	7,455	7,243	8,689	8,539
Male, Black, Not Hispanic	3,750	3,855	1,456	1,549	1,299	1,333	995	973
Female, Black, Not Hispanic	4,657	4,502	1,581	1,475	1,632	1,636	1,444	1,391
Male, Hispanic	5,208	5,278	1,993	2,005	1,875	1,875	1,340	1,398
Female, Hispanic	5,483	5,499	1,926	1,898	1,998	2,027	1,559	1,574
EDUCATION[1]								
< High School	7,591	7,369	N/A	N/A	4,304	4,193	3,287	3,176
High School Graduate	15,327	15,275	N/A	N/A	8,292	8,354	7,035	6,921
Some College	13,357	13,360	N/A	N/A	7,550	7,432	5,807	5,928
College Graduate	9,915	10,070	N/A	N/A	3,059	3,025	6,856	7,045
CURRENT EMPLOYMENT[1]								
Full-Time	24,762	22,242	N/A	N/A	10,626	8,784	14,136	13,458
Part-Time	8,625	9,133	N/A	N/A	5,999	6,320	2,626	2,813
Unemployed	2,896	4,380	N/A	N/A	2,109	3,000	787	1,380
Other[2]	9,907	10,319	N/A	N/A	4,471	4,900	5,436	5,419

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.

[2] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table F.4   Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Demographic Characteristics: 2008 and 2009

Demographic Characteristic	Total (2008)	Total (2009)	Aged 12-17 (2008)	Aged 12-17 (2009)	Aged 18-25 (2008)	Aged 18-25 (2009)	Aged 26+ (2008)	Aged 26+ (2009)
TOTAL	249,815	251,816	24,892	24,609	32,938	33,580	191,985	193,627
GENDER								
Male	121,261	122,291	12,708	12,568	16,566	16,887	91,987	92,836
Female	128,554	129,524	12,185	12,041	16,372	16,693	99,998	100,791
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	214,755	215,870	20,168	19,800	27,143	27,450	167,443	168,620
White	169,423	169,786	14,689	14,372	20,304	20,364	134,430	135,050
Black or African American	29,556	30,066	3,779	3,703	4,648	4,810	21,129	21,553
American Indian or Alaska Native	1,083	1,224	136	130	172	231	775	863
Native Hawaiian or Other Pacific Islander	900	813	95	81	114	101	692	631
Asian	10,778	11,027	966	987	1,494	1,516	8,319	8,524
Two or More Races	3,014	2,955	503	527	411	429	2,099	1,999
Hispanic or Latino	35,060	35,946	4,724	4,809	5,795	6,130	24,541	25,006
GENDER/RACE/HISPANIC ORIGIN								
Male, White, Not Hispanic	82,325	82,552	7,527	7,358	10,242	10,255	64,556	64,939
Female, White, Not Hispanic	87,098	87,234	7,162	7,015	10,062	10,108	69,874	70,110
Male, Black, Not Hispanic	13,410	13,647	1,903	1,858	2,219	2,258	9,289	9,531
Female, Black, Not Hispanic	16,146	16,418	1,877	1,845	2,429	2,552	11,840	12,022
Male, Hispanic	17,992	18,486	2,413	2,463	3,013	3,194	12,566	12,829
Female, Hispanic	17,069	17,460	2,312	2,346	2,782	2,937	11,975	12,178
EDUCATION[1]								
< High School	35,044	34,659	N/A	N/A	5,886	6,080	29,158	28,578
High School Graduate	70,170	70,063	N/A	N/A	11,621	11,733	58,550	58,330
Some College	57,214	57,704	N/A	N/A	10,851	11,051	46,364	46,653
College Graduate	62,494	64,780	N/A	N/A	4,581	4,716	57,913	60,065
CURRENT EMPLOYMENT[1]								
Full-Time	122,238	114,769	N/A	N/A	14,980	12,372	107,258	102,397
Part-Time	30,225	31,777	N/A	N/A	8,554	9,367	21,672	22,410
Unemployed	8,982	14,744	N/A	N/A	3,058	4,556	5,924	10,188
Other[2]	63,478	65,917	N/A	N/A	6,347	7,286	57,131	58,631

N/A: Not applicable.

[1] Estimates for education and current employment are shown only for persons aged 18 or older.

[2] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table F.5   Survey Sample Size for Respondents Aged 12 or Older, by Age Group and Geographic Characteristics: 2008 and 2009

Geographic Characteristic	Total (2008)	Total (2009)	Aged 12-17 (2008)	Aged 12-17 (2009)	Aged 18-25 (2008)	Aged 18-25 (2009)	Aged 26+ (2008)	Aged 26+ (2009)
TOTAL	68,736	68,700	22,546	22,626	23,205	23,004	22,985	23,070
GEOGRAPHIC DIVISION								
Northeast	13,594	13,772	4,432	4,556	4,619	4,670	4,543	4,546
New England	5,449	5,602	1,726	1,880	1,831	1,857	1,892	1,865
Middle Atlantic	8,145	8,170	2,706	2,676	2,788	2,813	2,651	2,681
Midwest	19,314	19,133	6,306	6,404	6,527	6,251	6,481	6,478
East North Central	12,907	12,726	4,248	4,284	4,379	4,104	4,280	4,338
West North Central	6,407	6,407	2,058	2,120	2,148	2,147	2,201	2,140
South	20,877	20,976	6,843	6,788	7,079	7,141	6,955	7,047
South Atlantic	10,977	10,939	3,681	3,516	3,654	3,861	3,642	3,562
East South Central	3,633	3,696	1,158	1,197	1,275	1,209	1,200	1,290
West South Central	6,267	6,341	2,004	2,075	2,150	2,071	2,113	2,195
West	14,951	14,819	4,965	4,878	4,980	4,942	5,006	4,999
Mountain	7,385	7,414	2,527	2,453	2,340	2,560	2,518	2,401
Pacific	7,566	7,405	2,438	2,425	2,640	2,382	2,488	2,598
COUNTY TYPE								
Large Metro	30,133	30,160	9,875	9,933	10,237	9,963	10,021	10,264
Small Metro	23,478	23,926	7,529	7,901	8,139	8,169	7,810	7,856
250K – 1 Mil. Pop.	15,054	15,073	4,869	5,079	5,112	4,981	5,073	5,013
< 250K Pop.	8,424	8,853	2,660	2,822	3,027	3,188	2,737	2,843
Nonmetro	15,125	14,614	5,142	4,792	4,829	4,872	5,154	4,950
Urbanized	6,313	6,369	2,077	2,005	2,158	2,288	2,078	2,076
Less Urbanized	7,252	6,750	2,505	2,247	2,244	2,185	2,503	2,318
Completely Rural	1,560	1,495	560	540	427	399	573	556

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table F.6 Numbers (in Thousands) of Persons Aged 12 or Older, by Age Group and Geographic Characteristics: 2008 and 2009

Geographic Characteristic	Total (2008)	Total (2009)	Aged 12-17 (2008)	Aged 12-17 (2009)	Aged 18-25 (2008)	Aged 18-25 (2009)	Aged 26+ (2008)	Aged 26+ (2009)
TOTAL	249,815	251,816	24,892	24,609	32,938	33,580	191,985	193,627
GEOGRAPHIC DIVISION								
Northeast	46,099	46,386	4,375	4,306	5,987	6,121	35,737	35,959
New England	12,060	12,180	1,130	1,113	1,556	1,597	9,373	9,470
Middle Atlantic	34,039	34,205	3,244	3,193	4,430	4,523	26,364	26,489
Midwest	54,957	55,167	5,509	5,410	7,276	7,338	42,173	42,419
East North Central	38,380	38,467	3,866	3,791	5,035	5,077	29,478	29,600
West North Central	16,577	16,700	1,643	1,620	2,240	2,261	12,694	12,819
South	90,963	92,049	9,050	9,009	11,765	12,023	70,148	71,017
South Atlantic	48,014	48,572	4,573	4,541	5,966	6,114	37,475	37,918
East South Central	14,863	14,988	1,469	1,456	1,874	1,901	11,520	11,630
West South Central	28,085	28,489	3,008	3,012	3,925	4,008	21,153	21,469
West	57,796	58,214	5,959	5,884	7,911	8,099	43,927	44,231
Mountain	17,585	17,819	1,807	1,803	2,369	2,420	13,409	13,596
Pacific	40,211	40,395	4,152	4,081	5,542	5,679	30,517	30,635
COUNTY TYPE								
Large Metro	132,895	133,832	13,265	13,027	17,732	17,772	101,899	103,033
Small Metro	75,643	76,709	7,447	7,668	10,200	10,547	57,996	58,494
250K – 1 Mil. Pop.	50,122	50,561	4,931	5,105	6,596	6,714	38,595	38,742
< 250K Pop.	25,521	26,147	2,516	2,562	3,604	3,833	19,401	19,752
Nonmetro	41,276	41,274	4,181	3,914	5,006	5,261	32,090	32,099
Urbanized	17,208	18,058	1,787	1,727	2,309	2,525	13,112	13,806
Less Urbanized	20,059	18,985	2,018	1,794	2,344	2,401	15,697	14,790
Completely Rural	4,010	4,231	375	393	354	335	3,281	3,502

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Appendix G: Selected Prevalence Tables

Table G.1 Types of Illicit Drug Use in Lifetime among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	108,255[b]	110,205[b]	110,057[b]	112,085[b]	111,774[b]	114,275[b]	117,325	118,705
Marijuana and Hashish	94,946[b]	96,611[b]	96,772[b]	97,545[b]	97,825[b]	100,518[b]	102,404	104,446
Cocaine	33,910[b]	34,891[a]	34,153[b]	33,673[b]	35,298	35,882	36,773	36,599
Crack	8,402	7,949	7,840	7,928	8,554	8,581	8,445	8,359
Heroin	3,668	3,744	3,145	3,534	3,785	3,780	3,788	3,683
Hallucinogens	34,314[b]	34,363[b]	34,333[b]	33,728[b]	35,281[a]	34,215[b]	35,963	37,256
LSD	24,516	24,424	23,398	22,433	23,346	22,656	23,547	23,635
PCP	7,418[b]	7,107[a]	6,762	6,603	6,618	6,140	6,631	6,239
Ecstasy	10,150[b]	10,904[b]	11,130[b]	11,495[b]	12,262[b]	12,426[b]	12,924[b]	14,234
Inhalants	22,870	22,995	22,798	22,745	22,879	22,477	22,274	22,448
Nonmedical Use of Psychotherapeutics[2,3]	47,958[b]	49,001[b]	49,157[a]	49,571[a]	50,965	50,415	51,970	51,771
Pain Relievers	29,611[b]	31,207[b]	31,768[b]	32,692[b]	33,472[a]	33,060[a]	34,861	35,046
OxyContin®	1,924[b]	2,832[b]	3,072[b]	3,481[b]	4,098[b]	4,354[b]	4,842[b]	5,829
Tranquilizers	19,267[b]	20,220[a]	19,852[b]	21,041	21,303	20,208[a]	21,476	21,755
Stimulants[3]	23,496[a]	23,004	22,297	20,983	22,468	21,654	21,206	21,930
Methamphetamine[3]	15,365[b]	15,139[b]	14,512[b]	12,663	14,206[a]	13,065	12,598	12,837
Sedatives	9,960[b]	9,510	9,891[a]	8,982	8,822	8,396	8,882	8,605
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	70,300[b]	71,128[b]	70,657[b]	71,822[b]	72,906[a]	73,494	75,573	75,780

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.2 Types of Illicit Drug Use in Lifetime among Persons Aged 12 or Older: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	46.0	46.4	45.8[a]	46.1	45.4[b]	46.1	47.0	47.1
Marijuana and Hashish	40.4[a]	40.6	40.2[a]	40.1[a]	39.8[b]	40.6	41.0	41.5
Cocaine	14.4	14.7	14.2	13.8	14.3	14.5	14.7	14.5
Crack	3.6	3.3	3.3	3.3	3.5	3.5	3.4	3.3
Heroin	1.6	1.6	1.3	1.5	1.5	1.5	1.5	1.5
Hallucinogens	14.6	14.5	14.3	13.9[a]	14.3	13.8[b]	14.4	14.8
LSD	10.4[b]	10.3[b]	9.7	9.2	9.5	9.1	9.4	9.4
PCP	3.2[b]	3.0[b]	2.8	2.7	2.7	2.5	2.7	2.5
Ecstasy	4.3[b]	4.6[b]	4.6[b]	4.7[b]	5.0[b]	5.0[b]	5.2[a]	5.7
Inhalants	9.7[b]	9.7[b]	9.5[a]	9.4	9.3	9.1	8.9	8.9
Nonmedical Use of Psychotherapeutics[2,3]	20.4	20.6	20.4	20.4	20.7	20.3	20.8	20.6
Pain Relievers	12.6[b]	13.1[a]	13.2[a]	13.4	13.6	13.3	14.0	13.9
OxyContin®	0.8[b]	1.2[b]	1.3[b]	1.4[b]	1.7[b]	1.8[b]	1.9[b]	2.3
Tranquilizers	8.2	8.5	8.3	8.7	8.7	8.2	8.6	8.6
Stimulants[3]	10.0[b]	9.7[b]	9.3	8.6	9.1	8.7	8.5	8.7
Methamphetamine[3]	6.5[b]	6.4[b]	6.0[b]	5.2	5.8[b]	5.3	5.0	5.1
Sedatives	4.2[b]	4.0[b]	4.1[b]	3.7	3.6	3.4	3.6	3.4
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	29.9	29.9	29.4	29.5	29.6	29.7	30.3	30.1

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.3   Types of Illicit Drug Use in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	35,132[b]	34,993[b]	34,807[b]	35,041[b]	35,775[b]	35,692[b]	35,525[b]	37,954
Marijuana and Hashish	25,755[b]	25,231[b]	25,451[b]	25,375[b]	25,378[b]	25,085[b]	25,768[b]	28,521
Cocaine	5,902[b]	5,908[b]	5,658[b]	5,523[a]	6,069[b]	5,738[b]	5,255	4,797
Crack	1,554[b]	1,406[a]	1,304	1,381[a]	1,479[b]	1,451[b]	1,109	1,016
Heroin	404[a]	314[b]	398[a]	379[a]	560	366[a]	453	605
Hallucinogens	4,749	3,936[b]	3,878[b]	3,809[b]	3,956[a]	3,762[b]	3,678[b]	4,509
LSD	999[b]	558[b]	592[b]	563[b]	666	620[a]	802	779
PCP	235[b]	219[b]	210[a]	164	187	137	99	122
Ecstasy	3,167[a]	2,119[b]	1,915[b]	1,960[b]	2,130[b]	2,132[b]	2,139[b]	2,799
Inhalants	2,084	2,075	2,255	2,187	2,218	2,080	2,047	2,090
Nonmedical Use of Psychotherapeutics[2,3]	14,795[a]	15,163	14,849[a]	15,346	16,482	16,280	15,166	16,006
Pain Relievers	10,992[b]	11,671	11,256[b]	11,815	12,649	12,466	11,885	12,405
OxyContin®	--	--	1,213[b]	1,226[b]	1,323[a]	1,422	1,459	1,677
Tranquilizers	4,849	5,051	5,068	5,249	5,058	5,282	5,103	5,460
Stimulants[3]	3,380	3,031	3,254	3,088	3,791[b]	2,998	2,639[a]	3,060
Methamphetamine[3]	1,755[b]	1,602[b]	1,808[b]	1,603[b]	1,889[b]	1,343	850[a]	1,165
Sedatives	981	831	737	750	926	864	621	811
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	20,423	20,305	19,658[a]	20,109	21,254	21,144	19,990	21,000

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.4   Types of Illicit Drug Use in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	14.9	14.7	14.5	14.4[a]	14.5	14.4	14.2[b]	15.1
Marijuana and Hashish	11.0	10.6[a]	10.6[b]	10.4[b]	10.3[b]	10.1[b]	10.3[b]	11.3
Cocaine	2.5[b]	2.5[b]	2.4[b]	2.3[b]	2.5[b]	2.3[b]	2.1	1.9
Crack	0.7[b]	0.6[b]	0.5[a]	0.6[b]	0.6[b]	0.6[b]	0.4	0.4
Heroin	0.2	0.1[b]	0.2	0.2[a]	0.2	0.1[a]	0.2	0.2
Hallucinogens	2.0[a]	1.7	1.6[a]	1.6[b]	1.6[a]	1.5[b]	1.5[b]	1.8
LSD	0.4[b]	0.2[b]	0.2[a]	0.2[b]	0.3	0.3	0.3	0.3
PCP	0.1[b]	0.1[b]	0.1[b]	0.1	0.1	0.1	0.0	0.0
Ecstasy	1.3[b]	0.9[b]	0.8[b]	0.8[b]	0.9[b]	0.9[b]	0.9[b]	1.1
Inhalants	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
Nonmedical Use of Psychotherapeutics[2,3]	6.3	6.4	6.2	6.3	6.7	6.6	6.1	6.4
Pain Relievers	4.7	4.9	4.7	4.9	5.1	5.0	4.8	4.9
OxyContin®	--	--	0.5[b]	0.5[b]	0.5[a]	0.6	0.6	0.7
Tranquilizers	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.2
Stimulants[3]	1.4[a]	1.3	1.4	1.3	1.5[b]	1.2	1.1[a]	1.2
Methamphetamine[3]	0.7[b]	0.7[b]	0.8[b]	0.7[b]	0.8[b]	0.5	0.3[a]	0.5
Sedatives	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	8.7	8.5	8.2	8.3	8.6	8.5	8.0	8.3

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.5   Types of Illicit Drug Use in the Past Month among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	19,522[b]	19,470[b]	19,071[b]	19,720[b]	20,357[a]	19,857[b]	20,077[b]	21,813
Marijuana and Hashish	14,584[b]	14,638[b]	14,576[b]	14,626[b]	14,813[b]	14,448[b]	15,203[b]	16,718
Cocaine	2,020[a]	2,281[b]	2,021[a]	2,397[b]	2,421[b]	2,075[a]	1,855	1,637
Crack	567	604	467	682	702	610	359	492
Heroin	166	119	166	136	338	153	213	195
Hallucinogens	1,196	1,042	929[b]	1,088	1,006[a]	996[a]	1,060	1,258
LSD	112	133	141	104	130	145	154	158
PCP	58	56	49	48	30	41	24	53
Ecstasy	676	470[b]	450[b]	502[b]	528[b]	503[b]	555[a]	760
Inhalants	635	570	638	611	761[a]	616	640	560
Nonmedical Use of Psychotherapeutics[2,3]	6,287[a]	6,451	6,110[a]	6,491	7,095	6,895	6,224[a]	6,953
Pain Relievers	4,377[b]	4,693	4,404[b]	4,658[a]	5,220	5,174	4,747	5,257
OxyContin®	--	--	325[b]	334[a]	276[b]	369	435	510
Tranquilizers	1,804	1,830	1,616[a]	1,817	1,766	1,835	1,800	2,010
Stimulants[3]	1,303	1,310	1,312	1,188	1,385	1,053	904[b]	1,290
Methamphetamine[3]	683	726[a]	706[a]	628	731[a]	529	314[a]	502
Sedatives	436	294	265	272	385	346	234[a]	370
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	8,777	8,849	8,247[a]	8,963	9,615	9,270	8,565	9,157

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.
[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.
[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.6   Types of Illicit Drug Use in the Past Month among Persons Aged 12 or Older: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	8.3	8.2	7.9[b]	8.1[a]	8.3	8.0[a]	8.0[b]	8.7
Marijuana and Hashish	6.2[a]	6.2[a]	6.1[b]	6.0[b]	6.0[b]	5.8[b]	6.1[b]	6.6
Cocaine	0.9[b]	1.0[b]	0.8[b]	1.0[b]	1.0[b]	0.8[a]	0.7	0.7
Crack	0.2	0.3	0.2	0.3	0.3	0.2	0.1	0.2
Heroin	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hallucinogens	0.5	0.4	0.4[b]	0.4	0.4[a]	0.4[a]	0.4	0.5
LSD	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1
PCP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ecstasy	0.3	0.2[b]	0.2[b]	0.2[b]	0.2[a]	0.2[b]	0.2[a]	0.3
Inhalants	0.3	0.2	0.3	0.3	0.3[a]	0.2	0.3	0.2
Nonmedical Use of Psychotherapeutics[2,3]	2.7	2.7	2.5	2.7	2.9	2.8	2.5[a]	2.8
Pain Relievers	1.9	2.0	1.8[a]	1.9	2.1	2.1	1.9	2.1
OxyContin®	--	--	0.1[a]	0.1[a]	0.1[b]	0.1	0.2	0.2
Tranquilizers	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.8
Stimulants[3]	0.6	0.6	0.5	0.5	0.6	0.4	0.4[b]	0.5
Methamphetamine[3]	0.3[a]	0.3[a]	0.3[a]	0.3	0.3[a]	0.2	0.1[a]	0.2
Sedatives	0.2	0.1	0.1	0.1	0.2	0.1	0.1[a]	0.1
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	3.7	3.7	3.4	3.7	3.9	3.7	3.4	3.6

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.7   Types of Illicit Drug Use in the Past Month among Persons Aged 12 to 17: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	11.6[b]	11.2[b]	10.6	9.9	9.8	9.5	9.3[a]	10.0
Marijuana and Hashish	8.2[b]	7.9	7.6	6.8	6.7[a]	6.7	6.7[a]	7.3
Cocaine	0.6[b]	0.6[b]	0.5[b]	0.6[b]	0.4[a]	0.4	0.4	0.3
Crack	0.1	0.1[b]	0.1	0.1[a]	0.0	0.1	0.0	0.0
Heroin	0.0	0.1	0.1	0.1	0.1	0.0[a]	0.1	0.1
Hallucinogens	1.0	1.0	0.8	0.8	0.7	0.7	1.0	0.9
LSD	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1
PCP	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
Ecstasy	0.5	0.4	0.3[a]	0.3[a]	0.3	0.3[b]	0.4	0.5
Inhalants	1.2	1.3[a]	1.2	1.2	1.3[a]	1.2	1.1	1.0
Nonmedical Use of Psychotherapeutics[2,3]	4.0[b]	4.0[b]	3.6[a]	3.3	3.3	3.3	2.9	3.1
Pain Relievers	3.2[b]	3.2[b]	3.0	2.7	2.7	2.7	2.3[a]	2.7
OxyContin®	--	--	0.3	0.1[b]	0.1[b]	0.2	0.2	0.3
Tranquilizers	0.8	0.9[b]	0.6	0.6	0.5	0.7	0.6	0.6
Stimulants[3]	0.8[b]	0.9[b]	0.7[a]	0.7	0.7	0.5	0.5	0.5
Methamphetamine[3]	0.3[a]	0.3[a]	0.2	0.3[a]	0.2	0.1	0.1	0.1
Sedatives	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	5.7[b]	5.7[b]	5.3[b]	4.9	4.9	4.7	4.4	4.5

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.8   Types of Illicit Drug Use in the Past Month among Persons Aged 18 to 25: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	20.2	20.3	19.4[b]	20.1	19.8[a]	19.7[b]	19.6[b]	21.2
Marijuana and Hashish	17.3	17.0[a]	16.1[b]	16.6[b]	16.3[b]	16.4[b]	16.5[b]	18.1
Cocaine	2.0[b]	2.2[b]	2.1[b]	2.6[b]	2.2[b]	1.7[a]	1.5	1.4
Crack	0.2	0.2	0.3[a]	0.3[b]	0.2[a]	0.2	0.2	0.1
Heroin	0.1	0.1[b]	0.1	0.2	0.2	0.1	0.2	0.2
Hallucinogens	1.9	1.7	1.5[a]	1.5	1.7	1.5[a]	1.7	1.8
LSD	0.1[b]	0.2	0.3	0.2	0.2	0.2	0.3	0.3
PCP	0.0	0.1[a]	0.1[a]	0.0	0.0	0.0	0.0	0.0
Ecstasy	1.1	0.7[b]	0.7[b]	0.8[a]	1.0	0.7[b]	0.9	1.1
Inhalants	0.5	0.4	0.4	0.5	0.4	0.4	0.3	0.4
Nonmedical Use of Psychotherapeutics[2,3]	5.5[b]	6.1	6.1	6.3	6.5	6.0	5.9	6.3
Pain Relievers	4.1[b]	4.7	4.7	4.7	4.9	4.6	4.6	4.8
OxyContin®	--	--	0.4	0.4	0.4	0.5	0.4	0.5
Tranquilizers	1.6	1.7	1.8	1.9	2.0	1.7	1.7	1.8
Stimulants[3]	1.3	1.3	1.5	1.4	1.4	1.1	1.1	1.3
Methamphetamine[3]	0.6[b]	0.6[b]	0.7[b]	0.7[b]	0.6[b]	0.4	0.2	0.2
Sedatives	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	7.9	8.4	8.1	8.8	8.9	8.1	7.8	8.3

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.9   Types of Illicit Drug Use in the Past Month among Persons Aged 26 or Older: Percentages, 2002-2009

Drug	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1]	5.8	5.6[a]	5.5[b]	5.8	6.1	5.8	5.9	6.3
Marijuana and Hashish	4.0[a]	4.0[a]	4.1[a]	4.1[a]	4.2	3.9[b]	4.2	4.6
Cocaine	0.7	0.8[a]	0.7	0.8[a]	0.8[b]	0.7	0.7	0.6
Crack	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2
Heroin	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
Hallucinogens	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
LSD	0.0	0.0	0.0	0.0	0.0	0.0	*	0.0
PCP	0.0	*	0.0	0.0	*	0.0	*	0.0
Ecstasy	0.1	0.1	0.1	0.1	0.1[a]	0.1	0.1	0.1
Inhalants	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Nonmedical Use of Psychotherapeutics[2,3]	2.0	2.0	1.8[a]	1.9	2.2	2.2	1.9	2.1
Pain Relievers	1.3	1.3	1.2[b]	1.3	1.5	1.6	1.4	1.6
OxyContin®	--	--	0.1[a]	0.1	0.1[a]	0.1	0.1	0.1
Tranquilizers	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6
Stimulants[3]	0.4	0.4	0.4	0.3	0.4	0.3	0.2[b]	0.4
Methamphetamine[3]	0.2	0.3	0.2	0.2	0.3	0.2	0.1[a]	0.2
Sedatives	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
ILLICIT DRUGS OTHER THAN MARIJUANA[1]	2.7	2.6	2.3	2.6	2.9	2.9	2.5	2.7

*Low precision; no estimate reported.

-- Not available.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. The estimates for Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine incorporated in these summary estimates do not include data from the methamphetamine items added in 2005 and 2006. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

[2] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[3] Estimates of Nonmedical Use of Psychotherapeutics, Stimulants, and Methamphetamine in the designated rows include data from methamphetamine items added in 2005 and 2006 and are not comparable with estimates presented in NSDUH reports prior to the 2007 National Findings report. For the 2002 through 2005 survey years, a Bernoulli stochastic imputation procedure was used to generate adjusted estimates comparable with estimates for survey years 2006 and later. See Section B.4.8 in Appendix B of the *Results from the 2008 National Survey on Drug Use and Health: National Findings*.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.10 Illicit Drug Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2008 and 2009

Age Category	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	47.0	47.1	14.2[b]	15.1	8.0[b]	8.7
12	11.2	10.5	7.2	6.6	3.1	3.6
13	15.2	15.2	9.9	9.3	3.4	3.6
14	21.5	21.2	14.9	14.6	6.7	7.0
15	28.4	30.4	20.4[a]	22.9	10.5	10.9
16	35.8	37.1	27.5	28.4	13.5	15.1
17	42.0	42.4	31.8	32.2	17.0	18.3
18	47.5	48.0	34.7	37.0	20.3	21.3
19	52.5	54.2	37.6	39.0	22.2	21.6
20	55.7	59.0	36.9	38.6	22.3	23.9
21	59.0	60.8	35.6[a]	39.8	20.9	23.5
22	60.1	62.2	34.8	37.7	20.7	22.4
23	59.1	60.7	28.8[a]	33.2	17.3	19.1
24	59.9	61.8	29.6	32.4	17.4	19.9
25	61.7	61.2	28.7	29.0	15.4	17.4
26-29	61.1	60.7	23.4	25.5	13.0	14.4
30-34	55.4	58.1	16.4	18.2	9.6	10.5
35-39	55.2	53.0	14.6	13.6	8.6	8.0
40-44	60.2	57.2	12.9	12.6	6.3	6.5
45-49	62.7	60.9	11.5	11.7	7.0	6.5
50-54	58.0	60.1	8.1[a]	10.7	4.3[a]	6.9
55-59	51.9	51.5	7.7	8.4	5.0	5.4
60-64	41.3	41.5	5.2	5.2	3.0	3.1
65 or Older	13.5	14.9	1.4	1.4	1.0	0.9

*Low precision; no estimate reported.

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.11 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	47.0	47.1	14.2[b]	15.1	8.0[b]	8.7
AGE						
12-17	26.2	26.8	19.0	19.5	9.3[a]	10.0
18-25	56.6[a]	58.1	33.5[b]	36.0	19.6[b]	21.2
26 or Older	48.0	47.8	10.3	10.9	5.9	6.3
GENDER						
Male	51.3	51.9	16.4[b]	17.9	9.9[a]	10.8
Female	42.9	42.6	12.2	12.4	6.3	6.6
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	48.7	48.7	14.5	15.1	8.3	8.8
White	50.7	51.2	14.4[a]	15.3	8.2	8.8
Black or African American	46.1	43.5	16.9	15.9	10.1	9.6
American Indian or Alaska Native	57.6	64.8	19.5	27.1	9.5[a]	18.3
Native Hawaiian or Other Pacific Islander	*	*	*	*	7.3	*
Asian	21.2	20.1	7.4	6.2	3.6	3.7
Two or More Races	56.1	55.8	21.2	23.4	14.7	14.3
Hispanic or Latino	36.4	37.6	12.3[b]	14.9	6.2[b]	7.9

*Low precision; no estimate reported.

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.12 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	26.2	26.8	19.0	19.5	9.3[a]	10.0
GENDER						
Male	26.0[a]	27.9	19.0	20.2	9.5[a]	10.6
Female	26.3	25.6	18.9	18.9	9.1	9.4
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	26.0	26.3	19.0	19.2	9.3	9.7
White	26.2	25.5	19.7	19.2	9.8	9.6
Black or African American	26.2[a]	29.5	17.6	20.1	8.2[b]	10.8
American Indian or Alaska Native	43.8	46.0	31.3	29.5	18.2	14.6
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	16.8	20.4	9.8	11.2	2.7[a]	5.5
Two or More Races	30.1	31.0	24.8	24.0	13.5	11.7
Hispanic or Latino	27.0	28.7	18.8	20.9	8.9[a]	11.4
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	25.1	25.8	18.9	19.4	10.0	9.9
Female, White, Not Hispanic	27.4[a]	25.0	20.6	19.1	9.6	9.3
Male, Black, Not Hispanic	29.0	32.1	20.3	21.3	9.0	11.3
Female, Black, Not Hispanic	23.5	26.9	15.0[a]	18.8	7.3[a]	10.4
Male, Hispanic	27.9	31.1	20.0	22.7	9.2[a]	12.8
Female, Hispanic	26.1	26.2	17.5	18.9	8.6	9.9

*Low precision; no estimate reported.

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.13 Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	49.3	49.3	13.7[b]	14.6	7.9[a]	8.5
GENDER						
Male	54.2	54.7	16.1[b]	17.6	9.9[a]	10.8
Female	44.6	44.4	11.5	11.8	6.0	6.3
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	51.0	51.0	14.1	14.7	8.2	8.7
White	53.1	53.6	13.9[a]	14.9	8.1[a]	8.7
Black or African American	49.0[a]	45.5	16.8	15.3	10.3	9.5
American Indian or Alaska Native	59.6	67.1	17.8	26.8	8.3[b]	18.7
Native Hawaiian or Other Pacific Islander	*	*	*	*	6.5	*
Asian	21.6	20.1	7.2	5.8	3.7	3.6
Two or More Races	61.3	61.2	20.4	23.3	14.9	14.9
Hispanic or Latino	37.9	39.0	11.3[b]	14.0	5.8[b]	7.4
EDUCATION						
< High School	37.7	39.7	13.5[b]	16.1	8.1[b]	10.2
High School Graduate	46.9	47.6	14.4	14.6	8.6	8.8
Some College	56.4	54.5	16.1	16.9	9.4	9.8
College Graduate	51.8	51.8	10.9	11.7	5.7	6.1
CURRENT EMPLOYMENT						
Full-Time	57.1	56.4	14.4	14.2	8.0	8.0
Part-Time	50.9	53.2	18.1	20.0	10.2	11.5
Unemployed	62.5	60.0	29.8	26.8	19.6	17.0
Other[1]	31.4	32.8	8.0[b]	9.8	4.9[b]	6.0

*Low precision; no estimate reported.

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.14 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 or Older, by Gender: Numbers in Thousands, 2002-2009

Gender/Substance	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
TOBACCO PRODUCTS[1]	71,499	70,757	70,257	71,519	72,873[b]	70,939	70,868	69,713
Cigarettes	61,136[a]	60,434	59,896	60,532	61,565[b]	60,069	59,781	58,661
Smokeless Tobacco	7,787	7,725[a]	7,154[b]	7,682[a]	8,231	8,051	8,670	8,559
Cigars	12,751	12,837	13,727	13,640	13,708	13,263	13,126	13,269
Pipe Tobacco	1,816	1,619[a]	1,835	2,190	2,321	2,046	1,877	2,087
ALCOHOL	119,820[b]	118,965[b]	120,934[b]	126,028[b]	125,309[b]	126,760[b]	128,974	130,621
Binge Alcohol Use[2]	53,787[b]	53,770[b]	54,725[b]	55,090[b]	56,575[b]	57,778	58,096	59,561
Heavy Alcohol Use[2]	15,860[a]	16,144	16,689	16,035	16,946	17,010	17,292	17,129
MALE								
TOBACCO PRODUCTS[1]	41,991	41,288	41,569	42,175	43,389[b]	42,369	41,881	40,909
Cigarettes	32,636[a]	32,263	32,278	32,312	33,220[b]	32,607[a]	31,942	30,937
Smokeless Tobacco	7,242[a]	7,096[b]	6,730[b]	7,174[b]	7,843	7,589	8,215	8,151
Cigars	10,669	10,372	11,375	11,355	11,092	10,940	10,900	10,679
Pipe Tobacco	1,487	1,400	1,579	1,877	2,023	1,797	1,486	1,772
ALCOHOL	65,210[b]	65,927[b]	66,317[b]	68,497[a]	68,025[b]	68,088[a]	69,989	70,455
Binge Alcohol Use[2]	35,456[b]	35,565[b]	36,195[b]	36,025[b]	37,298	38,128	38,292	38,654
Heavy Alcohol Use[2]	12,216	11,958	12,388	12,172	12,775	12,786	12,882	12,604
FEMALE								
TOBACCO PRODUCTS[1]	29,509	29,469	28,688	29,344	29,484	28,570	28,986	28,804
Cigarettes	28,500	28,171	27,618	28,220	28,345	27,462	27,839	27,724
Smokeless Tobacco	545	628	424	508	388	461	455	408
Cigars	2,082[b]	2,465	2,352	2,285	2,616	2,323	2,226[a]	2,590
Pipe Tobacco	330	219	256	313	298	249	391	315
ALCOHOL	54,610[b]	53,038[b]	54,616[b]	57,531[b]	57,283[b]	58,672	58,986	60,166
Binge Alcohol Use[2]	18,331[b]	18,205[b]	18,530[b]	19,065[b]	19,276[b]	19,651[a]	19,805	20,908
Heavy Alcohol Use[2]	3,645[b]	4,186	4,301	3,863[b]	4,172	4,225	4,410	4,525

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.15 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 or Older, by Gender: Percentages, 2002-2009

Gender/Substance	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
TOBACCO PRODUCTS[1]	30.4[b]	29.8[b]	29.2[b]	29.4[b]	29.6[b]	28.6[a]	28.4	27.7
Cigarettes	26.0[b]	25.4[b]	24.9[b]	24.9[b]	25.0[b]	24.2[a]	23.9	23.3
Smokeless Tobacco	3.3	3.3	3.0[b]	3.2	3.3	3.2	3.5	3.4
Cigars	5.4	5.4	5.7[a]	5.6	5.6	5.4	5.3	5.3
Pipe Tobacco	0.8	0.7	0.8	0.9	0.9	0.8	0.8	0.8
ALCOHOL	51.0	50.1[b]	50.3[b]	51.8	50.9	51.1	51.6	51.9
Binge Alcohol Use[2]	22.9	22.6[a]	22.8[a]	22.7[a]	23.0	23.3	23.3	23.7
Heavy Alcohol Use[2]	6.7	6.8	6.9	6.6	6.9	6.9	6.9	6.8
MALE								
TOBACCO PRODUCTS[1]	37.0[b]	35.9[b]	35.7[b]	35.8[b]	36.4[b]	35.2[a]	34.5	33.5
Cigarettes	28.7[b]	28.1[b]	27.7[b]	27.4[b]	27.8[b]	27.1[b]	26.3	25.3
Smokeless Tobacco	6.4	6.2	5.8[b]	6.1	6.6	6.3	6.8	6.7
Cigars	9.4	9.0	9.8[b]	9.6[a]	9.3	9.1	9.0	8.7
Pipe Tobacco	1.3	1.2	1.4	1.6	1.7	1.5	1.2	1.4
ALCOHOL	57.4	57.3	56.9	58.1	57.0	56.6	57.7	57.6
Binge Alcohol Use[2]	31.2	30.9	31.1	30.5	31.2	31.7	31.6	31.6
Heavy Alcohol Use[2]	10.8	10.4	10.6	10.3	10.7	10.6	10.6	10.3
FEMALE								
TOBACCO PRODUCTS[1]	24.3[b]	24.0[b]	23.1	23.4[a]	23.3	22.4	22.5	22.2
Cigarettes	23.4[b]	23.0[b]	22.3	22.5[a]	22.4	21.5	21.7	21.4
Smokeless Tobacco	0.4	0.5	0.3	0.4	0.3	0.4	0.4	0.3
Cigars	1.7[a]	2.0	1.9	1.8	2.1	1.8	1.7[a]	2.0
Pipe Tobacco	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2
ALCOHOL	44.9[a]	43.2[b]	44.0[b]	45.9	45.2	46.0	45.9	46.5
Binge Alcohol Use[2]	15.1[a]	14.8[b]	14.9[b]	15.2[a]	15.2[a]	15.4	15.4	16.1
Heavy Alcohol Use[2]	3.0[a]	3.4	3.5	3.1[a]	3.3	3.3	3.4	3.5

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.16 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 12 to 17, by Gender: Percentages, 2002-2009

Gender/Substance	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
TOBACCO PRODUCTS[1]	15.2[b]	14.4[b]	14.4[b]	13.1[b]	12.9[b]	12.4	11.4	11.6
Cigarettes	13.0[b]	12.2[b]	11.9[b]	10.8[b]	10.4[b]	9.8[a]	9.1	8.9
Smokeless Tobacco	2.0[a]	2.0	2.3	2.1	2.4	2.4	2.2	2.3
Cigars	4.5[a]	4.5[a]	4.8[b]	4.2	4.1	4.2	3.8	4.0
Pipe Tobacco	0.6[b]	0.6[b]	0.7[a]	0.6[b]	0.7[a]	0.7	0.7[a]	0.9
ALCOHOL	17.6[b]	17.7[b]	17.6[b]	16.5[b]	16.6[b]	15.9[b]	14.6	14.7
Binge Alcohol Use[2]	10.7[b]	10.6[b]	11.1[b]	9.9[b]	10.3[b]	9.7[a]	8.8	8.8
Heavy Alcohol Use[2]	2.5[a]	2.6[b]	2.7[b]	2.4	2.4	2.3	2.0	2.1
MALE								
TOBACCO PRODUCTS[1]	16.0[b]	15.6[b]	15.3[b]	14.2	14.0	14.1	12.6	13.6
Cigarettes	12.3[b]	11.9[b]	11.3[b]	10.7[b]	10.0	10.0	9.0	9.2
Smokeless Tobacco	3.4[a]	3.7	4.0	3.7	4.2	4.4	3.9	4.1
Cigars	6.2[a]	6.2[a]	6.6[b]	5.8	5.5	6.0[a]	5.3	5.2
Pipe Tobacco	0.7[b]	0.9	0.9[a]	0.8[a]	0.9[a]	0.9[a]	0.8[b]	1.3
ALCOHOL	17.4[b]	17.1[b]	17.2[b]	15.9	16.3	15.9	14.2	15.1
Binge Alcohol Use[2]	11.4[b]	11.1[b]	11.6[b]	10.4	10.7[a]	10.6	8.9	9.6
Heavy Alcohol Use[2]	3.1[b]	2.9[a]	3.2[b]	3.0[a]	2.8	2.8	2.3	2.3
FEMALE								
TOBACCO PRODUCTS[1]	14.4[b]	13.3[b]	13.5[b]	11.9[b]	11.8[b]	10.6	10.2	9.5
Cigarettes	13.6[b]	12.5[b]	12.5[b]	10.8[b]	10.7[b]	9.7[a]	9.2	8.6
Smokeless Tobacco	0.4	0.3[b]	0.4	0.4	0.4	0.4	0.5	0.5
Cigars	2.7	2.7	2.8	2.5	2.7	2.4	2.2	2.7
Pipe Tobacco	0.4	0.3[a]	0.5	0.4	0.4	0.5	0.6	0.6
ALCOHOL	17.9[b]	18.3[b]	18.0[b]	17.2[b]	17.0[b]	16.0[b]	15.0	14.3
Binge Alcohol Use[2]	9.9[b]	10.1[b]	10.5[b]	9.4[b]	9.9[b]	8.8	8.7	8.0
Heavy Alcohol Use[2]	1.9	2.3	2.1	1.8	1.9	1.8	1.6	1.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.17 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 18 to 25, by Gender: Percentages, 2002-2009

Gender/Substance	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
TOBACCO PRODUCTS[1]	45.3[b]	44.8[b]	44.6[b]	44.3[b]	43.9[b]	41.8	41.4	41.6
Cigarettes	40.8[b]	40.2[b]	39.5[b]	39.0[b]	38.4[b]	36.2	35.7	35.8
Smokeless Tobacco	4.8[b]	4.7[b]	4.9[b]	5.1[b]	5.2[b]	5.3[b]	5.4[a]	6.1
Cigars	11.0	11.4	12.7[b]	12.0	12.1	11.8	11.3	11.4
Pipe Tobacco	1.1[b]	0.9[b]	1.2[b]	1.5	1.3[b]	1.2[b]	1.4[a]	1.7
ALCOHOL	60.5	61.4	60.5	60.9	61.9	61.2	61.2	61.8
Binge Alcohol Use[2]	40.9	41.6	41.2	41.9	42.2	41.8	41.0	41.7
Heavy Alcohol Use[2]	14.9[a]	15.1[b]	15.1[a]	15.3[b]	15.6[b]	14.7[a]	14.5	13.7
MALE								
TOBACCO PRODUCTS[1]	52.1[a]	51.7	51.7	51.6	51.0	50.0	48.8	49.9
Cigarettes	44.4[b]	44.2[b]	43.5[b]	42.9[a]	41.9	40.5	39.5	40.4
Smokeless Tobacco	9.4[b]	8.9[b]	9.5[b]	9.7[b]	9.9[b]	9.9[a]	10.3[a]	11.4
Cigars	16.8	17.3	19.7[b]	18.3	18.7	18.4	17.2	17.4
Pipe Tobacco	1.7[b]	1.4[b]	2.1[a]	2.3	2.2[a]	1.9[b]	2.0[b]	2.7
ALCOHOL	65.2	66.9	64.9	66.3	65.9	65.3	64.3	65.9
Binge Alcohol Use[2]	50.2	51.3	50.1	51.7	50.2	49.8	48.4	49.7
Heavy Alcohol Use[2]	21.1[b]	21.2[b]	21.2[b]	21.7[b]	21.0[a]	19.9	19.9	19.0
FEMALE								
TOBACCO PRODUCTS[1]	38.4[b]	37.8[b]	37.4[b]	36.9[b]	36.8[b]	33.6	33.8	33.3
Cigarettes	37.1[b]	36.2[b]	35.5[b]	35.0[b]	34.9[b]	31.8	31.8	31.2
Smokeless Tobacco	0.3[b]	0.4[b]	0.4[b]	0.5[a]	0.4[a]	0.5	0.4[a]	0.8
Cigars	5.2	5.5	5.8	5.6	5.5	5.1	5.3	5.4
Pipe Tobacco	0.4[a]	0.4[b]	0.4[b]	0.6	0.5[a]	0.5	0.7	0.7
ALCOHOL	55.7[a]	55.8[a]	56.0	55.4[a]	57.9	57.1	58.0	57.7
Binge Alcohol Use[2]	31.7[a]	31.8[a]	32.3	31.9	34.0	33.7	33.6	33.6
Heavy Alcohol Use[2]	8.7	9.0	8.8	8.8	10.0[b]	9.5[a]	9.0	8.4

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.18 Tobacco Product and Alcohol Use in the Past Month among Persons Aged 26 or Older, by Gender: Percentages, 2002-2009

Gender/Substance	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
TOBACCO PRODUCTS[1]	29.9[b]	29.3[b]	28.5[a]	29.0[b]	29.4[b]	28.5[a]	28.3	27.3
Cigarettes	25.2[b]	24.7[b]	24.1[a]	24.3[b]	24.7[b]	24.1[a]	23.8	23.0
Smokeless Tobacco	3.2	3.2	2.7	3.0	3.2	3.0	3.3	3.1
Cigars	4.6	4.5	4.6	4.7	4.6	4.4	4.4	4.4
Pipe Tobacco	0.8	0.6	0.7	0.8	0.9[a]	0.8	0.6	0.7
ALCOHOL	53.9	52.5[b]	53.0[b]	55.1	53.7	54.1	54.8	54.9
Binge Alcohol Use[2]	21.4	21.0[b]	21.1[a]	21.0[b]	21.4	21.9	22.1	22.4
Heavy Alcohol Use[2]	5.9	5.9	6.1	5.6[a]	6.0	6.1	6.3	6.2
MALE								
TOBACCO PRODUCTS[1]	37.3[b]	36.0[b]	35.7[b]	36.0[b]	36.9[b]	35.6[b]	35.0[a]	33.1
Cigarettes	28.3[b]	27.5[b]	27.2[b]	27.0[b]	27.8[b]	27.1[b]	26.4[a]	24.7
Smokeless Tobacco	6.3	6.0	5.3[a]	5.8	6.3	5.9	6.5	6.2
Cigars	8.5	7.9	8.4	8.6	8.1	7.8	8.0	7.6
Pipe Tobacco	1.3	1.2	1.3	1.6	1.7[a]	1.5	1.1	1.2
ALCOHOL	61.9	61.5	61.3	62.7	61.2	60.8	62.5	61.8
Binge Alcohol Use[2]	30.7	30.1	30.4	29.6[a]	30.7	31.4	31.7	31.3
Heavy Alcohol Use[2]	10.0	9.5	9.8	9.3	10.0	10.1	10.1	9.8
FEMALE								
TOBACCO PRODUCTS[1]	23.2	23.1	22.0	22.6	22.5	22.0	22.2	21.9
Cigarettes	22.5	22.1	21.3	21.9	21.8	21.3	21.5	21.3
Smokeless Tobacco	0.5[a]	0.6[a]	0.3	0.4	0.3	0.3	0.3	0.2
Cigars	1.0[a]	1.3	1.1	1.1	1.4	1.2	1.1	1.4
Pipe Tobacco	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1
ALCOHOL	46.6	44.3[b]	45.4[b]	48.0	46.7	47.9	47.7	48.4
Binge Alcohol Use[2]	13.0[a]	12.6[b]	12.6[b]	13.2	12.8[b]	13.2	13.2	14.2
Heavy Alcohol Use[2]	2.2[b]	2.6	2.7	2.3[a]	2.4[a]	2.5	2.7	2.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
[2] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.19 Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 20, by Gender: Percentages, 2002-2009

Gender/Alcohol Use	2002	2003	2004	2005	2006	2007	2008	2009
TOTAL								
Lifetime	56.2[b]	55.8[b]	54.9[b]	53.9[a]	53.9[a]	52.9	52.2	52.5
Past Year	47.0[b]	46.8[b]	46.6[b]	46.3[b]	46.1[a]	45.1	44.3	44.6
Past Month	28.8[b]	29.0[b]	28.7[b]	28.2	28.3	27.9	26.4	27.2
Binge Alcohol Use[1]	19.3[a]	19.2[a]	19.6[b]	18.8	19.0	18.6	17.4	18.1
Heavy Alcohol Use[1]	6.2[b]	6.1[a]	6.3[b]	6.0[a]	6.2[a]	6.0[a]	5.5	5.4
MALE								
Lifetime	56.5[b]	55.0	54.9	53.7	54.0	53.0	52.0[a]	53.6
Past Year	46.6	45.6	46.3	45.6	46.0	45.1	43.5[a]	45.4
Past Month	29.6	29.9	29.6	28.9	29.2	28.4	27.1	28.5
Binge Alcohol Use[1]	21.8	21.7	22.1[a]	21.3	21.3	21.1	19.2	20.5
Heavy Alcohol Use[1]	8.1[a]	7.9	8.2[a]	7.6	7.9	7.8	7.0	7.0
FEMALE								
Lifetime	56.0[b]	56.6[b]	54.8[b]	54.2[b]	53.7[b]	52.8	52.4	51.4
Past Year	47.5[b]	48.0[b]	46.9[b]	46.9[b]	46.2[b]	45.1	45.1	43.8
Past Month	28.0[b]	28.1[b]	27.8[b]	27.5[a]	27.4[a]	27.3	25.8	25.8
Binge Alcohol Use[1]	16.7	16.5	17.0[a]	16.1	16.5	16.1	15.5	15.5
Heavy Alcohol Use[1]	4.2	4.3[a]	4.3	4.3[a]	4.3	4.2	4.0	3.7

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.20 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month, by Detailed Age Category: Percentages, 2008 and 2009

Age Category	Alcohol Use (2008)	Alcohol Use (2009)	Binge Alcohol Use (2008)	Binge Alcohol Use (2009)	Heavy Alcohol Use (2008)	Heavy Alcohol Use (2009)
TOTAL	51.6	51.9	23.3	23.7	6.9	6.8
12	2.1	2.4	0.9	1.0	0.1	0.1
13	4.6	4.5	2.1	2.2	0.3	0.3
14	10.6[a]	8.9	5.1	4.3	0.6	0.5
15	15.5	16.9	8.6	9.5	1.5	2.2
16	22.2	22.4	14.7	13.1	3.7	2.8
17	30.3	30.1	19.6	20.8	5.2	6.1
18	41.5	42.4	28.2	30.4	9.1	8.1
19	50.5	51.2	35.5	35.7	13.1	12.7
20	55.5	56.7	38.4	38.9	15.4	13.6
21	70.6	71.5	49.0	48.2	17.3	16.7
22	70.4	71.6	46.9[a]	50.5	18.0	17.8
23	69.0	69.7	45.0	46.0	14.8	15.5
24	69.8	70.1	46.2	44.9	15.9	14.1
25	67.8	67.7	42.5	42.2	13.4	12.7
26-29	67.4	66.4	42.6[a]	38.8	13.2[a]	10.8
30-34	59.9	62.5	30.8[a]	34.2	8.1	9.5
35-39	59.4	59.5	27.4	27.3	7.4	7.4
40-44	60.3	61.1	26.1	27.0	6.7	6.8
45-49	59.6	58.9	23.9	24.2	7.4	6.7
50-54	54.9	54.9	20.3	20.4	6.4	6.4
55-59	54.6	55.6	17.6	19.2	5.2	5.9
60-64	50.3	50.3	14.6	12.5	3.6	3.8
65 or Older	39.7	39.1	8.2	9.8	2.2	2.2

*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.21 Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month among Persons Aged 12 to 20, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Alcohol Use (2008)	Alcohol Use (2009)	Binge Alcohol Use (2008)	Binge Alcohol Use (2009)	Heavy Alcohol Use (2008)	Heavy Alcohol Use (2009)
TOTAL	26.4	27.2	17.4	18.1	5.5	5.4
GENDER						
Male	27.1	28.5	19.2	20.5	7.0	7.0
Female	25.8	25.8	15.5	15.5	4.0	3.7
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	27.2	27.7	17.9	18.3	5.9	5.7
White	30.1	30.4	20.8	21.0	7.2	7.0
Black or African American	19.0	20.4	9.3	10.1	1.9	1.7
American Indian or Alaska Native	26.4	22.0	*	16.8	4.0	5.2
Native Hawaiian or Other Pacific Islander	*	*	*	*	5.8	*
Asian	17.2	16.1	9.4	9.1	2.1	1.2
Two or More Races	22.9	27.5	15.0	18.3	4.2	6.1
Hispanic or Latino	23.1	25.1	15.1[a]	17.1	4.1	3.9
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	30.3	31.3	22.6	23.5	8.8	9.1
Female, White, Not Hispanic	29.9	29.4	18.9	18.3	5.5	4.8
Male, Black, Not Hispanic	18.9	21.8	10.7	11.2	2.7	2.4
Female, Black, Not Hispanic	19.2	19.0	7.8	9.1	1.2	1.0
Male, Hispanic	25.3	26.9	17.3[a]	20.6	5.6	5.0
Female, Hispanic	20.7	23.2	12.6	13.4	2.5	2.7

*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.22 Cigarette Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2008 and 2009

Age Category	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	65.1	64.6	28.0	27.5	23.9	23.3
12	5.0	4.9	2.4	2.7	1.2[a]	0.5
13	10.1	8.9	5.9	5.4	2.9	2.2
14	16.9	16.8	9.9	11.6	5.0	5.6
15	25.5	24.4	17.2	16.8	10.1	9.3
16	34.4	33.4	22.9	22.4	14.1	13.9
17	42.0	40.5	29.0	28.1	19.4	19.8
18	53.2	50.2	41.6	40.2	30.2	29.3
19	60.9	58.4	46.0	45.1	34.3	34.0
20	62.0	62.4	45.0	46.0	36.9	36.5
21	65.2	66.0	46.6	47.1	38.5	37.4
22	66.5[a]	70.3	47.0	48.6	37.7	38.9
23	68.4	68.7	45.0	46.0	36.0	37.5
24	69.3	69.0	43.9	45.4	36.0	37.4
25	71.5	68.9	45.4	44.4	37.6	37.5
26-29	72.1	70.9	44.1	42.3	37.1	36.4
30-34	68.5[a]	71.7	35.4	37.1	30.4	31.9
35-39	68.3	67.8	29.7	30.0	26.1	25.7
40-44	71.7	70.6	30.2	28.0	27.4	25.1
45-49	73.8	72.0	31.1	29.4	28.8	26.5
50-54	72.6	71.6	30.1	27.2	27.1	25.8
55-59	75.5	72.9	22.3	24.1	20.6	21.6
60-64	73.8	71.7	20.4	19.7	18.0	17.7
65 or Older	65.3	66.0	11.2	10.5	10.3	8.9

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.23 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	22.9	22.2	15.0	15.0	9.1	8.9
GENDER						
Male	22.6	23.1	14.8	15.8	9.0	9.2
Female	23.1[a]	21.2	15.1	14.1	9.2	8.6
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	23.1[a]	21.9	15.2	14.8	9.4	9.2
White	24.7	23.8	17.0	16.7	10.6	10.6
Black or African American	19.0	17.3	9.7	9.3	5.0	5.1
American Indian or Alaska Native	41.6	39.9	28.9	21.0	18.9[a]	11.6
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	10.7	9.4	5.9	4.7	3.8	2.5
Two or More Races	25.4	24.0	18.1	16.9	13.1	12.9
Hispanic or Latino	22.0	23.3	14.0	15.9	7.9	7.5
GENDER/RACE/HISPANIC ORIGIN						
Male, White, Not Hispanic	23.8	24.0	16.2	17.0	10.1	10.6
Female, White, Not Hispanic	25.7[a]	23.6	17.8	16.5	11.2	10.6
Male, Black, Not Hispanic	19.9	18.2	10.9	10.5	5.4	5.7
Female, Black, Not Hispanic	18.0	16.3	8.6	8.2	4.5	4.5
Male, Hispanic	22.9[a]	26.6	15.2[a]	18.9	9.1	8.5
Female, Hispanic	21.0	19.8	12.7	12.7	6.6	6.5

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.24 Cigarette Use in Lifetime, Past Year, and Past Month among Persons Aged 18 or Older, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Lifetime (2008)	Lifetime (2009)	Past Year (2008)	Past Year (2009)	Past Month (2008)	Past Month (2009)
TOTAL	69.7	69.2	29.5	28.8	25.6	24.9
GENDER						
Male	75.1	74.5	32.8	31.7	28.4	27.1
Female	64.7	64.2	26.4	26.1	23.0	22.7
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	71.6	71.1	30.0[a]	28.9	26.3[a]	25.1
White	75.8	75.6	30.5	29.8	26.6	25.8
Black or African American	58.4	56.9	30.7	28.3	27.8	25.2
American Indian or Alaska Native	77.6	78.4	52.1	39.6	47.7	35.6
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Asian	37.3	38.1	15.9	14.2	12.7	11.7
Two or More Races	80.3	76.1	39.1	37.7	36.0	34.6
Hispanic or Latino	58.1	56.9	25.8[a]	28.3	21.1	23.4
EDUCATION						
< High School	65.2	65.0	38.1	39.0	34.4	35.4
High School Graduate	70.8	71.2	34.6	33.9	30.6	30.0
Some College	72.0	71.2	30.8	30.1	26.6	25.4
College Graduate	69.0	67.5	17.7	16.7	14.0	13.1
CURRENT EMPLOYMENT						
Full-Time	72.4	71.5	31.5[b]	29.6	27.2[a]	25.6
Part-Time	67.9	67.8	28.5	29.2	23.8	23.9
Unemployed	70.7	72.0	47.3	47.1	43.0	41.9
Other[1]	65.3	65.2	23.5	23.1	20.8	20.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] The Other Employment category includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.25 Perceived Risk and Availability of Substances among Persons Aged 12 to 17: Percentages, 2002-2009

Risk/Availability	2002	2003	2004	2005	2006	2007	2008	2009
PERCEPTIONS OF GREAT RISK[1]								
Cigarettes								
Smoke One or More Packs Per Day	63.1[b]	64.2[b]	67.5[b]	68.3[b]	68.7[b]	68.8[b]	69.7[b]	65.8
Marijuana								
Smoke Once a Month	32.4[b]	34.9[b]	35.0[b]	34.0[b]	34.7[b]	34.5[b]	33.9[b]	30.7
Smoke Once or Twice a Week	51.5[b]	54.4[b]	54.7[b]	55.0[b]	54.2[b]	54.7[b]	53.1[b]	49.3
Cocaine								
Use Once a Month	50.5	51.4[b]	49.6	48.8	49.0	49.6	49.7	49.5
Use Once or Twice a Week	79.8[a]	80.7[b]	79.8[a]	79.9[b]	79.2	78.9	79.2	78.5
Heroin								
Try Once or Twice	58.5[a]	58.8[b]	57.0	56.5	57.2	57.0	57.7	57.0
Use Once or Twice a Week	82.5[b]	82.6[b]	81.4	81.8	81.2	81.0	81.3	81.0
LSD								
Try Once or Twice	52.6[b]	53.4[b]	52.6[b]	51.7[b]	51.6[b]	51.2[b]	50.5[b]	48.4
Use Once or Twice a Week	76.2[b]	76.9[b]	76.4[b]	76.1[b]	74.7[b]	74.2[b]	73.9[b]	71.8
Alcohol								
Have Four or Five Drinks Nearly Every Day	62.2[b]	61.6[b]	61.8[b]	63.8	64.6	65.2	65.9[b]	64.3
Have Five or More Drinks Once or Twice								
a Week	38.2[b]	38.5[a]	38.1[b]	38.4[a]	39.4	39.4	40.5	39.9
PERCEIVED AVAILABILITY[2]								
Fairly or Very Easy to Obtain[3]								
Marijuana	55.0[b]	53.6[b]	52.2[b]	51.0	50.1	49.1	49.2	49.9
Cocaine	25.0[b]	25.0[b]	24.4[b]	24.9[b]	25.9[b]	24.5[b]	22.1[a]	20.9
Crack	26.5[b]	26.2[b]	25.0[b]	25.3[b]	26.2[b]	25.3[b]	23.2	22.1
Heroin	15.8[b]	15.3[b]	14.0[a]	14.0[a]	14.4[b]	14.1[b]	13.0	12.9
LSD	19.4[b]	17.6[b]	16.9[b]	15.7[b]	14.0	14.4	13.8	13.5
Approached in the Past Month by Someone								
Selling Drugs	16.7[b]	16.1[b]	16.3[b]	15.5[a]	15.3[a]	14.5	13.7	14.3

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Response categories for the Perception of Risk questions include "No risk," "Slight risk," "Moderate risk," and "Great risk." The estimates in this table correspond to persons reporting "Great risk." Respondents with unknown Perception of Risk data were excluded.

[2] Respondents with unknown Perceived Availability data were excluded.

[3] Response categories for the Perceived Availability questions pertaining to the listed illicit drugs include "Probably impossible," "Very difficult," "Fairly difficult," "Fairly easy," and "Very easy." The estimates in this table correspond to persons reporting "Fairly easy" or "Very easy."

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.26 Past Year Initiation of Substance Use among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Substance	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1,2]	2,656[b]	2,627[b]	2,784[a]	2,908	2,789[a]	2,670[b]	2,885	3,115
Marijuana and Hashish	2,196	1,973[b]	2,142	2,114	2,063[b]	2,090[a]	2,208	2,361
Cocaine	1,032[b]	986[b]	998[b]	872[b]	977[b]	906[b]	722	617
Crack	337[b]	269[b]	215[b]	230[b]	245[b]	352[b]	205[b]	94
Heroin	117	92[a]	118	108[a]	91[b]	106[a]	114	180
Hallucinogens	1,152	886[b]	934[b]	953[b]	1,116	1,064[a]	1,127	1,269
LSD	338	200[b]	235[b]	243[a]	264	270	394	337
PCP	123[b]	105[b]	106[b]	77[a]	69	58	53	45
Ecstasy	1,206	642[b]	607[b]	615[b]	860[b]	781[b]	894[a]	1,110
Inhalants	849	871	857	877	783	775	729	813
Nonmedical Use of Psychotherapeutics[2,3]	2,552	2,583	2,836	2,526	2,576	2,532	2,512	2,567
Pain Relievers	2,320	2,456	2,422	2,193	2,150	2,147	2,176	2,179
OxyContin®	--	--	615	526	533	554	478	584
Tranquilizers	1,184	1,071	1,180	1,286	1,112	1,232	1,127	1,226
Stimulants[2]	783	715	793	647	845	642	599	702
Sedatives	209	194	240	247	267	198	181	186
ILLICIT DRUGS OTHER THAN MARIJUANA[1,2]	2,569	2,523	2,664	2,768	2,719	2,563	2,693	2,803
CIGARETTES	1,940[b]	1,983[b]	2,122[b]	2,282[a]	2,449	2,231[b]	2,418	2,527
Daily Cigarette Use[4]	1,016	1,064	1,101	965	1,051	984	942[a]	1,125
SMOKELESS TOBACCO	951[b]	928[b]	999[b]	1,134[b]	1,329	1,297	1,398	1,462
CIGARS	2,858	2,736[a]	3,058	3,349	3,061	3,076	2,884	3,135
ALCOHOL	3,942[b]	4,082[b]	4,396	4,274	4,381	4,559	4,466	4,560

*Low precision; no estimate reported.

-- Not available.

NOTE: Past Year Initiates are defined as persons who used the substance(s) for the first time in the 12 months prior to date of interview.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

[2] Estimates in these designated rows do not include data from methamphetamine initiation items added in 2007 or methamphetamine use items added in 2005 and 2006.

[3] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

[4] Daily Cigarette Use is defined as ever smoking every day for at least 30 days.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.27 Substance Dependence or Abuse for Specific Substances in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Past Year Dependence or Abuse	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1,2]	7,116	6,835	7,298	6,833	7,020	6,851	6,990	7,101
Marijuana and Hashish	4,294	4,198	4,469	4,090	4,172	3,932	4,199	4,299
Cocaine	1,488[a]	1,515[a]	1,571[b]	1,549[b]	1,671[b]	1,598[b]	1,411[a]	1,120
Heroin	214[a]	189[b]	270	227[a]	323	213[a]	282	399
Hallucinogens	426	321	449	371	380	368	358	371
Inhalants	180	169	233[a]	221	176	164	175	164
Nonmedical Use of Psychotherapeutics[2,3]	2,018	1,923[a]	2,048	1,959	2,035	2,160	2,176	2,284
Pain Relievers	1,509[a]	1,424[b]	1,388[b]	1,546[a]	1,635	1,707	1,716	1,854
Tranquilizers	509	435	573	419	402	443	451	481
Stimulants[2]	436	378	470	409	390	406	351	371
Sedatives	154	158	128	97	121	154	126	147
ALCOHOL	18,100	17,805	18,654	18,658	18,799	18,638	18,331	18,657
BOTH ILLICIT DRUGS AND ALCOHOL[1,2]	3,210	3,054	3,445	3,273	3,205	3,175	3,090	3,229
ILLICIT DRUGS OR ALCOHOL[1,2]	22,006	21,586	22,506	22,218	22,613	22,313	22,231	22,530

*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.
[2] Estimates in these designated rows do not include data from methamphetamine use items added in 2005 and 2006.
[3] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.28 Substance Dependence or Abuse for Specific Substances in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2009

Past Year Dependence or Abuse	2002	2003	2004	2005	2006	2007	2008	2009
ILLICIT DRUGS[1,2]	3.0	2.9	3.0	2.8	2.9	2.8	2.8	2.8
Marijuana and Hashish	1.8	1.8	1.9	1.7	1.7	1.6	1.7	1.7
Cocaine	0.6[b]	0.6[b]	0.7[b]	0.6[b]	0.7[b]	0.6[b]	0.6[a]	0.4
Heroin	0.1	0.1[a]	0.1	0.1[a]	0.1	0.1[a]	0.1	0.2
Hallucinogens	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Inhalants	0.1	0.1	0.1[a]	0.1	0.1	0.1	0.1	0.1
Nonmedical Use of Psychotherapeutics[2,3]	0.9	0.8	0.9	0.8	0.8	0.9	0.9	0.9
Pain Relievers	0.6	0.6[a]	0.6[b]	0.6	0.7	0.7	0.7	0.7
Tranquilizers	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Stimulants[2]	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Sedatives	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1
ALCOHOL	7.7	7.5	7.8	7.7	7.6	7.5	7.3	7.4
BOTH ILLICIT DRUGS AND ALCOHOL[1,2]	1.4	1.3	1.4	1.3	1.3	1.3	1.2	1.3
ILLICIT DRUGS OR ALCOHOL[1,2]	9.4	9.1	9.4	9.1	9.2	9.0	8.9	8.9

*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.
[2] Estimates in these designated rows do not include data from methamphetamine use items added in 2005 and 2006.
[3] Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.29 Substance Dependence or Abuse in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Illicit Drugs[1] (2008)	Illicit Drugs[1] (2009)	Alcohol (2008)	Alcohol (2009)	Illicit Drugs or Alcohol[1] (2008)	Illicit Drugs or Alcohol[1] (2009)
TOTAL	2.8	2.8	7.3	7.4	8.9	8.9
AGE						
12-17	4.6	4.3	4.9	4.6	7.6	7.0
18-25	7.8	7.7	17.2[a]	16.0	20.8	20.0
26 or Older	1.7	1.8	6.0	6.3	7.0	7.3
GENDER						
Male	3.4[a]	3.8	9.7	9.9	11.5	11.9
Female	2.2[b]	1.9	5.1	5.0	6.4	6.1
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	2.8	2.8	7.2	7.2	8.8	8.8
White	2.7	2.8	7.5	7.5	9.0	9.0
Black or African American	3.6	3.3	6.6	7.0	8.8	8.8
American Indian or Alaska Native	4.7	6.0	8.4	13.3	11.1	15.5
Native Hawaiian or Other Pacific Islander	1.9	1.8	*	4.5	*	5.3
Asian	0.9	1.2	3.5	2.6	4.2	3.5
Two or More Races	3.6	4.6	7.2	10.8	9.8	13.2
Hispanic or Latino	2.9	3.0	8.0	8.6	9.5	10.1

*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.30 Received Substance Use Treatment at Any Treatment Location or at a Specialty Facility in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Location/Substance for Which Treatment Was Received in Past Year	2002	2003	2004	2005	2006	2007	2008	2009
ANY TREATMENT LOCATION								
Illicit Drugs[1]	2,013	1,802[b]	2,192	2,172	2,457	2,163	2,082	2,316
Alcohol	2,405[b]	2,359[b]	2,658	2,843	2,764	2,733	2,894	3,090
Both Illicit Drugs and Alcohol[1]	1,319	1,255	1,467	1,522	1,566	1,406	1,317	1,550
Illicit Drugs or Alcohol[1,2]	3,483[b]	3,327[b]	3,791	3,930	4,031	3,913	4,045	4,276
SPECIALTY FACILITY								
Illicit Drugs[1]	1,412	1,103[a]	1,427	1,280	1,576	1,343	1,209	1,495
Alcohol	1,549	1,298[a]	1,535	1,626	1,557	1,567	1,560	1,705
Both Illicit Drugs and Alcohol[1]	709	595	718	748	731	615	577	756
Illicit Drugs or Alcohol[1,2]	2,346	1,874[b]	2,327	2,308	2,537	2,412	2,287	2,627

*Low precision; no estimate reported.

NOTE: Received Substance Use Treatment refers to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. Treatment at Any Treatment Location includes treatment received at any location, such as a hospital (inpatient), rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

[2] Estimates include persons who received treatment specifically for illicit drugs or alcohol, as well as persons who received treatment but did not specify for what substance(s).

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.31 Received Substance Use Treatment at Any Treatment Location or at a Specialty Facility in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2009

Location/Substance for Which Treatment Was Received in Past Year	2002	2003	2004	2005	2006	2007	2008	2009
ANY TREATMENT LOCATION								
Illicit Drugs[1]	0.9	0.8[a]	0.9	0.9	1.0	0.9	0.8	0.9
Alcohol	1.0[a]	1.0[a]	1.1	1.2	1.1	1.1	1.2	1.2
Both Illicit Drugs and Alcohol[1]	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6
Illicit Drugs or Alcohol[1,2]	1.5	1.4[b]	1.6	1.6	1.6	1.6	1.6	1.7
SPECIALTY FACILITY								
Illicit Drugs[1]	0.6	0.5[a]	0.6	0.5	0.6	0.5	0.5	0.6
Alcohol	0.7	0.5[a]	0.6	0.7	0.6	0.6	0.6	0.7
Both Illicit Drugs and Alcohol[1]	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3
Illicit Drugs or Alcohol[1,2]	1.0	0.8[b]	1.0	0.9	1.0	1.0	0.9	1.0

*Low precision; no estimate reported.

NOTE: Received Substance Use Treatment refers to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. Treatment at Any Treatment Location includes treatment received at any location, such as a hospital (inpatient), rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail. Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.
[2] Estimates include persons who received treatment specifically for illicit drugs or alcohol, as well as persons who received treatment but did not specify for what substance(s).

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.32 Needed and Received Treatment for a Substance Use Problem in the Past Year among Persons Aged 12 or Older: Numbers in Thousands, 2002-2009

Substance/Substance Treatment Status	2002	2003	2004	2005	2006	2007	2008	2009
NEEDED TREATMENT FOR ILLICIT DRUGS[1]	7,748	7,333	8,053	7,550	7,756	7,528	7,559	7,846
Received Treatment at a Specialty Facility	1,412	1,103[a]	1,427	1,280	1,576	1,343	1,209	1,495
Did Not Receive Treatment at a Specialty Facility	6,335	6,230	6,626	6,269	6,180	6,185	6,351	6,351
NEEDED TREATMENT FOR ALCOHOL	18,638	18,215	19,360	19,378	19,520	19,301	18,951	19,317
Received Treatment at a Specialty Facility	1,549	1,298[a]	1,535	1,626	1,557	1,567	1,560	1,705
Did Not Receive Treatment at a Specialty Facility	17,089	16,917	17,824	17,752	17,963	17,734	17,391	17,613
NEEDED TREATMENT FOR ILLICIT DRUGS OR ALCOHOL[1]	22,811	22,165[a]	23,476	23,172	23,591	23,202	23,051	23,523
Received Treatment at a Specialty Facility	2,346	1,874[b]	2,327	2,308	2,537	2,412	2,287	2,627
Did Not Receive Treatment at a Specialty Facility	20,465	20,290	21,149	20,864	21,054	20,790	20,764	20,897

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for a substance use problem if they met at least one of three criteria during the past year: (1) dependent on the substance; (2) abuse of the substance; or (3) received treatment for substance use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient], or mental health center).

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.33 Needed and Received Treatment for a Substance Use Problem in the Past Year among Persons Aged 12 or Older: Percentages, 2002-2009

Substance/Substance Treatment Status	2002	2003	2004	2005	2006	2007	2008	2009
NEEDED TREATMENT FOR ILLICIT DRUGS[1]	3.3	3.1	3.3	3.1	3.2	3.0	3.0	3.1
Received Treatment at a Specialty Facility	0.6	0.5[a]	0.6	0.5	0.6	0.5	0.5	0.6
Did Not Receive Treatment at a Specialty Facility	2.7	2.6	2.8	2.6	2.5	2.5	2.5	2.5
NEEDED TREATMENT FOR ALCOHOL	7.9	7.7	8.0	8.0	7.9	7.8	7.6	7.7
Received Treatment at a Specialty Facility	0.7	0.5[a]	0.6	0.7	0.6	0.6	0.6	0.7
Did Not Receive Treatment at a Specialty Facility	7.3	7.1	7.4	7.3	7.3	7.2	7.0	7.0
NEEDED TREATMENT FOR ILLICIT DRUGS OR ALCOHOL[1]	9.7	9.3	9.8	9.5	9.6	9.4	9.2	9.3
Received Treatment at a Specialty Facility	1.0	0.8[b]	1.0	0.9	1.0	1.0	0.9	1.0
Did Not Receive Treatment at a Specialty Facility	8.7	8.5	8.8[a]	8.6	8.6	8.4	8.3	8.3

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for a substance use problem if they met at least one of three criteria during the past year: (1) dependent on the substance; (2) abuse of the substance; or (3) received treatment for substance use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient], or mental health center).

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine items added in 2005 and 2006.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002-2009.

Table G.34 Needed and Received Treatment at a Specialty Facility for an Illicit Drug or Alcohol Problem in the Past Year among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Needed Treatment (2008)	Needed Treatment (2009)	Needed and Received Treatment (2008)	Needed and Received Treatment (2009)	Needed but Did Not Receive Treatment (2008)	Needed but Did Not Receive Treatment (2009)	Percentage Who Received Treatment among Persons Who Needed Treatment (2008)	Percentage Who Received Treatment among Persons Who Needed Treatment (2009)
TOTAL	9.2	9.3	0.9	1.0	8.3	8.3	9.9	11.2
AGE								
12-17	7.8	7.2	0.6	0.6	7.2	6.6	7.4	8.4
18-25	21.2	20.5	1.5	1.7	19.7	18.7	7.1	8.4
26 or Older	7.4	7.7	0.9	1.0	6.5	6.7	11.6	12.8
GENDER								
Male	11.9	12.6	1.2	1.5	10.7	11.1	10.3	11.9
Female	6.7	6.3	0.6	0.6	6.1	5.7	9.3	9.7
HISPANIC ORIGIN AND RACE								
Not Hispanic or Latino	9.2	9.1	1.0	1.1	8.2	8.1	10.7	11.7
White	9.4	9.3	1.0	1.0	8.4	8.3	10.3	11.1
Black or African American	9.5	9.3	1.2	1.5	8.2	7.9	13.2	15.6
American Indian or Alaska Native	12.1	15.9	1.9	1.8	10.2	14.1	15.4	11.3
Native Hawaiian or Other Pacific Islander	*	5.3	0.1	0.2	*	5.1	*	*
Asian	4.2	3.6	0.4	0.1	3.8	3.4	*	3.1
Two or More Races	10.4	14.9	1.3	2.4	9.1	12.5	12.9	*
Hispanic or Latino	9.7	10.5	0.5	0.9	9.2	9.6	5.4	8.4

*Low precision; no estimate reported.

NOTE: Respondents were classified as needing treatment for an illicit drug or alcohol problem if they met at least one of three criteria during the past year: (1) dependent on illicit drugs or alcohol; (2) abuse of illicit drugs or alcohol; or (3) received treatment for illicit drug or alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient], or mental health center). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine use items added in 2005 and 2006.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.
[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.35 Perceived Need for Illicit Drug or Alcohol Treatment and Whether Made an Effort to Get Treatment in the Past Year among Persons Aged 12 or Older Classified as Needing But Not Receiving Treatment for an Illicit Drug or Alcohol Problem, by Demographic Characteristics: Numbers in Thousands, 2008 and 2009

Demographic Characteristic	Needed but Did Not Receive Treatment[1] (2008)	Needed but Did Not Receive Treatment[1] (2009)	Felt Need for Treatment[2] (2008)	Felt Need for Treatment[2] (2009)	Felt Need and Made Effort to Get Treatment[2] (2008)	Felt Need and Made Effort to Get Treatment[2] (2009)	Felt Need and Made No Effort to Get Treatment[2] (2008)	Felt Need and Made No Effort to Get Treatment[2] (2009)	Did Not Feel Need for Treatment[2] (2008)	Did Not Feel Need for Treatment[2] (2009)
TOTAL	20,764	20,897	1,000	1,064	233	371	766	693	19,764	19,832
AGE										
12-17	1,795	1,628	39	62	8	16	31	46	1,756[a]	1,566
18-25	6,489	6,296	184	211	42	68	142	143	6,304	6,085
26 or Older	12,481	12,973	776	792	183	288	593	504	11,704	12,181
GENDER										
Male	12,953	13,541	591	753	137	265	455	488	12,361	12,788
Female	7,811	7,356	408	311	97	106	312	205	7,403	7,045

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs or alcohol, but have not received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient], or mental health center). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine use items added in 2005 and 2006.

[2] Felt Need for Treatment includes persons who did not receive but felt they needed treatment for an illicit drug or alcohol problem, as well as persons who received treatment at a location other than a specialty facility but felt they needed additional treatment.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Table G.36 Perceived Need for Illicit Drug or Alcohol Treatment and Whether Made an Effort to Get Treatment in the Past Year among Persons Aged 12 or Older Classified as Needing But Not Receiving Treatment for an Illicit Drug or Alcohol Problem, by Demographic Characteristics: Percentages, 2008 and 2009

Demographic Characteristic	Needed but Did Not Receive Treatment[1] (2008)	Needed but Did Not Receive Treatment[1] (2009)	Felt Need for Treatment[2] (2008)	Felt Need for Treatment[2] (2009)	Felt Need and Made Effort to Get Treatment[2] (2008)	Felt Need and Made Effort to Get Treatment[2] (2009)	Felt Need and Made No Effort to Get Treatment[2] (2008)	Felt Need and Made No Effort to Get Treatment[2] (2009)	Did Not Feel Need for Treatment[2] (2008)	Did Not Feel Need for Treatment[2] (2009)
TOTAL	100.0	100.0	4.8	5.1	1.1	1.8	3.7	3.3	95.2	94.9
AGE										
12-17	100.0	100.0	2.2[a]	3.8	0.5	1.0	1.7	2.8	97.8[a]	96.2
18-25	100.0	100.0	2.8	3.3	0.7	1.1	2.2	2.3	97.2	96.7
26 or Older	100.0	100.0	6.2	6.1	1.5	2.2	4.8	3.9	93.8	93.9
GENDER										
Male	100.0	100.0	4.6	5.6	1.1	2.0	3.5	3.6	95.4	94.4
Female	100.0	100.0	5.2	4.2	1.2	1.4	4.0	2.8	94.8	95.8

*Low precision; no estimate reported.

[a] Difference between estimate and 2009 estimate is statistically significant at the 0.05 level.

[b] Difference between estimate and 2009 estimate is statistically significant at the 0.01 level.

[1] Needing But Not Receiving Treatment refers to respondents classified as needing treatment for illicit drugs or alcohol, but have not received treatment for an illicit drug or alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient], or mental health center). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically, based on data from original questions not including methamphetamine use items added in 2005 and 2006.

[2] Felt Need for Treatment includes persons who did not receive but felt they needed treatment for an illicit drug or alcohol problem, as well as persons who received treatment at a location other than a specialty facility but felt they needed additional treatment.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2008 and 2009.

Appendix H: List of Contributors

This National Survey on Drug Use and Health (NSDUH) report was prepared by the Division of Population Surveys, Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS), and by RTI International (a trade name of Research Triangle Institute), Research Triangle Park, North Carolina. Work by RTI was performed under Contract No. 283-2004-00022.

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