

ICPSR 32722

## **National Survey on Drug Use and Health, 2010**

Description

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## **Bibliographic Description**

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Title: National Survey on Drug Use and Health, 2010

Alternate Title: NSDUH 2010

Principal Investigator(s): United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality

Series: National Survey on Drug Use and Health (NSDUH) Series

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## **Scope of Study**

Summary: The National Survey on Drug Use and Health (NSDUH) series (formerly titled National Household Survey on Drug Abuse) primarily measures the prevalence and correlates of drug use in the United States. The surveys are designed to provide quarterly, as well as annual, estimates. Information is provided on the use of illicit drugs, alcohol, and tobacco among members of United States households aged 12 and older. Questions included age at first use as well as lifetime, annual, and past-month usage for the following drug classes: marijuana, cocaine (and crack), hallucinogens, heroin, inhalants, alcohol, tobacco, and nonmedical use of prescription drugs, including pain relievers, tranquilizers, stimulants, and sedatives. The survey covered substance abuse treatment history and perceived need for treatment, and included questions from the Diagnostic and Statistical Manual (DSM) of Mental Disorders that allow diagnostic criteria to be applied. The survey included questions concerning treatment for both substance abuse and mental health-related disorders. Respondents were also asked about personal

and family income sources and amounts, health care access and coverage, illegal activities and arrest record, problems resulting from the use of drugs, and needle-sharing. Questions introduced in previous administrations were retained in the 2010 survey, including questions asked only of respondents aged 12 to 17. These "youth experiences" items covered a variety of topics, such as neighborhood environment, illegal activities, drug use by friends, social support, extracurricular activities, exposure to substance abuse prevention and education programs, and perceived adult attitudes toward drug use and activities such as school work. Several measures focused on prevention-related themes in this section. Also retained were questions on mental health and access to care, perceived risk of using drugs, perceived availability of drugs, driving and personal behavior, and cigar smoking. Questions on the tobacco brand used most often were introduced with the 1999 survey. For the 2008 survey, adult mental health questions were added to measure symptoms of psychological distress in the worst period of distress that a person experienced in the past 30 days and suicidal ideation. In 2008, a split-sample design also was included to administer separate sets of questions (WHODAS vs. SDS) to assess impairment due to mental health problems. Beginning with the 2009 NSDUH, however, all of the adults in the sample received only the WHODAS questions. Background information includes gender, race, age, ethnicity, marital status, educational level, job status, veteran status, and current household composition.

Subject Term(s): addiction, alcohol, alcohol abuse, alcohol consumption, amphetamines, barbiturates, cocaine, controlled drugs, crack cocaine, demographic characteristics, depression (psychology), drinking behavior, drug abuse, drug dependence, drug treatment, drug use, drugs, employment, hallucinogens, health care, heroin, households, income, inhalants, marijuana, mental health, mental health services, methamphetamine, pregnancy, prescription drugs, sedatives, smoking, stimulants, substance abuse, substance abuse treatment, tobacco use, tranquilizers, youths

Geographic Coverage: United States

Time Period: • 2010

Date(s) of Collection: • 2010

Unit of Observation: individual

Universe: The civilian, noninstitutionalized population of the United States aged 12 and older, including residents of noninstitutional group quarters such as college dormitories, group homes, shelters, rooming houses, and civilians dwelling on military installations.

Data Type: survey data

Data Collection Notes: Data were collected and prepared for release by Research Triangle Institute, Research Triangle Park, North Carolina.

Since 1999, the survey sample has employed a 50-state design with an independent, multistage area probability sample for each of the 50 states and the District of Columbia.

Prior to the 2002 survey, this series was titled National Household Surveys on Drug Abuse.

Although the design of the 2010 survey is similar to the design of the 1999 through 2001 surveys, there are important methodological differences since 2002 that affect the 2010 estimates. Each NSDUH respondent since 2002 has been given an incentive payment of \$30. This change resulted in an improvement in the survey response rate. In addition, in 2002 new population data from the 2000 decennial Census became available for use in NSDUH sample weighting procedures. Therefore the data from 2002 and later should not be compared with data collected in 2001 or earlier to assess changes over time.

For selected variables, statistical imputation was performed following logical inference to replace missing responses. These variables are identified in the codebook as "...LOGICALLY ASSIGNED" for the logical procedure, or by the designation "IMPUTATION-REVISED" in the variable label when the statistical procedure was also performed. The names of statistically imputed variables begin with the letters "IR". For each imputation-revised variable, a corresponding imputation indicator variable indicates whether a case's value on the variable resulted from an interview response or was imputed. Missing values for some demographic variables were imputed by the unweighted hot-deck technique used in previous surveys. Beginning in 1999, imputation of missing values for most variables was accomplished using predictive mean neighborhoods (PMN), a new procedure developed specifically for this survey. Both the hot-deck and PMN imputation procedures are described in the codebook.

To protect the privacy of respondents, all variables that could be used to identify individuals have been encrypted or collapsed in the public use file. To further ensure respondent confidentiality, the data producer used data substitution and deletion of state identifiers and a subsample of records in the creation of the public use file.

Previously published estimates may not be exactly reproducible from the variables in the public use file due to the disclosure protection procedures that were implemented.

The setup and dictionary files for Stata are designed to be compatible with StataSE, Version 8. This is a large data file requiring that approximately 400 megabytes of Random Access Memory be allocated to Stata. Operations within Stata, including conversion of the ASCII data to Stata format, are likely to be slow. Analysts may wish to download subsets of data from the SAMHDA Survey Documentation and Analysis (SDA) system for use with Stata.

In the income section, which was interviewer-administered, a split-sample study had been embedded within the 2006 and 2007 surveys to compare a shorter version of the income questions with a longer set of questions that had been used in previous surveys. This shorter version was adopted for the 2008 NSDUH and will be used for future NSDUHs.

## Methodology

**Sample:** A multistage area probability sample for each of the 50 states and the District of Columbia has been used since 1999. A coordinated sample design was developed for the 2005 through 2009 NSDUHs. The 2010 NSDUH is an extension of the 5-year sample design. Although there is no overlap with the 1999-2004 samples, the coordinated design for 2005 through 2009 facilitated a 50 percent overlap in second-stage units (area segments [see below]) between each two successive years from 2005 through 2009. The 2010 NSDUH continues the 50 percent overlap by retaining half of the second-stage units from 2009. This design was intended to increase precision of estimates in year-to-year trend analyses because of the expected positive correlation resulting from the overlapping sample between successive survey years. The 2010 design allows for computation of estimates by state in all 50 states plus the District of Columbia. States may therefore be viewed as the first level of stratification as well as a reporting variable. Eight states, referred to as the large sample states, had a sample designed to yield 3,600 respondents per state for the 2010 survey. This sample size was considered adequate to support direct state estimates. The remaining 43 states (which include the District of Columbia) had a sample designed to yield 900 respondents per state in the 2010 survey. In these 43 states, adequate data were available to support reliable state estimates based on SAE methodology. Within each state, sampling strata called state sampling (SS) regions were formed. Based on a composite size measure, states were partitioned geographically into roughly equal-sized regions. In other words, regions were formed such that each area yielded, in expectation, roughly the same number of interviews during each data collection period. The eight large sample states were divided into 48 SS regions each. The remaining states were divided into 12 SS regions each. Therefore, the partitioning of the United States resulted in the formation of a total of 900 SS regions. Unlike the 1999 through 2004 surveys, the first stage of selection for the 2005 through 2009 NSDUHs

was Census tracts. The first stage of selection began with the construction of an area sample frame that contained one record for each Census tract in the United States. If necessary, Census tracts were aggregated within SS regions until each tract had, at a minimum, 150 dwelling units in urban areas and 100 dwelling units in rural areas. These Census tracts served as the primary sampling units (PSUs) for the coordinated five-year sample. One area segment (one or more Census blocks) was selected within each sampled Census tract. In advance of the survey period, specially trained listers had visited each area segment and listed all addresses for housing units and eligible group quarters units in a prescribed order. Systematic sampling was used to select the allocated sample of addresses from each segment. Beginning in 2002, each respondent who completed a full interview was given a \$30 cash payment as a token of appreciation for his or her time. To improve the precision of the estimates, the sample allocation process targeted five age groups: 12 to 17 years, 18 to 25 years, 26 to 34 years, 35 to 49 years, and 50 years or older. The size measures used in selecting the area segments were coordinated with the dwelling unit and person selection process so that a nearly self-weighting sample could be achieved in each of the five age groups. The achieved sample size for the 2010 survey was 67,804 persons. The public use file contains 57,873 records due to a subsampling step used in the disclosure protection procedures. A key step in the data processing procedures established the minimum item response requirements in order for cases to be retained for weighting and further analysis (i.e., "usable" cases). These requirements, as well as full sampling methodology, are detailed in the codebook.

**Weight:** Due to unequal selection probabilities at multiple stages of sample selection and various adjustments, such as those for nonresponse and post-stratification, the 2010 NSDUH sample design is not self-weighting. Analysts are advised to use the final sample weight when attempting to use the 2010 NSDUH data to draw inferences about the target population or any subdomains of the target population. All estimates published in SAMHSA reports (such as the results from the 2010 NSDUH) are weighted using the final analysis weight for the full sample (ANALWT). For the public use file, the corresponding final sample weight is denoted as ANALWT\_C, with the "C" denoting confidentiality protection. This sample weight represents the total number of target population persons each record on the file represents. Note that the sum of ANALWT\_C, over all records on the data file, represents an estimate of the total number of people in the target population.

In the 2008 NSDUH's mental health module, the adult sample was split into a sample A who received the WHODAS questions LIREMEM through LIAD68 and a sample B who received the SDS questions MHAD66a through MHAD68. In the 2009 NSDUH, however, all of the adults in the sample received the WHODAS questions. Therefore, there is no need

to have a separate adult mental health weight beginning in the 2009 NSDUH because the person-level analysis weight can be used to produce the adult mental health estimates.

Mode of Data Collection: audio computer-assisted self interview (ACASI)

computer-assisted personal interview (CAPI)

computer-assisted self interview (CASI)

Response Rates: Strategies for ensuring high rates of participation resulted in a weighted screening response rate of 88.4 percent and a weighted interview response rate for the CAI of 74.6 percent. (Note that these response rates reflect the original sample, not the subsampled data file referenced in this document.)

Extent of Processing: Performed consistency checks.

Standardized missing values.

Created online analysis version with question text.

Checked for undocumented or out-of-range codes.

## **Access and Availability**

Note: A list of the data formats available for this study can be found in the [summary of holdings](#). Detailed file-level information (such as record length, case count, and variable count) is listed in the [file manifest](#).

Some instruments administered as part of this study may contain contents from copyrighted instruments. Reproductions of the instruments are provided solely as documentation for the analysis of the data associated with this collection. Please contact the data producers for information on permissions to use the instruments for other purposes.

Restrictions: Users are reminded that these data are to be used solely for statistical analysis and reporting of aggregated information and not for the investigation of specific individuals or treatment facilities.

Original ICPSR Release: 2011-12-05

Version History: The last update of this study occurred on 2014-09-05.

2014-09-05 - Changed the Stata system data file from version 13 to version 12 for compatibility on a wider range of systems. Updated codebook to include correct frequencies from the data.

2014-06-26

Since the release of the previous version of the 2010 Public Use Data File and Codebook a number of variables have been added. Some of the additional variables are revised versions of previous variables and replace the ones removed from the data file.

A model to predict adult mental illness was revised in the 2012 NSDUH to produce more accurate estimates. The mental illness variables included in the 2010 NSDUH data files are based on the revised 2012 model.

One new geographic variable(PDEN00), has been added to the data file to replace the previous PDEN variable. In this case, the only difference is the variable name. The variable has been renamed to indicate which census data was used in its construction.

2013-06-20 - The NSDUH public-use data files have been updated with a corrected value label.

2012-11-21 - The NSDUH public-use data files have been updated with a corrected variable label.

2012-10-19 - The data files have been updated by omitting extraneous variables.

2012-10-18 - The 2010 NSDUH public-use data file has been updated to include 12 new variables related to adult and adolescent depression, and a weight variable post stratified to the 2010 Census. Please view Table 4 of the codebook for more information on these variables.

Dataset(s):

- DS1: National Survey on Drug Use and Health, 2010