

# **Behavioral Health in the Gulf Coast Region Following the *Deepwater Horizon* Oil Spill**

## **Appendices**

Substance Abuse and Mental Health Services Administration  
Center for Behavioral Health Statistics and Quality  
Division of Surveillance and Data Collection

Centers for Disease Control and Prevention  
Office of Surveillance, Epidemiology, and Laboratory Services  
Public Health Surveillance and Informatics Program Office  
Division of Behavioral Surveillance

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# Appendix A: NSDUH Methods

## A.1 Target Population and Sample Design

The estimates of the prevalence of substance use and mental disorders from the National Survey on Drug Use and Health (NSDUH) are designed to describe the target population of the survey—the civilian, noninstitutionalized population aged 12 or older living in the United States. The Gulf Coast Oversample (GCO) in 32 counties and parishes affected by the April 2010 *Deepwater Horizon* oil spill also allows estimates to be made for this target population within the Gulf Coast region.

The civilian, noninstitutionalized population includes almost 98 percent of the total U.S. population aged 12 or older. It excludes active military personnel, persons living in institutional group quarters, such as prisons and residential mental health or substance abuse treatment centers, and homeless persons not living in a shelter on the survey date.

### A.1.1 National Sample Design

The sample design for the 2011 NSDUH<sup>1</sup> was an extension of a coordinated 5-year design providing estimates for all 50 States plus the District of Columbia initially for the years 2005 through 2009, and then continuing through 2011. The coordinated design for 2005 through 2009 facilitated a 50 percent overlap in second-stage units (area segments) within each successive 2-year period from 2005 through 2009. The 2010 and 2011 NSDUHs continued the 50 percent overlap by retaining half of the second-stage units from the previous survey. Those segments not retained are considered "retired" from use. Because the coordinated design enabled 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 pre-oversample target sample sizes of 3,600. For the remaining 42 States and the District of Columbia, the pre-oversample target sample size was 900. This approach ensured that there was a sufficient sample in every State to support State estimation by either direct methods or small area estimation (SAE),<sup>2</sup> while maintaining efficiency for national estimates.

States were first stratified into a total of 900 State sampling regions (SSRs) (48 regions in each large sample State and 12 regions in each small sample State). These regions were contiguous geographic areas designed to yield approximately the same number of interviews.<sup>3</sup>

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<sup>1</sup> Prior to 2002, the survey was known as the National Household Survey on Drug Abuse (NHSDA).

<sup>2</sup> SAE is a hierarchical Bayes modeling technique used to make State-level estimates for 25 measures related to substance use and mental health. For more details, see the *State Estimates of Substance Use and Mental Disorders from the 2009-2010 National Surveys on Drug Use and Health* (Hughes, Muhuri, Sathe, & Spagnola, 2012).

<sup>3</sup> Sampling areas were defined using 2000 census geography. Counts of dwelling units (DUs) and population totals were obtained from the 2000 decennial census data supplemented with revised population counts from Nielsen Claritas.

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 selection for the 2005 through 2011 NSDUHs was census tracts.<sup>4</sup> This stage was included to contain sample segments within a single census tract to the extent possible.<sup>5</sup>

Within each SSR, 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. Although only 24 segments were needed to support the coordinated 5-year sample, an additional 24 segments were selected to support any supplemental studies that the Substance Abuse and Mental Health Services Administration (SAMHSA) may choose to field. These 24 segments constituted the reserve sample and were available for use in 2010 and 2011. Eight reserve sample segments per SSR were fielded during the 2011 survey year. Four of these segments were retained from the 2010 survey, and four were selected for use in the 2011 survey.

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 of addresses was selected from two segments<sup>6</sup> in each calendar quarter so that the survey was relatively continuous in the field. In each of the area segments, a listing of all addresses was made from which a national sample of addresses was selected. Interviewers visited sampled addresses to determine if they represented eligible dwelling units (DUs). In DUs (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 design oversampled adolescents aged 12 to 17 and young adults aged 18 to 25 but did not oversample based on race/ethnicity.

Nationwide, 216,521 addresses were sampled, of which 179,293 were determined to be eligible, and 88,536 persons were selected within these eligible DUs. The final respondent sample consisted of 70,109 persons and was representative of the civilian, noninstitutionalized population) aged 12 or older. In addition, State samples were representative of their respective State populations.

For more details about the 2011 NSDUH sample design, including the GCO, see the 2011 NSDUH sample design report by Morton, Martin, Shook-Sa, Chromy, and Hirsch (2012).

### **A.1.2 Gulf Coast Oversample Design**

The geographic area for the GCO was specified by SAMHSA and includes portions of Alabama, Florida, Louisiana, and Mississippi. The designated counties and parishes were identified as those most likely to be affected by the oil spill based on the following criteria:

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<sup>4</sup> Census tracts are relatively permanent statistical subdivisions of counties and parishes and provide a stable set of geographic units across decennial census periods.

<sup>5</sup> 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.

<sup>6</sup> The sample was selected from up to four segments per calendar quarter in SSRs receiving the GCO supplement.

- claims activity to British Petroleum (BP) for economic and related health needs;
- county and parish involvement with U.S. Department of Education and Administration for Children and Families programming; and
- State assessment of impacted counties and parishes based on consultation with SAMHSA during the preparation of aid applications.

Table A.1 includes the 32 counties and parishes that were designated for the GCO and Figure A.1 displays a map of those counties and parishes.

To implement the GCO, the 2011 main study sample was expanded by targeting 1,400 completed interviews in the designated Gulf Coast counties and parishes. The additional 1,400 targeted interviews were proportionally allocated to the States based on 2009 Census estimates of the population sizes in the affected counties and parishes. Remaining areas of Alabama, Louisiana, and Mississippi outside of the Gulf Coast region were supplemented with an additional 200 interviews per State, for a total of 2,000 targeted completed interviews in the GCO. The additional 200 interviews in each of the three States mentioned previously was intended to facilitate comparisons between the group of 32 counties and parishes in the affected area and the rest of the States as a group. Florida did not receive an additional sample of 200 interviews because it is one of the large sample States (see Section A.1.1). Therefore, Florida already was designed to have an annual sample size that was 4 times larger than the samples in the other three States in the GCO.

In the designated counties and parishes for the GCO, segments that were retired from use in the 2009 and 2010 surveys were used to supplement the 2011 main study segments. The retired segments were roughly equally distributed by quarter; therefore, they are equally allocated across the 2011 NSDUH quarterly sample design. The 181 main study and retired segments were expected to yield approximately 2,263 interviews in the GCO-designated counties and parishes. The increased sample was achieved by adjusting the cluster size across all segments (retired and main study), as shown in Table A.2. Within each State and GCO area, the target cluster size was determined by dividing the total sample by the total number of segments. In most areas, the increase in sample size was proportionally larger than the increase in segments; thus, the target cluster size was larger than the main study cluster size of 9.375. However, a smaller sample was allocated to the GCO-designated counties of Mississippi relative to the number of segments used to supplement the sample in that area; therefore, a smaller cluster size was targeted (8.687). Within the GCO segments, no distinction was made between the 2011 base sample and the additional sample, and the two cannot be separated for analysis. As in the national design, adolescents and young adults were oversampled in the GCO, but oversampling did not occur by race/ethnicity. Actual sample sizes during the pre-spill and post-spill periods for the GCO, the remainder of the Gulf States, the remainder of the United States, and the total United States are presented by age group in Table A.3.

## **A.2 Data Collection Methodology**

The data collection method used in NSDUH involves in-person interviews with sampled individuals, incorporating procedures 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.

### **A.2.1 Interview Preparation and NSDUH Interviewing**

Introductory letters are sent to sampled addresses, followed by an interviewer visit. When contacting a 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 can be completed in English or 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, the interview is not conducted if a sample person does not speak English or Spanish.

Immediately after the completion of the screener, interviewers attempt to conduct the NSDUH interview 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.

Questions about mental illness and the utilization of mental health services are included in noncore self-administered sections of the interview. Although many of the questions are asked both of youths aged 12 to 17 and adults, some are asked only of adults and others are asked only of youths. In particular, only adults are asked questions about symptoms of psychological distress in the past 30 days or past 12 months and impairment with daily activities because of psychological distress. More information about the mental health topics in NSDUH can be found in the 2010 NSDUH mental health findings (CBHSQ, 2012).

Additional topics in 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 other health care 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. In practice, 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.

### **A.2.2 Interview Transmission and Verification**

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

Samples of respondents who completed screenings or interviews are randomly selected for verification; see Appendix A in the 2010 NSDUH summary of national findings (CBHSQ, 2011) for more information on procedures for selecting cases 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 no longer works on NSDUH. All cases completed that quarter by the FI who falsified data are reworked by the FI conducting the field verification.

### A.2.3 NSDUH Response Rates

In 2011, respondents, including those in the GCO, 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<sup>7</sup> divided by the weighted number of eligible households, 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.3.2. Of the 179,293 eligible households sampled for the 2011 NSDUH, 156,048 were screened successfully, for a weighted screening response rate of 87.0 percent (Table A.4). In the GCO-designated counties and parishes, the weighted screening response rate was 91.9 percent in 2011 compared with 93.2 percent in 2007 through 2009 combined and 91.7 percent in 2010.

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, 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.3.2). To be considered a completed interview, a respondent must provide enough data to pass the usable case rule (see Section A.3). In the 156,048 households screened nationwide in 2011, a total of 88,536 sample persons were selected, and completed interviews were obtained from 70,109 of these sample persons, for a weighted IRR of 74.4 percent (Table A.4). The weighted IRR was 76.0 percent in the GCO area, 75.5 percent in the remainder of the Gulf Coast region, and 74.2 percent in the remaining States and the District of Columbia.

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

$$ORR = SRR \times IRR,$$

was 64.7 percent in 2011, 65.9 percent in 2010, and 66.1 in 2007 through 2009 combined. Within the GCO-designated counties and parishes, the weighted ORR was 69.8 percent in 2011, 69.7 percent in 2010, and 70.3 percent in 2007 through 2009 combined. Although response rates

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

declined at the national level between 2010 and 2011, they remained stable within the GCO area, possibly due to economic hardship.

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. However, in a study that matched 1990 census data to 1990 NHSDA nonrespondents, 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, 1997).

### **A.3 Data Processing**

Data that FIs transmit to RTI are processed to create a raw data file in which no logical editing of the data has been done. The raw data file consists of one record for each transmitted interview. Cases are eligible to be treated as final respondents only if they provided data on lifetime use of cigarettes and at least 9 out of 13 of the 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. Further details about the editing, imputation, and weighting procedures appear in the 2010 NSDUH summary of national findings (CBHSQ, 2011) and the 2010 mental health findings (CBHSQ, 2012). Details of the editing, imputation, and weighting procedures for 2011 also will appear in the *2011 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2010 NSDUH Methodological Resource Book* (RTI International, 2012).

#### **A.3.1 Logical Editing and Statistical Imputation**

As noted previously, 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 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.

In the adult NSDUH data for 2010 and 2011, all respondents with skipped or missing item scores for psychological distress (based on the Kessler-6 [K6] distress scale) or functional impairment because of psychological distress (based on the abridged World Health Organization Disability Assessment Schedule [WHODAS]) (Novak, Colpe, Barker, & Gfroerer, 2010; Rehm et al., 1999) had their scores assigned as zeros.<sup>8</sup> This included cases in which all item scores were missing and those where the skip pattern allowed all WHODAS questions to be skipped when the sum of all K6 item scores was zero. As a result of assigning zeros to the K6 and WHODAS scores in these situations, there are no missing values in the 2011 survey for measures of adult serious mental illness (SMI) and other mental illness measures that were created from a model using K6 and WHODAS scores. Further details on the creation of these mental illness measures can be found in Section A.5.1.

For some key variables that 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 "Used 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 (PMNs), which was developed specifically for the 1999 survey and has been used in all subsequent survey years. PMN allows for the following: (1) the ability to use covariates to determine donors is greater than that offered in the hot-deck imputation procedure, (2) the relative importance of covariates can be determined by standard modeling 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. 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 imputed 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.

In the modeling stage of PMN, the model chosen depends on the nature of the response variable. In the 2011 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

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<sup>8</sup> The content of the K6 and WHODAS procedures for scoring these scales are described further in Section A.5.1.

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 that are defined as "close" to the unit with the missing or ambiguous value according to a predefined function called a distance metric. 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.

Whenever possible, missing or ambiguous values for more than one response variable are considered together. In this (multivariate) case, the distance metric is a Mahalanobis distance, which takes into account the correlation between variables (Manly, 1986). 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. For example, donors for the age at first use variable are required to be of the same age as recipients, if at all possible. If no donors are available who meet these conditions, these likeness constraints can be loosened. Further details on the PMN methodology are provided by Singh, Grau, and Folsom (2002).

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

In the 2011 NSDUH, the majority of variables that underwent statistical imputation required less than 5 percent of their records to be logically assigned or statistically imputed. Variables for measures that are highly sensitive or that may not be known to younger respondents (e.g., family income) often have higher rates of item nonresponse. In addition, certain variables that are subject to a greater number of skip patterns and consistency checks (e.g., frequency of use in the past 12 months and past 30 days) often require greater amounts of imputation.

### **A.3.2 Development of Analysis Weights**

**General Approach.** 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. Since 2005, NSDUH has 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,  $d_k$ , incorporate 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  $\lambda$  is the column vector of  $p$  model parameters corresponding to the  $p$  covariates  $x$ . The  $\lambda$ -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 Hispanic origin 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.

Census control totals for the 2011 NSDUH weights were based on population estimates from the 2010 decennial census, whereas the control totals for the 2010 NSDUH weights still were based on the 2000 census. The forthcoming 2011 NSDUH national findings report and mental health findings report will discuss the results of an investigation assessing the effects of using control totals based on the 2010 census instead of the 2000 census for estimating substance use and mental health measures in 2010.

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, then the calibration process provides an objective way of deciding the extent of adjustment (or truncation) within the specified bounds. A step was included to poststratify the household-level weights to obtain census-consistent estimates based on the household rosters from all screened households. 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 respondent poststratification step poststratified the respondent person sample to external census data.

***Analysis Weights for the GCO.*** The GCO analysis compares estimates for three areas:

- *affected counties and parishes:* 32 counties and parishes in Alabama, Louisiana, Mississippi, and Florida;
- *buffer counties:* the remaining counties and parishes in Alabama, Louisiana, Mississippi, and Florida; and
- *unaffected States:* the remaining 46 States and the District of Columbia.

To assess the impact of the Gulf Coast oil spill on survey estimates, the main study analysis weight was further adjusted to match the population estimates for the 32 affected counties and parishes and the remaining unaffected (buffer) counties and parishes within Alabama, Louisiana, Mississippi, and Florida. The adjustment reduces coverage bias and variance of estimates for these areas.

For each year between 2002 and 2011, separate poststratification weight adjustments were performed for survey respondents in the affected counties and parishes and those in the buffer counties and parishes. The four steps to complete the adjustments were as follows:

1. Obtained annual county- and parish-level population estimates from Nielsen Claritas.
2. Adjusted the county- and parish-level population estimates to the target population (i.e., the U.S. civilian, noninstitutionalized population aged 12 or older).
3. Aligned the adjusted county- and parish-level population estimates to the State-level population estimates.
4. Poststratified the main study analysis weight using GEM and controlling for State, age group, gender, race, and ethnicity.

The GCO analysis weight is the original analysis weight for the 46 unaffected States and the District of Columbia, as well as the newly adjusted weights for the affected and buffer counties and parishes in the four Gulf States.

***Use of Weights for Estimates in This Report.*** The GCO analysis weights were used in all analyses included in this report. For estimates involving multiple years, the GCO analysis weight was divided by the number of years included. For example, for 2007 through 2009 estimates, the GCO analysis weight was divided by 3.

The GCO analysis weight can be used to compute estimates for any specified time period. For example, to compute estimates from the time period for Quarter 2 of 2007 through Quarter 1 of 2010 (12 quarters), the analysis weight would be converted to an annual average weight by multiplying each weight by a factor of 4/12 or 1/3, where 4 is the number of quarters in a year and 12 is the total number of quarters. Using a constant weight adjustment factor across a specified time period will result in estimates that are data-driven compared with weights that are based on adjustment factors that vary within the period.

## **A.4 Statistical Methods**

Estimates included in this report (Appendix B) were computed using a multiprocedure package, SUDAAN<sup>®</sup> Software for Statistical Analysis of Correlated Data (RTI International, 2008). This software accounts for the complex survey design in NSDUH in estimating the standard errors (SEs), which are the square roots of the variances. The final, nonresponse-adjusted, and poststratified analysis weights were used in SUDAAN to compute unbiased design-based estimates.

The sampling error (SE) of an estimate is the error caused by the selection of a sample instead of conducting a census of the population. The SE 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. The use of probability sampling methods in NSDUH allows estimation of sampling error from the survey data. SEs 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 SEs are used to

identify unreliable estimates and to test for the statistical significance of differences between estimates. Reliability checks were conducted on all NSDUH estimates included in this report, and no estimates were excluded due to low precision.

#### A.4.1 Variance Estimation for Totals

The variances and SEs of estimates of means and proportions can be calculated appropriately in SUDAAN using a Taylor series linearization approach. 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 domain  $d$  and  $\hat{N}_d$  is a linear statistic estimating the total number of persons in domain  $d$  (including 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 SE, an appropriate estimate of the SE for the total number of substance users is

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

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. Section A.3.2 contains further information about the weight calibration process. In addition, more detailed information about the weighting procedures for 2011 will appear in the *2011 NSDUH Methodological Resource Book*, which is in process. Until that volume becomes available, refer to the *2010 NSDUH Methodological Resource Book* (RTI International, 2012).

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. Because of this

underestimation, alternatives for estimating SEs of totals were implemented. Currently, a "mixed" method approach is used 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 previous formula, and all other estimates were calculated directly in SUDAAN. 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. The use of such SEs does 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.

Table A.5 at the end of this appendix contains a list of domains with a fixed  $\hat{N}_d$  that are used in the GCO analysis tables. 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. For the tables included in this report, all estimates are treated as controlled.

#### A.4.2 Suppression Criteria for Unreliable Estimates

Direct survey estimates produced for this study that are considered to be unreliable are not shown in this report and are noted by asterisks (\*) in the tables in Appendix B. The criteria used for suppressing all direct survey estimates were based on the prevalence (for proportion estimates), 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. These suppression criteria for various NSDUH estimates are summarized in Table A.6 at the end of this appendix.

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

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

or

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

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

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

or

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

The separate formulas for  $\hat{p} \leq .5$  and  $\hat{p} > .5$  produce a symmetric suppression rule; that is, if  $\hat{p}$  is suppressed,  $1 - \hat{p}$  will be suppressed as well. 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 less than 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 A.6](#) 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  $\hat{p} \geq .99995$ ).

Estimates of totals were suppressed if the corresponding prevalence rates were suppressed. Estimates of means that are not bounded between 0 and 1 (e.g., mean age at first use) were suppressed if the RSEs of the estimates were larger than .5 or if the sample size was smaller than 10 respondents.

### A.4.3 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 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 in which significance tests between years were performed, the prevalence estimate from the earlier year (e.g., 2007-2009 [pre-spill period]) becomes the first prevalence estimate, and the prevalence estimate from the later year (e.g., 2011 [post-spill period]) 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 Section A.1. A similar procedure and formula for  $Z$  were used for estimated totals. Whenever it was necessary to calculate the SE outside of SUDAAN (i.e., when domains were 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.

## A.5 Measurement of the Effects of the Gulf Coast Oil Spill

The GCO permits assessment of the impact of the oil spill in two dimensions: (1) across areas (Gulf Coast oil spill area [affected counties and parishes] vs. remainder of Gulf Coast counties and parishes [buffer], remainder of United States [unaffected States], and total United States) and (2) across time (before, during, and after the oil spill). [Table A.7](#) depicts 12 cells that reflect time and area partitions. In the tables included in Appendix B of this report, substance use and mental health measures are compared between the pre-oil spill period and the post-oil spill period within each of the four geographic areas. For the Gulf Coast oil spill area, the pre-spill against post-spill comparison is equivalent to (cell C – cell A).

The analysis also includes comparisons of the Gulf Coast oil spill area with the other geographic areas over time as a pre-post design. Because temporal effects unrelated to the oil spill may have occurred over this time period, the comparison is corrected by comparing this effect with the same temporal effect in the remainder of the Gulf Coast States (cell F vs. cell D), the remainder of the United States (cell I vs. cell G), and the total United States (cell L vs. cell J). The corrected effects are then represented as:

$$\begin{aligned} \text{Gulf Coast Oil Spill Area vs. Remainder of Gulf Coast States effect} &= (C - A) - (F - D) \\ \text{Gulf Coast Oil Spill Area vs. Remainder of United States effect} &= (C - A) - (I - G) \\ \text{Gulf Coast Oil Spill Area vs. Total United States effect} &= (C - A) - (L - J). \end{aligned}$$

**Table A.1 Gulf Coast Oversample (GCO) Designated Counties and Parishes**

<b>State</b>	<b>FIPS Code</b>	<b>County/Parish Name</b>	<b>State</b>	<b>FIPS Code</b>	<b>County/Parish Name</b>
Alabama	01003	Baldwin	Louisiana	22071	Orleans
Alabama	01097	Mobile	Louisiana	22075	Plaquemines
Alabama	01053	Escambia	Louisiana	22087	St. Bernard
Alabama	01025	Clarke	Louisiana	22103	St. Tammany
Alabama	01099	Monroe	Louisiana	22109	Terrebonne
Alabama	01129	Washington	Louisiana	22113	Vermilion
Florida	12005	Bay	Louisiana	22101	St. Mary
Florida	12033	Escambia	Louisiana	22099	St. Martin
Florida	12045	Gulf	Louisiana	22045	Iberia
Florida	12091	Okaloosa	Louisiana	22055	Lafayette
Florida	12113	Santa Rosa	Mississippi	28045	Hancock
Florida	12131	Walton	Mississippi	28047	Harrison
Florida	12037	Franklin	Mississippi	28059	Jackson
Florida	12129	Wakulla	Mississippi	28109	Pearl River
Louisiana	22051	Jefferson	Mississippi	28039	George
Louisiana	22057	Lafourche	Mississippi	28131	Stone

FIPS = Federal Information Processing Standards. The first two numbers are the State FIPS code, and the last three are the FIPS county or parish code within a State.

**Figure A.1 2011 NSDUH Gulf Coast Oversample (GCO) Designated Counties and Parishes**



**Table A.2 2011 NSDUH Gulf Coast Oversample (GCO) Sample Allocation by State**

State	State Population*	Estimated Population Represented*	State Annual Sample	2009 and 2010 Retired Segments	2011 Main Study Segments	Total Segments	2011 Base Sample <sup>1</sup>	Additional Sample <sup>1</sup>	Total Sample <sup>1</sup>	Target Cluster Size
<b>Designated Areas</b>										
Alabama	4,708,708	694,533	900	13	16	29	150	264	414	14.261
Florida	18,537,969	913,297	3,600	20	22	42	206	338	544	12.948
Louisiana	4,492,076	1,739,485	900	41	38	79	356	680	1,036	13.111
Mississippi	2,951,996	452,235	900	15	16	31	150	119	269	8.687
Total	30,690,749	3,799,550	6,300	89	92	181	863	1,400	2,263	
<b>Remainder Areas</b>										
Alabama	4,708,708	4,014,175	900	0	80	80	750	200	950	11.875
Florida	18,537,969	17,624,672	3,600	0	362	362	3,394	0	3,394	9.375
Louisiana	4,492,076	2,752,591	900	0	58	58	544	200	744	12.823
Mississippi	2,951,996	2,499,761	900	0	80	80	750	200	950	11.875
Total	30,690,749	26,891,199	6,300	0	580	580	5,438	600	6,038	

\* 2009 census estimate of the total resident population.

<sup>1</sup> The base sample, additional sample, and total sample are target sample sizes rather than actual sample sizes.

**Table A.3 Sample Sizes of Persons, by Geographic Area, Time Period, and Age Group: 2007-2009 and 2011 NSDUH**

Age Group	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>TOTAL 12 or Older</b>	2,296	2,313	16,677	6,071	184,339	61,725	203,312	70,109
12-17	761	812	5,248	2,075	60,925	20,623	66,934	23,510
18 or Older	1,535	1,501	11,429	3,996	123,414	41,102	136,378	46,599
18-25	741	692	5,654	1,949	61,172	20,235	67,567	22,876
26 or Older	794	809	5,775	2,047	62,242	20,867	68,811	23,723

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table A.4 Weighted Response Rates, by Geographic Region and Year: 2007-2009 and 2011 NSDUH**

Geographic Area	Weighted Screening Response Rate		Weighted Interview Response Rate		Weighted Overall Response Rate	
	2007-2009 Combined	2011	2007-2009 Combined	2011	2007-2009 Combined	2011
Total United States	88.7%	87.0%	74.6%	74.4%	66.1%	64.7%
Gulf Coast Disaster Area	93.2%	91.9%	75.3%	76.0%	70.3%	69.8%
Remainder of Gulf Coast Region	91.6%	88.5%	75.5%	75.5%	69.2%	66.8%
Remainder of United States	88.3%	86.8%	74.5%	74.2%	65.8%	64.4%

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (Revised March 2012) and 2011.

**Table A.5 Demographic and Geographic Domains Forced to Match Their Respective Population Estimates through the Weight Calibration Process: 2011 Gulf Coast Oversample (GCO)**

<b>Main Effects<sup>1</sup></b>	<b>Two-Way Interactions<sup>1</sup></b>
<p><b>Age Group</b>            12-17            18-25            26-34            35-49            50-64            65 or Older            All Combinations of Groups Listed Above            (Including 18 or Older)</p> <p><b>Gender</b>            Male            Female</p> <p><b>Hispanic Origin</b>            Hispanic or Latino            Not Hispanic or Latino</p> <p><b>Race</b>            White            Black or African American            Other</p> <p><b>Geographic Region<sup>2</sup></b>            Gulf Coast Disaster Area            Remainder of Gulf Coast States            Remainder of United States            Combinations of Groups Listed Above            (Including Total United States)</p>	<p><b>Age Group × Gender</b>            (e.g., Males Aged 12 to 17)</p> <p><b>Age Group × Hispanic Origin<sup>3</sup></b>            (e.g., Hispanics or Latinos Aged 18 to 25)</p> <p><b>Age Group × Race</b>            (e.g., Whites Aged 26 or Older)</p> <p><b>Gender × Race</b>            (e.g., African American Males)</p> <p><b>Gender × Hispanic Origin</b>            (e.g., Not Hispanic or Latino Males)</p> <p><b>Hispanic Origin × Race</b>            (e.g., Not Hispanic or Latino Whites)</p>

NOTE: When dealing with partial years of data (e.g., quarters 2 and 3 of 2011), only the entire population (12 or Older) is controlled.

<sup>1</sup> All main effects and two-way interactions are controlled within geographic region.

<sup>2</sup> Gulf Coast Disaster Area and Remainder of Gulf Coast States are only controlled with the use of the GCO analysis weight (GCOWT)

<sup>3</sup> Within the Gulf Coast Disaster Area, the Age Group × Hispanic Origin interaction is only controlled for the 12 to 17, 18 to 25, 26 to 34, and 35 or Older age groups.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011.

**Table A.6 Summary of 2011 NSDUH Suppression Rules**

Estimate	Suppress If:
Prevalence Rate, $\hat{p}$ , with Nominal Sample Size, $n$ , and Design Effect, $deff$ $\left( deff = \frac{n[SE(\hat{p})]^2}{\hat{p}(1-\hat{p})} \right)$	(1) The estimated prevalence rate, $\hat{p}$ , is $< .00005$ or $\geq .99995$ , or (2) $\frac{SE(\hat{p})/\hat{p}}{-\ln(\hat{p})} > .175$ when $\hat{p} \leq .5$ , or $\frac{SE(\hat{p})/(1-\hat{p})}{-\ln(1-\hat{p})} > .175$ when $\hat{p} > .5$ , or (3) <i>Effective</i> $n < 68$ , where <i>Effective</i> $n = \frac{n}{deff} = \frac{\hat{p}(1-\hat{p})}{[SE(\hat{p})]^2}$ , 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.
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. 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011.

**Table A.7 Gulf Coast Oversample Analytic Partitions over Time and Area**

<b>Geographic Area</b>	<b>Time Period</b>		
	Pre-Oil Spill	Event	Post-Oil Spill
Gulf Coast Disaster Area (Affected Counties and Parishes)	A	B	C
Remainder of Gulf Coast States (Buffer)	D	E	F
Remainder of United States (Unaffected States)	G	H	I
Total United States	J	K	L

# **Appendix B: Additional NSDUH Data Tables**

## **B.1: Estimates of Totals and Percentages**

**Table B.1A Numbers in Thousands of Persons, by Geographic Area, Time Period, and Demographic and Socioeconomic Characteristics: 2007-2009 and 2011 NSDUH**

Demographic/ Socioeconomic Characteristic	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>TOTAL<sup>1</sup></b>	3,069	3,207	22,065	23,038	224,691	231,353	249,825	257,599
<b>AGE<sup>1</sup></b>								
12-17	311	307	2,055	2,074	22,548	22,592	24,914	24,974
18 or Older	2,758	2,900	20,010	20,964	202,144	208,761	224,911	232,625
18-25	391	411	2,756	2,934	29,936	30,957	33,083	34,302
26 or Older	2,366	2,489	17,254	18,030	172,208	177,804	191,828	198,324
<b>GENDER<sup>1</sup></b>								
Male	1,458	1,533	10,596	11,026	109,218	112,066	121,272	124,624
Female	1,611	1,675	11,469	12,012	115,474	119,288	128,553	132,975
<b>HISPANIC ORIGIN AND RACE<sup>1</sup></b>								
Not Hispanic or Latino	2,960	3,062	18,802	19,261	192,979	195,875	214,740	218,198
White	2,150	2,187	13,847	13,926	153,414	153,024	169,412	169,137
Black or African American	716	741	4,356	4,551	24,551	24,985	29,623	30,277
Other	93	134	598	784	15,014	17,866	15,705	18,783
Hispanic or Latino	109	145	3,263	3,778	31,713	35,478	35,085	39,401
<b>EDUCATION<sup>2</sup></b>								
< High School	586	478	3,581	3,273	31,297 <sup>a</sup>	29,263	35,463 <sup>a</sup>	33,014
High School Graduate	975	1,034	6,792	6,531	61,363	62,125	69,131	69,690
Some College	688	798	5,214	5,595	51,610 <sup>a</sup>	55,270	57,512 <sup>a</sup>	61,663
College Graduate	509	591	4,422 <sup>a</sup>	5,566	57,874 <sup>a</sup>	62,103	62,805 <sup>a</sup>	68,259
<b>CURRENT EMPLOYMENT<sup>2</sup></b>								
Full-Time	1,450	1,375	10,130	9,680	107,860 <sup>b</sup>	104,690	119,440 <sup>a</sup>	115,744
Part-Time	307	383	2,326 <sup>a</sup>	2,789	27,887 <sup>b</sup>	29,264	30,520 <sup>a</sup>	32,435
Unemployed	110 <sup>a</sup>	198	931 <sup>a</sup>	1,373	9,318 <sup>a</sup>	12,032	10,359 <sup>a</sup>	13,603
Other <sup>3</sup>	890	944	6,623	7,123	57,079 <sup>a</sup>	62,776	64,592 <sup>a</sup>	70,843
<b>FAMILY INCOME</b>								
Less Than \$20,000	690	673	4,696	5,203	38,309 <sup>a</sup>	43,474	43,695 <sup>a</sup>	49,350
\$20,000 - \$49,999	1,133	1,204	8,057	8,556	72,226	73,665	81,416	83,426
\$50,000 - \$74,999	488	533	3,988	3,754	40,522	39,604	44,998	43,891
\$75,000 or More	758	798	5,324	5,524	73,634	74,610	79,716	80,933

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> The size of this domain is forced to match the U.S. Census Bureau population estimate through the weight calibration process, and so is free of sampling error. Therefore, statistically significant differences were not tested for this subpopulation.

<sup>2</sup> Estimates for Education and Current Employment are only among persons aged 18 or older.

<sup>3</sup> The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.1B Numbers (in Thousands) and Percent Distribution of Persons, by Geographic Area, Time Period, and Demographic and Socioeconomic Characteristics: 2007-2009 and 2011 NSDUH**

Demographic/ Socioeconomic Characteristic	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>POPULATION ESTIMATE<sup>1</sup></b>	3,069	3,207	22,065	23,038	224,691	231,353	249,825	257,599
<b>AGE<sup>1</sup></b>								
12-17	10.1	9.6	9.3	9.0	10.0	9.8	10.0	9.7
18 or Older	89.9	90.4	90.7	91.0	90.0	90.2	90.0	90.3
18-25	12.7	12.8	12.5	12.7	13.3	13.4	13.2	13.3
26 or Older	77.1	77.6	78.2	78.3	76.6	76.9	76.8	77.0
<b>GENDER<sup>1</sup></b>								
Male	47.5	47.8	48.0	47.9	48.6	48.4	48.5	48.4
Female	52.5	52.2	52.0	52.1	51.4	51.6	51.5	51.6
<b>HISPANIC ORIGIN AND RACE<sup>1</sup></b>								
Not Hispanic or Latino	96.4	95.5	85.2	83.6	85.9	84.7	86.0	84.7
White	70.1	68.2	62.8	60.4	68.3	66.1	67.8	65.7
Black or African American	23.3	23.1	19.7	19.8	10.9	10.8	11.9	11.8
Other	3.0	4.2	2.7	3.4	6.7	7.7	6.3	7.3
Hispanic or Latino	3.6	4.5	14.8	16.4	14.1	15.3	14.0	15.3
<b>EDUCATION<sup>2</sup></b>								
< High School	21.2 <sup>a</sup>	16.5	17.9 <sup>a</sup>	15.6	15.5 <sup>a</sup>	14.0	15.8 <sup>a</sup>	14.2
High School Graduate	35.4	35.7	33.9 <sup>b</sup>	31.2	30.4	29.8	30.7 <sup>b</sup>	30.0
Some College	25.0	27.5	26.1	26.7	25.5 <sup>a</sup>	26.5	25.6 <sup>a</sup>	26.5
College Graduate	18.4	20.4	22.1 <sup>a</sup>	26.5	28.6 <sup>a</sup>	29.7	27.9 <sup>a</sup>	29.3
<b>CURRENT EMPLOYMENT<sup>2</sup></b>								
Full-Time	52.6 <sup>a</sup>	47.4	50.6 <sup>a</sup>	46.2	53.4 <sup>a</sup>	50.1	53.1 <sup>a</sup>	49.8
Part-Time	11.1	13.2	11.6 <sup>a</sup>	13.3	13.8	14.0	13.6	13.9
Unemployed	4.0 <sup>a</sup>	6.8	4.7 <sup>a</sup>	6.5	4.6 <sup>a</sup>	5.8	4.6 <sup>a</sup>	5.8
Other <sup>3</sup>	32.3	32.6	33.1	34.0	28.2 <sup>a</sup>	30.1	28.7 <sup>a</sup>	30.5
<b>FAMILY INCOME</b>								
Less Than \$20,000	22.5	21.0	21.3	22.6	17.0 <sup>a</sup>	18.8	17.5 <sup>a</sup>	19.2
\$20,000 - \$49,999	36.9	37.5	36.5	37.1	32.1	31.8	32.6	32.4
\$50,000 - \$74,999	15.9	16.6	18.1	16.3	18.0 <sup>a</sup>	17.1	18.0 <sup>a</sup>	17.0
\$75,000 or More	24.7	24.9	24.1	24.0	32.8	32.2	31.9	31.4

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level.

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level.

<sup>1</sup> The size of this domain is forced to match the U.S. Census Bureau population estimate through the weight calibration process, and so is free of sampling error. Therefore, statistically significant differences were not tested for this subpopulation.

<sup>2</sup> Estimates for Education and Current Employment are only among persons aged 18 or older.

<sup>3</sup> The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.2A Past Month Substance Use among Persons Aged 12 or Older, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	218 <sup>a</sup>	312	1,708	1,890	18,718 <sup>a</sup>	20,243	20,644 <sup>a</sup>	22,445
Marijuana	145 <sup>a</sup>	234	1,215 <sup>a</sup>	1,458	14,152 <sup>a</sup>	16,371	15,511 <sup>a</sup>	18,063
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	105	112	612	539	5,984 <sup>a</sup>	5,462	6,701 <sup>a</sup>	6,113
Cigarettes	81	83	457	376	4,529 <sup>a</sup>	4,006	5,066 <sup>a</sup>	4,465
Alcohol	826	886	5,445	5,435	53,299 <sup>a</sup>	50,485	59,571 <sup>a</sup>	56,806
Binge Alcohol <sup>3</sup>	1,476 <sup>a</sup>	1,704	10,767 <sup>b</sup>	11,330	116,582 <sup>a</sup>	120,338	128,825 <sup>a</sup>	133,371
Heavy Alcohol <sup>3</sup>	733	723	4,868	4,661	53,061	52,962	58,662	58,345
Heavy Alcohol <sup>3</sup>	200	229	1,487	1,464	15,507 <sup>a</sup>	14,176	17,194 <sup>a</sup>	15,869

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.2B Past Month Substance Use among Persons Aged 12 or Older, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	7.1 <sup>a</sup>	9.7	7.7	8.2	8.3 <sup>b</sup>	8.7 <sup>d</sup>	8.3 <sup>a</sup>	8.7 <sup>d</sup>
Marijuana	4.7 <sup>a</sup>	7.3	5.5 <sup>b</sup>	6.3	6.3 <sup>a</sup>	7.1 <sup>d</sup>	6.2 <sup>a</sup>	7.0 <sup>d</sup>
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	3.4	3.5	2.8	2.3	2.7 <sup>a</sup>	2.4	2.7 <sup>a</sup>	2.4
Pain Relievers	2.6	2.6	2.1	1.6	2.0 <sup>a</sup>	1.7	2.0 <sup>a</sup>	1.7
Cigarettes	26.9	27.6	24.7	23.6	23.7 <sup>a</sup>	21.8	23.8 <sup>a</sup>	22.1
Alcohol	48.1 <sup>b</sup>	53.1	48.8	49.2	51.9	52.0 <sup>d</sup>	51.6	51.8 <sup>d</sup>
Binge Alcohol <sup>3</sup>	23.9	22.5	22.1 <sup>b</sup>	20.2	23.6 <sup>a</sup>	22.9	23.5 <sup>a</sup>	22.6
Heavy Alcohol <sup>3</sup>	6.5	7.1	6.7	6.4	6.9 <sup>a</sup>	6.1	6.9 <sup>a</sup>	6.2

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.2P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.2P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.11](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.11](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.3A Past Month Substance Use and Psychological Distress among Persons Aged 18 or Older, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	195 <sup>a</sup>	286	1,528	1,717	16,516 <sup>a</sup>	17,921	18,239 <sup>a</sup>	19,923
Marijuana	128 <sup>a</sup>	220	1,102 <sup>a</sup>	1,324	12,556 <sup>a</sup>	14,552	13,786 <sup>a</sup>	16,096
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	97	102	540	474	5,293 <sup>b</sup>	4,850	5,930 <sup>b</sup>	5,425
Pain Relievers	74	74	395	327	3,965 <sup>a</sup>	3,502	4,434 <sup>a</sup>	3,903
Cigarettes	793	855	5,266	5,305	51,181 <sup>a</sup>	48,709	57,239 <sup>a</sup>	54,869
Alcohol	1,418 <sup>a</sup>	1,657	10,464 <sup>b</sup>	11,086	113,157 <sup>a</sup>	117,304	125,039 <sup>a</sup>	130,046
Binge Alcohol <sup>3</sup>	702	698	4,692	4,529	50,983	51,270	56,377	56,497
Heavy Alcohol <sup>3</sup>	192	225	1,446	1,442	15,019 <sup>a</sup>	13,823	16,657 <sup>a</sup>	15,490
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	154	155	946 <sup>b</sup>	1,138	9,263	9,578	10,363	10,871
Average K6 Score <sup>5</sup>	3.8	3.5	3.7	3.6	3.8 <sup>a</sup>	3.7	3.8 <sup>a</sup>	3.7

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.3B Past Month Substance Use and Psychological Distress among Persons Aged 18 or Older, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	7.1 <sup>b</sup>	9.9	7.6	8.2	8.2 <sup>b</sup>	8.6	8.1 <sup>a</sup>	8.6
Marijuana	4.6 <sup>a</sup>	7.6	5.5	6.3 <sup>d</sup>	6.2 <sup>a</sup>	7.0 <sup>c</sup>	6.1 <sup>a</sup>	6.9 <sup>c</sup>
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	3.5	3.5	2.7	2.3	2.6 <sup>a</sup>	2.3	2.6 <sup>a</sup>	2.3
Cigarettes	2.7	2.6	2.0	1.6	2.0 <sup>a</sup>	1.7	2.0 <sup>a</sup>	1.7
Alcohol	28.7	29.5	26.3	25.3	25.3 <sup>a</sup>	23.3	25.4 <sup>a</sup>	23.6
Binge Alcohol <sup>3</sup>	51.4 <sup>b</sup>	57.1	52.3	52.9	56.0	56.2 <sup>d</sup>	55.6	55.9 <sup>d</sup>
Heavy Alcohol <sup>3</sup>	25.5	24.1	23.4	21.6	25.2 <sup>b</sup>	24.6	25.1 <sup>a</sup>	24.3
Average K6 Score <sup>5</sup>	7.0	7.8	7.2	6.9	7.4 <sup>a</sup>	6.6	7.4 <sup>a</sup>	6.7
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>								
Average K6 Score <sup>5</sup>	5.6	5.3	4.7	5.4	4.6	4.6	4.6	4.7
Average K6 Score <sup>5</sup>	3.8	3.5	3.7	3.6	3.8 <sup>a</sup>	3.7	3.8 <sup>a</sup>	3.7

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.3P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.3P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.12](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.12](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.4A Past Month Substance Use among Persons Aged 12 to 17, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	23	26	180	173	2,201	2,323	2,405	2,522
Marijuana	17	15	113	133	1,596 <sup>a</sup>	1,819	1,725 <sup>a</sup>	1,967
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	9	10	71	65	692 <sup>a</sup>	612	772 <sup>a</sup>	688
Pain Relievers	7	9	61	49	564 <sup>b</sup>	504	632 <sup>b</sup>	562
Cigarettes	34	31	179 <sup>a</sup>	130	2,118 <sup>a</sup>	1,776	2,331 <sup>a</sup>	1,937
Alcohol	58 <sup>b</sup>	46	302 <sup>a</sup>	244	3,425 <sup>a</sup>	3,034	3,786 <sup>a</sup>	3,325
Binge Alcohol <sup>3</sup>	31	25	177 <sup>a</sup>	132	2,077 <sup>a</sup>	1,691	2,285 <sup>a</sup>	1,848
Heavy Alcohol <sup>3</sup>	7 <sup>b</sup>	3	40 <sup>a</sup>	22	489 <sup>a</sup>	353	536 <sup>a</sup>	378

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.4B Past Month Substance Use among Persons Aged 12 to 17, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	7.4	8.5	8.8	8.4	9.8	10.3	9.7	10.1
Marijuana	5.4	4.7	5.5	6.4	7.1 <sup>a</sup>	8.1	6.9 <sup>a</sup>	7.9
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	2.7	3.4	3.5	3.2	3.1 <sup>a</sup>	2.7	3.1 <sup>a</sup>	2.8
Pain Relievers	2.2	2.9	3.0	2.4	2.5 <sup>b</sup>	2.2	2.5 <sup>b</sup>	2.3
Cigarettes	10.8	10.0	8.7 <sup>a</sup>	6.3	9.4 <sup>a</sup>	7.9	9.4 <sup>a</sup>	7.8
Alcohol	18.7 <sup>b</sup>	15.1	14.7 <sup>a</sup>	11.8	15.2 <sup>a</sup>	13.4	15.2 <sup>a</sup>	13.3
Binge Alcohol <sup>3</sup>	9.9	8.1	8.6 <sup>a</sup>	6.4	9.2 <sup>a</sup>	7.5	9.2 <sup>a</sup>	7.4
Heavy Alcohol <sup>3</sup>	2.3	1.1	2.0 <sup>a</sup>	1.1	2.2 <sup>a</sup>	1.6	2.2 <sup>a</sup>	1.5

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.4P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.4P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.13](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.13](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.5A Past Month Substance Use and Psychological Distress among Persons Aged 18 to 25, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	65	75	504 <sup>b</sup>	580	6,145 <sup>a</sup>	6,697	6,714 <sup>a</sup>	7,351
Marijuana	51 <sup>b</sup>	66	411 <sup>a</sup>	513	5,198 <sup>a</sup>	5,946	5,660 <sup>a</sup>	6,525
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	32	23	170 <sup>a</sup>	122	1,803 <sup>a</sup>	1,567	2,005 <sup>a</sup>	1,712
Pain Relievers	27 <sup>a</sup>	14	127 <sup>a</sup>	81	1,384 <sup>a</sup>	1,125	1,538 <sup>a</sup>	1,220
Cigarettes	143	150	972	952	10,769 <sup>a</sup>	10,387	11,884 <sup>a</sup>	11,489
Alcohol	222	241	1,558 <sup>a</sup>	1,677	18,526 <sup>b</sup>	18,896	20,306 <sup>a</sup>	20,814
Binge Alcohol <sup>3</sup>	139	146	1,020	1,006	12,615	12,502	13,775	13,655
Heavy Alcohol <sup>3</sup>	41	43	339	325	4,378 <sup>a</sup>	3,798	4,757 <sup>a</sup>	4,165
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	32	36	208	246	2,300	2,354	2,540	2,636
Average K6 Score <sup>5</sup>	4.9	5.3	5.0	5.0	5.2 <sup>b</sup>	5.1	5.1	5.1

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.5B Past Month Substance Use and Psychological Distress among Persons Aged 18 to 25, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	16.6	18.1	18.3	19.8	20.5 <sup>a</sup>	21.6	20.3 <sup>a</sup>	21.4
Marijuana	13.0	16.1	14.9 <sup>a</sup>	17.5	17.4 <sup>a</sup>	19.2	17.1 <sup>a</sup>	19.0
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	8.1 <sup>b</sup>	5.5	6.2 <sup>a</sup>	4.1	6.0 <sup>a</sup>	5.1	6.1 <sup>a</sup>	5.0
Pain Relievers	7.0 <sup>a</sup>	3.5	4.6 <sup>a</sup>	2.8	4.6 <sup>a</sup>	3.6 <sup>c</sup>	4.7 <sup>a</sup>	3.6 <sup>d</sup>
Cigarettes	36.5	36.6	35.3 <sup>b</sup>	32.4	36.0 <sup>a</sup>	33.6	35.9 <sup>a</sup>	33.5
Alcohol	56.8	58.7	56.5	57.2	61.9	61.0	61.4	60.7
Binge Alcohol <sup>3</sup>	35.6	35.6	37.0 <sup>b</sup>	34.3	42.1 <sup>a</sup>	40.4	41.6 <sup>a</sup>	39.8
Heavy Alcohol <sup>3</sup>	10.4	10.5	12.3	11.1	14.6 <sup>a</sup>	12.3	14.4 <sup>a</sup>	12.1
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	8.4	8.8	7.5	8.4	7.6	7.6	7.6	7.7
Average K6 Score <sup>5</sup>	4.9	5.3	5.0	5.0	5.2 <sup>b</sup>	5.1	5.1	5.1

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.5P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.5P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.14](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.14](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.6A Past Month Substance Use and Psychological Distress among Persons Aged 26 or Older, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	130 <sup>b</sup>	211	1,024	1,136	10,372 <sup>b</sup>	11,224	11,525 <sup>a</sup>	12,571
Marijuana	77 <sup>a</sup>	154	691	811	7,358 <sup>a</sup>	8,606	8,126 <sup>a</sup>	9,571
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	65	79	370	352	3,489	3,282	3,925	3,714
Pain Relievers	47	60	268	245	2,581	2,377	2,896	2,683
Cigarettes	650	705	4,294	4,353	40,412 <sup>a</sup>	38,322	45,355 <sup>a</sup>	43,380
Alcohol	1,196 <sup>a</sup>	1,416	8,907	9,408	94,630 <sup>a</sup>	98,408	104,733 <sup>a</sup>	109,233
Binge Alcohol <sup>3</sup>	563	552	3,672	3,522	38,368	38,768	42,602	42,842
Heavy Alcohol <sup>3</sup>	152	182	1,107	1,117	10,641	10,025	11,900	11,325
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	122	119	738	892	6,963	7,224	7,823	8,235
Average K6 Score <sup>5</sup>	3.6	3.2	3.4	3.4	3.6 <sup>b</sup>	3.5	3.5 <sup>b</sup>	3.5

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.6B Past Month Substance Use and Psychological Distress among Persons Aged 26 or Older, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	5.5 <sup>b</sup>	8.5	5.9	6.3	6.0	6.3	6.0	6.3
Marijuana	3.3 <sup>a</sup>	6.2	4.0	4.5 <sup>d</sup>	4.3 <sup>a</sup>	4.8 <sup>d</sup>	4.2 <sup>a</sup>	4.8 <sup>d</sup>
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	2.8	3.2	2.1	2.0	2.0	1.8	2.0	1.9
Pain Relievers	2.0	2.4	1.6	1.4	1.5	1.3	1.5	1.4
Cigarettes	27.5	28.3	24.9	24.1	23.5 <sup>a</sup>	21.6	23.6 <sup>a</sup>	21.9
Alcohol	50.5 <sup>b</sup>	56.9	51.6	52.2	55.0	55.3 <sup>d</sup>	54.6	55.1 <sup>d</sup>
Binge Alcohol <sup>3</sup>	23.8	22.2	21.3	19.5	22.3	21.8	22.2	21.6
Heavy Alcohol <sup>3</sup>	6.4	7.3	6.4	6.2	6.2 <sup>a</sup>	5.6	6.2 <sup>a</sup>	5.7
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	5.2	4.8	4.2	4.9	4.0	4.1	4.1	4.2
Average K6 Score <sup>5</sup>	3.6	3.2	3.4	3.4	3.6 <sup>b</sup>	3.5	3.5 <sup>b</sup>	3.5

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.6P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.6P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.15](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.15](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.7A Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>ILLICIT DRUG OR ALCOHOL DEPENDENCE OR ABUSE<sup>1,2</sup></b>								
12+	244	257	1,898 <sup>a</sup>	1,528	20,321 <sup>a</sup>	18,820	22,463 <sup>a</sup>	20,606
18+	224	240	1,762 <sup>a</sup>	1,416	18,615 <sup>a</sup>	17,232	20,600 <sup>a</sup>	18,889
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>								
Major Depressive Episode <sup>3</sup>	187	199	1,221	1,193	13,319	13,752	14,727	15,144
Serious Mental Illness <sup>4</sup>	141	122	942	1,023	9,367 <sup>a</sup>	10,385	10,450 <sup>a</sup>	11,531
Any Mental Illness <sup>4</sup>	609	559	3,724	3,909	40,372	41,075	44,705	45,543
Had Serious Thoughts of Suicide <sup>5</sup>	70	102	684	731	7,643	7,702	8,396	8,535
Made Any Suicide Plans <sup>5</sup>	13 <sup>a</sup>	35	241	200	2,018	2,164	2,272	2,399
Attempted Suicide <sup>5</sup>	10	18	90	95	963	1,017	1,064	1,130
Received Mental Health Treatment/Counseling <sup>6</sup>	399	367	2,412	2,331	27,223 <sup>a</sup>	28,948	30,034 <sup>a</sup>	31,646
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	170	154	1,171	1,020	13,705	14,297	15,046	15,471

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.7B Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>ILLICIT DRUG OR ALCOHOL DEPENDENCE OR ABUSE<sup>1,2</sup></b>								
12+	7.9	8.0	8.6 <sup>a</sup>	6.6	9.0 <sup>a</sup>	8.1	9.0 <sup>a</sup>	8.0
18+	8.1	8.3	8.8 <sup>a</sup>	6.8	9.2 <sup>a</sup>	8.3	9.2 <sup>a</sup>	8.1
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>								
Major Depressive Episode <sup>3</sup>	6.8	6.9	6.2	5.7	6.6	6.6	6.6	6.6
Serious Mental Illness <sup>4</sup>	5.1	4.2	4.7	4.9	4.6 <sup>b</sup>	5.0	4.6 <sup>b</sup>	5.0
Any Mental Illness <sup>4</sup>	22.1	19.3	18.5	18.6	19.9	19.7	19.8	19.6
Had Serious Thoughts of Suicide <sup>5</sup>	2.6	3.5	3.4	3.5	3.8	3.7	3.7	3.7
Made Any Suicide Plans <sup>5</sup>	0.5 <sup>a</sup>	1.2	1.2	1.0 <sup>c</sup>	1.0	1.0 <sup>d</sup>	1.0	1.0 <sup>c</sup>
Attempted Suicide <sup>5</sup>	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Received Mental Health/Treatment Counseling <sup>6</sup>	14.5	12.7	12.1	11.1	13.5	13.9	13.4	13.6
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	6.2	5.3	5.9 <sup>b</sup>	4.9	6.8	6.9	6.7	6.7

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B table B.7P.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B table B.7P.

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B table B.16.

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B table B.16.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.8A Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	20	17	136 <sup>b</sup>	112	1,707 <sup>b</sup>	1,588	1,863 <sup>a</sup>	1,717
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	22	28	154	138	1,823	1,844	1,999	2,010
Received Specialty Mental Health Services <sup>4</sup>	37	33	239 <sup>b</sup>	210	2,797	2,886	3,073	3,129

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.8B Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	6.6	5.5	6.6 <sup>b</sup>	5.4	7.6 <sup>b</sup>	7.0	7.5 <sup>a</sup>	6.9
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	7.2	9.3	7.7	6.8	8.3	8.4	8.2	8.2
Received Specialty Mental Health Services <sup>4</sup>	12.0	10.9	11.7 <sup>b</sup>	10.3	12.6	13.0	12.5	12.7

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B [table B.8P](#).

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B [table B.8P](#).

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B [table B.17](#).

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B [table B.17](#).

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.9A Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	66	73	492	495	6,262 <sup>a</sup>	5,802	6,820 <sup>a</sup>	6,370
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	26 <sup>a</sup>	49	189	210	2,461	2,569	2,676	2,827
Serious Mental Illness <sup>4</sup>	34	34	178	210	2,260	2,373	2,472	2,617
Any Mental Illness <sup>4</sup>	100 <sup>b</sup>	128	737 <sup>b</sup>	816	9,375	9,267	10,212	10,211
Had Serious Thoughts of Suicide <sup>5</sup>	20 <sup>a</sup>	39	173 <sup>a</sup>	223	1,935	2,068	2,127 <sup>a</sup>	2,330
Made Any Suicide Plans <sup>5</sup>	7 <sup>a</sup>	18	61	66	581	580	649	664
Attempted Suicide <sup>5</sup>	5	7	33	49	347	359	384	415
Received Mental Health Treatment/Counseling <sup>6</sup>	42	50	258	276	3,279 <sup>a</sup>	3,574	3,579 <sup>a</sup>	3,900
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	23	25	136	147	1,782 <sup>a</sup>	1,956	1,940 <sup>a</sup>	2,128

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.9B Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	16.9	17.9	17.9	16.9	20.9 <sup>a</sup>	18.7	20.6 <sup>a</sup>	18.6
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	6.7 <sup>a</sup>	12.0	6.9	7.2 <sup>c</sup>	8.3	8.4 <sup>c</sup>	8.2	8.3 <sup>c</sup>
Serious Mental Illness <sup>4</sup>	8.8	8.4	6.4	7.2	7.5	7.7	7.4	7.6
Any Mental Illness <sup>4</sup>	26.2	31.2	27.1	27.8	31.1 <sup>b</sup>	29.9	30.7 <sup>b</sup>	29.8
Had Serious Thoughts of Suicide <sup>5</sup>	5.1 <sup>a</sup>	9.4	6.2	7.6 <sup>d</sup>	6.5	6.7 <sup>c</sup>	6.4	6.8 <sup>c</sup>
Made Any Suicide Plans <sup>5</sup>	1.8 <sup>a</sup>	4.3	2.2	2.3 <sup>c</sup>	1.9	1.9 <sup>c</sup>	2.0	1.9 <sup>c</sup>
Attempted Suicide <sup>5</sup>	1.2	1.8	1.2	1.7	1.2	1.2	1.2	1.2
Received Mental Health Treatment/Counseling <sup>6</sup>	10.9	12.2	9.4	9.4	11.0	11.6	10.9	11.4
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	5.9	6.0	4.9	5.0	6.0	6.3	5.9	6.2

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B table B.9P.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B table B.9P.

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B table B.18.

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B table B.18.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.10A Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older, by Geographic Region and Time Period: Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	157	167	1,270 <sup>a</sup>	922	12,353 <sup>a</sup>	11,430	13,780 <sup>a</sup>	12,519
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	161	150	1,032	983	10,858	11,183	12,051	12,317
Serious Mental Illness <sup>4</sup>	107	88	764	814	7,107 <sup>a</sup>	8,012	7,978 <sup>a</sup>	8,913
Any Mental Illness <sup>4</sup>	509	431	2,987	3,092	30,997	31,809	34,493	35,332
Had Serious Thoughts of Suicide <sup>5</sup>	50	63	511	508	5,707	5,634	6,269	6,205
Made Any Suicide Plans <sup>5</sup>	7	17	180	134	1,436	1,584	1,623	1,734
Attempted Suicide <sup>5</sup>	6	11	58	46	616	658	680	715
Received Mental Health Treatment/Counseling <sup>6</sup>	356	317	2,154	2,055	23,944 <sup>a</sup>	25,374	26,454 <sup>b</sup>	27,746
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	147	129	1,035	873	11,924	12,341	13,106	13,344

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.10B Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older, by Geographic Region and Time Period: Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	6.7	6.7	7.4 <sup>a</sup>	5.1	7.2 <sup>a</sup>	6.4	7.2 <sup>a</sup>	6.3
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	6.8	6.1	6.0	5.5	6.4	6.3	6.3	6.3
Serious Mental Illness <sup>4</sup>	4.5	3.5	4.4	4.5	4.1 <sup>b</sup>	4.5	4.1 <sup>b</sup>	4.5
Any Mental Illness <sup>4</sup>	21.4	17.3	17.1	17.2	17.9	17.9	17.9	17.8
Had Serious Thoughts of Suicide <sup>5</sup>	2.1	2.6	3.0	2.8	3.3	3.2	3.3	3.1
Made Any Suicide Plans <sup>5</sup>	0.3	0.7	1.0	0.7	0.8	0.9	0.8	0.9
Attempted Suicide <sup>5</sup>	0.2	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Received Mental Health Treatment/Counseling <sup>6</sup>	15.2	12.8	12.5	11.4	13.9	14.3	13.8	14.0
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	6.2	5.2	6.0 <sup>b</sup>	4.8	6.9	7.0	6.8	6.7

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>a</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .05 level. *P* values are located in Appendix B table B.10P.

<sup>b</sup> Difference between Pre-Oil Spill estimate and Post-Oil Spill estimate is statistically significant at the .10 level. *P* values are located in Appendix B table B.10P.

<sup>c</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .05 level. *P* values are located in Appendix B table B.19.

<sup>d</sup> Difference between area effect (Post-Oil Spill Period estimate minus Pre-Oil Spill Period estimate) for this geographic region and the area effect for the Gulf Coast Oil Spill Disaster Area is statistically significant at the .10 level. *P* values are located in Appendix B table B.19.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.



## **B.2: Standard Errors of Estimated Totals and Percentages, and $P$ Values from Tests of Differences of Percentages over Time**

**Table B.1C Standard Errors of Numbers in Thousands of Persons, by Geographic Area, Time Period, and Demographic and Socioeconomic Characteristics: 2007-2009 and 2011 NSDUH**

Demographic/ Socioeconomic Characteristic	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>TOTAL<sup>1</sup></b>	0	0	0	0	0	0	0	0
<b>AGE<sup>1</sup></b>								
12-17	0	0	0	0	0	0	0	0
18 or Older	0	0	0	0	0	0	0	0
18-25	0	0	0	0	0	0	0	0
26 or Older	0	0	0	0	0	0	0	0
<b>GENDER<sup>1</sup></b>								
Male	0	0	0	0	0	0	0	0
Female	0	0	0	0	0	0	0	0
<b>HISPANIC ORIGIN AND RACE<sup>1</sup></b>								
Not Hispanic or Latino	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Hispanic or Latino	0	0	0	0	0	0	0	0
<b>EDUCATION<sup>2</sup></b>								
< High School	55	53	134	195	481	750	507	783
High School Graduate	87	87	202	313	634	1,025	668	1,079
Some College	62	69	166	283	571	1,023	595	1,070
College Graduate	61	66	198	364	795	1,277	814	1,319
<b>CURRENT EMPLOYMENT<sup>2</sup></b>								
Full-Time	113	90	262	382	897	1,520	931	1,579
Part-Time	42	47	103	178	384	658	398	678
Unemployed	19	29	55	103	201	381	212	390
Other <sup>3</sup>	77	80	246	371	751	1,218	788	1,276
<b>FAMILY INCOME</b>								
Less Than \$20,000	69	61	181	262	542	929	573	974
\$20,000 - \$49,999	77	107	221	377	737	1,254	765	1,324
\$50,000 - \$74,999	67	57	177	261	495	845	519	884
\$75,000 or More	91	74	232	380	1,011	1,576	1,042	1,635

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

<sup>1</sup> The size of this domain is forced to match the U.S. Census Bureau population estimate through the weight calibration process, and so is free of sampling error. Therefore, statistically significant differences were not tested for this subpopulation.

<sup>2</sup> Estimates for Education and Current Employment are only among persons aged 18 or older.

<sup>3</sup> The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.1D Standard Errors of Numbers in Thousands and Percent Distribution of Persons, by Geographic Area, Time Period, and Demographic and Socioeconomic Characteristics: 2007-2009 and 2011 NSDUH**

Demographic/ Socioeconomic Characteristic	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>POPULATION ESTIMATE<sup>1</sup></b>	0	0	0	0	0	0	0	0
<b>AGE<sup>1</sup></b>								
12-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18 or Older	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26 or Older	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>GENDER<sup>1</sup></b>								
Male	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Female	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>HISPANIC ORIGIN AND RACE<sup>1</sup></b>								
Not Hispanic or Latino	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Black or African American	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hispanic or Latino	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>EDUCATION<sup>2</sup></b>								
< High School	1.82	1.62	0.61	0.84	0.23	0.33	0.21	0.31
High School Graduate	1.83	1.80	0.69	1.24	0.25	0.40	0.23	0.37
Some College	1.54	1.62	0.55	1.06	0.23	0.39	0.21	0.37
College Graduate	1.76	2.05	0.77	1.42	0.30	0.47	0.28	0.44
<b>CURRENT EMPLOYMENT<sup>2</sup></b>								
Full-Time	1.79	1.67	0.82	1.28	0.28	0.47	0.26	0.44
Part-Time	1.30	1.39	0.44	0.75	0.17	0.28	0.16	0.26
Unemployed	0.64	0.87	0.27	0.48	0.10	0.18	0.09	0.16
Other <sup>3</sup>	2.17	1.78	0.83	1.26	0.28	0.45	0.26	0.42
<b>FAMILY INCOME</b>								
Less Than \$20,000	2.00	1.70	0.76	1.11	0.24	0.38	0.23	0.35
\$20,000 - \$49,999	2.12	2.28	0.74	1.21	0.27	0.44	0.25	0.42
\$50,000 - \$74,999	1.73	1.31	0.60	0.96	0.18	0.32	0.17	0.30
\$75,000 or More	2.13	2.08	0.83	1.40	0.34	0.53	0.32	0.50

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

<sup>1</sup> The size of this domain is forced to match the U.S. Census Bureau population estimate through the weight calibration process, and so is free of sampling error. Therefore, statistically significant differences were not tested for this subpopulation.

<sup>2</sup> Estimates for Education and Current Employment are only among persons aged 18 or older.

<sup>3</sup> The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.1P P Values from Tests of Differences of Percent Distribution of Persons, by Geographic Area, Time Period, and Demographic and Socioeconomic Characteristics: 2011 vs. 2007-2009 NSDUH**

Demographic/ Socioeconomic Characteristic	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>POPULATION ESTIMATE<sup>1</sup></b>	N/A		N/A		N/A		N/A	
<b>AGE<sup>1</sup></b>								
12-17	N/A		N/A		N/A		N/A	
18 or Older	N/A		N/A		N/A		N/A	
18-25	N/A		N/A		N/A		N/A	
26 or Older	N/A		N/A		N/A		N/A	
<b>GENDER<sup>1</sup></b>								
Male	N/A		N/A		N/A		N/A	
Female	N/A		N/A		N/A		N/A	
<b>HISPANIC ORIGIN AND RACE<sup>1</sup></b>								
Not Hispanic or Latino	N/A		N/A		N/A		N/A	
White	N/A		N/A		N/A		N/A	
Black or African American	N/A		N/A		N/A		N/A	
Other	N/A		N/A		N/A		N/A	
Hispanic or Latino	N/A		N/A		N/A		N/A	
<b>EDUCATION<sup>2</sup></b>								
< High School	0.0317		0.0283		0.0005		0.0001	
High School Graduate	0.9033		0.0525		0.2003		0.0687	
Some College	0.2865		0.6143		0.0373		0.0289	
College Graduate	0.4036		0.0084		0.0424		0.0051	
<b>CURRENT EMPLOYMENT<sup>2</sup></b>								
Full-Time	0.0390		0.0045		0.0000		0.0000	
Part-Time	0.2687		0.0469		0.5081		0.2278	
Unemployed	0.0179		0.0006		0.0000		0.0000	
Other <sup>3</sup>	0.9218		0.5635		0.0004		0.0004	
<b>FAMILY INCOME</b>								
Less Than \$20,000	0.5557		0.3289		0.0001		0.0001	
\$20,000 - \$49,999	0.8338		0.6723		0.5563		0.6784	
\$50,000 - \$74,999	0.7367		0.1091		0.0131		0.0052	
\$75,000 or More	0.9457		0.9281		0.4204		0.4206	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

<sup>1</sup> The size of this domain is forced to match the U.S. Census Bureau population estimate through the weight calibration process, and so is free of sampling error. Therefore, statistically significant differences were not tested for this subpopulation.

<sup>2</sup> Estimates for Education and Current Employment are only among persons aged 18 or older.

<sup>3</sup> The Other Employment category includes students, persons keeping house or caring for children full time, retired or disabled persons, or other persons not in the labor force.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.2C Past Month Substance Use among Persons Aged 12 or Older, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	25	31	66	125	245	440	256	461
Marijuana	18	29	54	103	208	392	217	410
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	20	19	38	70	134	217	141	232
Pain Relievers	16	16	33	55	114	181	120	189
Cigarettes	55	68	137	218	461	772	486	816
Alcohol	73	57	170	271	558	967	577	1,007
Binge Alcohol <sup>3</sup>	48	49	117	196	427	703	444	735
Heavy Alcohol <sup>3</sup>	23	27	68	121	237	401	245	424

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.2D Past Month Substance Use among Persons Aged 12 or Older, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.82	0.98	0.30	0.54	0.11	0.19	0.10	0.18
Marijuana	0.60	0.89	0.25	0.45	0.09	0.17	0.09	0.16
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	0.65	0.58	0.17	0.30	0.06	0.09	0.06	0.09
Cigarettes	0.52	0.49	0.15	0.24	0.05	0.08	0.05	0.07
Alcohol	1.79	2.12	0.62	0.95	0.21	0.33	0.19	0.32
Binge Alcohol <sup>3</sup>	2.39	1.77	0.77	1.18	0.25	0.42	0.23	0.39
Heavy Alcohol <sup>3</sup>	1.57	1.54	0.53	0.85	0.19	0.30	0.18	0.29
Heavy Alcohol <sup>3</sup>	0.75	0.85	0.31	0.52	0.11	0.17	0.10	0.16

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.2P Past Month Substance Use among Persons Aged 12 or Older, by Geographic Region and Time Period: *P* Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.0490		0.4278		0.0600		0.0322	
Marijuana	0.0082		0.0933		0.0001		0.0000	
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	0.9476		0.2151		0.0063		0.0039	
Pain Relievers	0.9700		0.1121		0.0020		0.0008	
Cigarettes	0.7993		0.3636		0.0000		0.0000	
Alcohol	0.0734		0.7933		0.7852		0.6383	
Binge Alcohol <sup>3</sup>	0.5498		0.0853		0.0453		0.0148	
Heavy Alcohol <sup>3</sup>	0.4817		0.5348		0.0001		0.0001	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.3C Past Month Substance Use and Psychological Distress among Persons Aged 18 or Older, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	25	32	65	124	240	433	251	453
Marijuana	18	29	54	103	204	386	212	403
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	19	19	38	70	132	214	139	228
Pain Relievers	15	16	33	54	111	179	118	187
Cigarettes	54	68	135	217	458	769	483	813
Alcohol	73	53	169	272	549	968	568	1,008
Binge Alcohol <sup>3</sup>	48	49	117	197	424	704	442	737
Heavy Alcohol <sup>3</sup>	23	27	67	121	235	401	243	423
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	28	24	68	94	231	330	244	342
Average K6 Score <sup>5</sup>	0.19	0.17	0.07	0.10	0.02	0.04	0.02	0.03

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.3D Past Month Substance Use and Psychological Distress among Persons Aged 18 or Older, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.89	1.11	0.32	0.59	0.12	0.21	0.11	0.19
Marijuana	0.64	0.99	0.27	0.49	0.10	0.18	0.09	0.17
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.70	0.64	0.19	0.33	0.07	0.10	0.06	0.10
Pain Relievers	0.55	0.55	0.16	0.26	0.06	0.09	0.05	0.08
Cigarettes	1.95	2.35	0.68	1.04	0.23	0.37	0.21	0.35
Alcohol	2.64	1.82	0.84	1.30	0.27	0.46	0.25	0.43
Binge Alcohol <sup>3</sup>	1.73	1.68	0.59	0.94	0.21	0.34	0.20	0.32
Heavy Alcohol <sup>3</sup>	0.83	0.92	0.33	0.58	0.12	0.19	0.11	0.18
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	1.02	0.81	0.34	0.45	0.11	0.16	0.11	0.15
Average K6 Score <sup>5</sup>	0.19	0.17	0.07	0.10	0.02	0.04	0.02	0.03

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.3P Past Month Substance Use and Psychological Distress among Persons Aged 18 or Older, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.0590		0.3864		0.0898		0.0477	
Marijuana	0.0052		0.1303		0.0004		0.0001	
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	1.0000		0.2466		0.0156		0.0098	
Pain Relievers	0.8995		0.1625		0.0052		0.0024	
Cigarettes	0.7997		0.4369		0.0000		0.0000	
Alcohol	0.0606		0.7164		0.6864		0.5287	
Binge Alcohol <sup>3</sup>	0.5664		0.1176		0.0971		0.0386	
Heavy Alcohol <sup>3</sup>	0.4202		0.6052		0.0002		0.0003	
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	0.8327		0.1722		0.8813		0.6174	
Average K6 Score <sup>5</sup>	0.2329		0.7991		0.0445		0.0333	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.4C Past Month Substance Use among Persons Aged 12 to 17, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	4	3	9	14	37	66	38	68
Marijuana	3	2	7	12	32	59	32	61
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	2	2	6	10	21	33	22	35
Pain Relievers	2	2	6	9	18	30	19	31
Cigarettes	5	4	10	12	36	58	38	60
Alcohol	4	5	12	15	47	76	49	77
Binge Alcohol <sup>3</sup>	4	3	10	11	36	54	38	55
Heavy Alcohol <sup>3</sup>	2	1	5	5	18	24	19	25

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.4D Past Month Substance Use among Persons Aged 12 to 17, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	1.23	1.10	0.44	0.69	0.16	0.29	0.15	0.27
Marijuana	0.96	0.73	0.36	0.58	0.14	0.26	0.13	0.24
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	0.67	0.70	0.29	0.48	0.09	0.15	0.09	0.14
Pain Relievers	0.56	0.69	0.28	0.42	0.08	0.13	0.08	0.12
Cigarettes	1.52	1.17	0.48	0.60	0.16	0.26	0.15	0.24
Alcohol	1.37	1.68	0.60	0.73	0.21	0.34	0.20	0.31
Binge Alcohol <sup>3</sup>	1.23	1.00	0.47	0.55	0.16	0.24	0.15	0.22
Heavy Alcohol <sup>3</sup>	0.53	0.39	0.23	0.24	0.08	0.11	0.08	0.10

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.4P Past Month Substance Use among Persons Aged 12 to 17, by Geographic Region and Time Period: *P* Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.4194		0.6039		0.1256		0.1504	
Marijuana	0.5521		0.1643		0.0008		0.0004	
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	0.4767		0.5579		0.0401		0.0379	
Pain Relievers	0.3844		0.2022		0.0893		0.0559	
Cigarettes	0.6716		0.0019		0.0000		0.0000	
Alcohol	0.0979		0.0022		0.0000		0.0000	
Binge Alcohol <sup>3</sup>	0.2956		0.0023		0.0000		0.0000	
Heavy Alcohol <sup>3</sup>	0.1047		0.0042		0.0000		0.0000	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.5C Past Month Substance Use and Psychological Distress among Persons Aged 18 to 25, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	6	6	17	35	78	138	80	142
Marijuana	5	6	17	35	73	131	76	135
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	4	4	11	15	39	67	41	69
Pain Relievers	4	3	9	12	35	57	36	58
Cigarettes	13	8	24	37	88	156	92	162
Alcohol	10	12	25	43	100	178	104	183
Binge Alcohol <sup>3</sup>	10	9	24	37	102	183	107	189
Heavy Alcohol <sup>3</sup>	5	7	18	24	75	123	78	125
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	6	5	14	19	53	78	55	81
Average K6 Score <sup>5</sup>	0.27	0.22	0.09	0.13	0.03	0.05	0.03	0.05

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.5D Past Month Substance Use and Psychological Distress among Persons Aged 18 to 25, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	1.47	1.54	0.63	1.20	0.26	0.45	0.24	0.41
Marijuana	1.36	1.41	0.62	1.19	0.24	0.42	0.23	0.39
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	1.05	0.97	0.38	0.51	0.13	0.22	0.12	0.20
Cigarettes	1.03	0.67	0.32	0.41	0.12	0.18	0.11	0.17
Alcohol	3.21	2.05	0.89	1.26	0.29	0.50	0.28	0.47
Binge Alcohol <sup>3</sup>	2.55	2.95	0.92	1.45	0.33	0.57	0.31	0.53
Heavy Alcohol <sup>3</sup>	2.51	2.27	0.88	1.25	0.34	0.59	0.32	0.55
Heavy Alcohol <sup>3</sup>	1.22	1.59	0.64	0.80	0.25	0.40	0.24	0.36
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>								
Average K6 Score <sup>5</sup>	1.53	1.24	0.50	0.65	0.18	0.25	0.17	0.23
Average K6 Score <sup>5</sup>	0.27	0.22	0.09	0.13	0.03	0.05	0.03	0.05

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.5P Past Month Substance Use and Psychological Distress among Persons Aged 18 to 25, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.5094		0.2676		0.0311		0.0172	
Marijuana	0.1649		0.0500		0.0002		0.0000	
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>								
Pain Relievers	0.0763		0.0011		0.0001		0.0000	
Cigarettes	0.0066		0.0002		0.0000		0.0000	
Alcohol	0.9868		0.0743		0.0000		0.0000	
Binge Alcohol <sup>3</sup>	0.6440		0.7016		0.1987		0.2584	
Heavy Alcohol <sup>3</sup>	0.9908		0.0842		0.0103		0.0046	
Average K6 Score <sup>5</sup>	0.9512		0.2312		0.0000		0.0000	
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	0.8434		0.2826		0.8955		0.8643	
Average K6 Score <sup>5</sup>	0.1821		0.9329		0.0952		0.1179	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.6C Past Month Substance Use and Psychological Distress among Persons Aged 26 or Older, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	24	32	61	115	212	399	222	420
Marijuana	17	28	50	94	176	356	184	374
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	19	17	36	68	123	202	130	216
Pain Relievers	15	15	31	52	105	170	111	178
Cigarettes	55	64	131	211	439	728	464	771
Alcohol	72	49	165	266	539	942	558	979
Binge Alcohol <sup>3</sup>	47	46	113	188	391	669	410	699
Heavy Alcohol <sup>3</sup>	22	25	67	119	213	375	222	397
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	27	23	67	90	224	321	236	331
Average K6 Score <sup>5</sup>	0.20	0.20	0.08	0.11	0.03	0.04	0.03	0.04

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.6D Past Month Substance Use and Psychological Distress among Persons Aged 26 or Older, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	1.03	1.29	0.35	0.64	0.12	0.22	0.12	0.21
Marijuana	0.71	1.14	0.29	0.52	0.10	0.20	0.10	0.19
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.79	0.70	0.21	0.37	0.07	0.11	0.07	0.11
Pain Relievers	0.61	0.61	0.18	0.29	0.06	0.10	0.06	0.09
Cigarettes	2.33	2.57	0.76	1.17	0.25	0.41	0.24	0.39
Alcohol	3.03	1.95	0.96	1.48	0.31	0.53	0.29	0.49
Binge Alcohol <sup>3</sup>	1.97	1.84	0.65	1.04	0.23	0.38	0.21	0.35
Heavy Alcohol <sup>3</sup>	0.94	1.00	0.39	0.66	0.12	0.21	0.12	0.20
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	1.16	0.93	0.38	0.50	0.13	0.18	0.12	0.17
Average K6 Score <sup>5</sup>	0.20	0.20	0.08	0.11	0.03	0.04	0.03	0.04

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.6P Past Month Substance Use and Psychological Distress among Persons Aged 26 or Older, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE USE</b>								
Illicit Drugs <sup>1</sup>	0.0801		0.6002		0.2571		0.1712	
Marijuana	0.0155		0.4054		0.0114		0.0054	
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.7372		0.6502		0.1788		0.1788	
Pain Relievers	0.6447		0.5671		0.1492		0.1401	
Cigarettes	0.7922		0.6117		0.0001		0.0002	
Alcohol	0.0664		0.7568		0.5117		0.3917	
Binge Alcohol <sup>3</sup>	0.5664		0.1809		0.2804		0.1449	
Heavy Alcohol <sup>3</sup>	0.4148		0.7771		0.0226		0.0293	
<b>PSYCHOLOGICAL DISTRESS</b>								
Serious Psychological Distress <sup>4</sup>	0.7901		0.2490		0.8567		0.6419	
Average K6 Score <sup>5</sup>	0.1124		0.7838		0.0828		0.0585	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from six questions asking the frequency that a respondent experienced symptoms of psychological distress in the past 30 days. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.7C Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>ILLCIT DRUG OR ALCOHOL DEPEDENCE OR ABUSE<sup>1,2</sup></b>								
12+	27	22	75	108	260	392	273	407
18+	27	21	74	107	257	388	270	401
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>								
Major Depressive Episode <sup>3</sup>	30	23	64	101	231	402	239	415
Serious Mental Illness <sup>4</sup>	29	18	68	93	221	348	234	360
Any Mental Illness <sup>4</sup>	83	38	155	181	606	672	628	698
Had Serious Thoughts of Suicide <sup>5</sup>	16	13	56	74	197	290	205	299
Made Any Suicide Plans <sup>5</sup>	5	7	34	38	103	154	110	157
Attempted Suicide <sup>5</sup>	5	7	19	20	66	108	69	110
Received Mental Health Treatment/Counseling <sup>6</sup>	45	35	96	158	347	573	367	594
Received Outpatient Mental Health Treatment/ Counseling <sup>6</sup>	29	29	72	99	251	424	263	437

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.7D Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>ILLCIT DRUG OR ALCOHOL DEPENDENCE OR ABUSE<sup>1,2</sup></b>								
12+	0.90	0.67	0.34	0.47	0.12	0.17	0.11	0.16
18+	0.98	0.74	0.37	0.51	0.13	0.19	0.12	0.17
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>								
Major Depressive Episode <sup>3</sup>	1.11	0.80	0.32	0.49	0.12	0.19	0.11	0.18
Serious Mental Illness <sup>4</sup>	1.04	0.62	0.34	0.44	0.11	0.17	0.10	0.15
Any Mental Illness <sup>4</sup>	3.01	1.32	0.77	0.86	0.30	0.32	0.28	0.30
Had Serious Thoughts of Suicide <sup>5</sup>	0.59	0.44	0.28	0.35	0.10	0.14	0.09	0.13
Made Any Suicide Plans <sup>5</sup>	0.19	0.26	0.17	0.18	0.05	0.07	0.05	0.07
Attempted Suicide <sup>5</sup>	0.17	0.25	0.10	0.10	0.03	0.05	0.03	0.05
Received Mental Health Treatment/Counseling <sup>6</sup>	1.65	1.21	0.48	0.75	0.17	0.28	0.16	0.26
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	1.06	1.00	0.36	0.47	0.12	0.20	0.12	0.19

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.7P Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>ILLCIT DRUG OR ALCOHOL DEPEDENCE OR ABUSE<sup>1,2</sup></b>								
12+	0.9534		0.0008		0.0000		0.0000	
18+	0.8914		0.0014		0.0000		0.0000	
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>								
Major Depressive Episode <sup>3</sup>	0.9501		0.4635		0.9857		0.8707	
Serious Mental Illness <sup>4</sup>	0.4052		0.7021		0.0636		0.0690	
Any Mental Illness <sup>4</sup>	0.3669		0.8914		0.6611		0.6338	
Had Serious Thoughts of Suicide <sup>5</sup>	0.1908		0.8498		0.6801		0.7808	
Made Any Suicide Plans <sup>5</sup>	0.0320		0.3309		0.6238		0.7531	
Attempted Suicide <sup>5</sup>	0.4072		0.9743		0.8269		0.7837	
Received Mental Health Treatment/Counseling <sup>6</sup>	0.4464		0.2826		0.2086		0.4087	
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	0.5994		0.0724		0.7798		0.8536	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.8C Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011  
NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	4	3	7	11	33	57	34	58
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	3	4	9	12	33	57	35	58
Received Specialty Mental Health Services <sup>4</sup>	5	3	10	15	43	73	44	75

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.8D Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	1.16	0.98	0.34	0.54	0.15	0.25	0.14	0.23
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	0.83	1.21	0.43	0.62	0.15	0.26	0.14	0.24
Received Specialty Mental Health Services <sup>4</sup>	1.54	1.11	0.48	0.75	0.19	0.33	0.18	0.31

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.8P Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	0.5276		0.0565		0.0632		0.0246	
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	0.2282		0.2619		0.7196		0.8515	
Received Specialty Mental Health Services <sup>4</sup>	0.5628		0.0890		0.2885		0.5040	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.9C Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011  
NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	6	8	17	34	71	125	73	128
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	4	8	11	19	44	82	45	84
Serious Mental Illness <sup>4</sup>	4	6	12	17	50	80	52	82
Any Mental Illness <sup>4</sup>	11	10	28	32	113	139	117	142
Had Serious Thoughts of Suicide <sup>5</sup>	4	5	13	21	49	83	51	85
Made Any Suicide Plans <sup>5</sup>	2	4	8	10	28	43	29	44
Attempted Suicide <sup>5</sup>	2	2	6	9	22	33	23	35
Received Mental Health Treatment/Counseling <sup>6</sup>	5	9	12	21	52	98	53	101
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	4	6	9	16	39	75	40	76

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.9D Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	1.55	1.83	0.61	1.17	0.24	0.40	0.22	0.37
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	0.96	2.05	0.41	0.66	0.15	0.27	0.14	0.25
Serious Mental Illness <sup>4</sup>	1.16	1.37	0.44	0.58	0.17	0.26	0.16	0.24
Any Mental Illness <sup>4</sup>	2.85	2.35	1.04	1.10	0.38	0.45	0.35	0.41
Had Serious Thoughts of Suicide <sup>5</sup>	0.97	1.14	0.45	0.72	0.16	0.27	0.15	0.25
Made Any Suicide Plans <sup>5</sup>	0.59	0.89	0.28	0.35	0.09	0.14	0.09	0.13
Attempted Suicide <sup>5</sup>	0.53	0.53	0.20	0.31	0.07	0.11	0.07	0.10
Received Mental Health Treatment/Counseling <sup>6</sup>	1.37	2.19	0.45	0.72	0.17	0.32	0.16	0.30
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	0.98	1.35	0.34	0.55	0.13	0.24	0.12	0.22

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.9P Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	0.6932		0.4549		0.0000		0.0000	
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	0.0112		0.7145		0.8020		0.5877	
Serious Mental Illness <sup>4</sup>	0.7858		0.3181		0.6196		0.4985	
Any Mental Illness <sup>4</sup>	0.2272		0.6310		0.0506		0.0860	
Had Serious Thoughts of Suicide <sup>5</sup>	0.0046		0.1036		0.4175		0.1702	
Made Any Suicide Plans <sup>5</sup>	0.0204		0.9000		0.7446		0.9297	
Attempted Suicide <sup>5</sup>	0.4843		0.1827		0.9538		0.6494	
Received Mental Health Treatment/Counseling <sup>6</sup>	0.6237		0.9925		0.1010		0.1025	
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	0.9421		0.8822		0.1768		0.1750	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.10C Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older, by Geographic Region and Time Period: Standard Errors of Numbers in Thousands, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	28	20	72	100	238	366	251	381
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	31	22	63	98	226	392	234	403
Serious Mental Illness <sup>4</sup>	29	17	68	91	216	334	229	345
Any Mental Illness <sup>4</sup>	80	36	148	174	583	650	604	673
Had Serious Thoughts of Suicide <sup>5</sup>	16	11	55	70	191	276	199	285
Made Any Suicide Plans <sup>5</sup>	5	7	34	36	97	145	104	148
Attempted Suicide <sup>5</sup>	4	6	19	18	62	101	66	103
Received Mental Health Treatment/Counseling <sup>6</sup>	43	33	94	157	340	564	360	585
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	29	28	71	98	246	416	258	429

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.10D Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older, by Geographic Region and Time Period: Standard Errors of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	1.18	0.80	0.42	0.55	0.14	0.21	0.13	0.19
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	1.30	0.88	0.37	0.55	0.13	0.22	0.12	0.20
Serious Mental Illness <sup>4</sup>	1.22	0.67	0.39	0.50	0.12	0.19	0.12	0.17
Any Mental Illness <sup>4</sup>	3.37	1.47	0.85	0.96	0.34	0.37	0.31	0.34
Had Serious Thoughts of Suicide <sup>5</sup>	0.69	0.44	0.32	0.39	0.11	0.16	0.10	0.14
Made Any Suicide Plans <sup>5</sup>	0.20	0.27	0.19	0.20	0.06	0.08	0.05	0.07
Attempted Suicide <sup>5</sup>	0.17	0.24	0.11	0.10	0.04	0.06	0.03	0.05
Received Mental Health Treatment/Counseling <sup>6</sup>	1.84	1.32	0.55	0.87	0.20	0.32	0.19	0.30
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	1.23	1.13	0.41	0.54	0.14	0.23	0.13	0.22

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.10P Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older, by Geographic Region and Time Period: P Values from Tests of Differences of Percentages, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area		Remainder of Gulf Coast States		Remainder of United States		Total United States	
	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011	Pre-Spill 2007-2009	Post-Spill 2011
<b>SUBSTANCE DEPENDENCE OR ABUSE</b>								
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	0.9772		0.0015		0.0026		0.0002	
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>								
Major Depressive Episode <sup>3</sup>	0.6040		0.4149		0.9708		0.7787	
Serious Mental Illness <sup>4</sup>	0.4298		0.8544		0.0731		0.0878	
Any Mental Illness <sup>4</sup>	0.2292		1.0000		0.9587		0.8740	
Had Serious Thoughts of Suicide <sup>5</sup>	0.5911		0.7932		0.5028		0.4906	
Made Any Suicide Plans <sup>5</sup>	0.2425		0.2908		0.5412		0.7243	
Attempted Suicide <sup>5</sup>	0.4980		0.6029		0.8342		0.8949	
Received Mental Health Treatment/Counseling <sup>6</sup>	0.3750		0.2818		0.3204		0.5717	
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	0.5785		0.0683		0.9599		0.6772	

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States. Estimates for Total United States may differ from those shown in the NSDUH detailed tables.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008-2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

### **B.3: Significance Tests of Percentages on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas**

**Table B.11 Significance Tests of Percentages of Past Month Substance Use Measures among Persons Aged 12 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE USE</b>															
Illicit Drugs <sup>1</sup>	2.6	0.5	2.2	1.52	0.1336	2.6	0.4	2.2	1.68	0.0994	2.6	0.4	2.2	1.68	0.0995
Marijuana	2.6	0.8	1.8	1.65	0.1039	2.6	0.8	1.8	1.89	0.0646	2.6	0.8	1.8	1.88	0.0649
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.1	-0.4	0.5	0.45	0.6553	0.1	-0.3	0.4	0.35	0.7251	0.1	-0.3	0.4	0.36	0.7172
Pain Relievers	0.0	-0.4	0.4	0.47	0.6397	0.0	-0.3	0.3	0.31	0.7579	0.0	-0.3	0.3	0.33	0.7452
Cigarettes	0.7	-1.1	1.8	0.60	0.5528	0.7	-1.9	2.6	0.95	0.3482	0.7	-1.8	2.5	0.92	0.3618
Alcohol	5.0	0.4	4.6	1.49	0.1431	5.0	0.1	4.9	1.74	0.0881	5.0	0.2	4.8	1.73	0.0890
Binge Alcohol <sup>3</sup>	-1.3	-1.8	0.5	0.20	0.8404	-1.3	-0.7	-0.6	-0.27	0.7879	-1.3	-0.8	-0.5	-0.23	0.8218
Heavy Alcohol <sup>3</sup>	0.6	-0.4	1.0	0.93	0.3583	0.6	-0.8	1.4	1.54	0.1297	0.6	-0.7	1.4	1.50	0.1392

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.12 Significance Tests of Percentages of Past Month Substance Use and Psychological Distress Measures among Persons Aged 18 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Month Substance Use/ Psychological Distress	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE USE</b>															
Illicit Drugs <sup>1</sup>	2.8	0.6	2.2	1.42	0.1606	2.8	0.4	2.4	1.63	0.1094	2.8	0.5	2.3	1.62	0.1107
Marijuana	2.9	0.8	2.1	1.86	0.0681	2.9	0.8	2.2	2.12	0.0383	2.9	0.8	2.2	2.12	0.0384
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.0	-0.4	0.4	0.36	0.7171	0.0	-0.3	0.3	0.26	0.7959	0.0	-0.3	0.3	0.27	0.7874
Pain Relievers	-0.1	-0.4	0.3	0.32	0.7515	-0.1	-0.3	0.2	0.19	0.8507	-0.1	-0.3	0.2	0.20	0.8404
Cigarettes	0.8	-1.0	1.8	0.55	0.5875	0.8	-2.0	2.7	0.92	0.3599	0.8	-1.9	2.6	0.89	0.3754
Alcohol	5.7	0.6	5.1	1.52	0.1356	5.7	0.2	5.5	1.80	0.0775	5.7	0.3	5.4	1.79	0.0786
Binge Alcohol <sup>3</sup>	-1.4	-1.8	0.5	0.17	0.8644	-1.4	-0.7	-0.7	-0.30	0.7688	-1.4	-0.8	-0.6	-0.25	0.8018
Heavy Alcohol <sup>3</sup>	0.8	-0.4	1.1	0.96	0.3438	0.8	-0.8	1.6	1.60	0.1160	0.8	-0.7	1.5	1.56	0.1251
<b>PSYCHOLOGICAL DISTRESS</b>															
Serious Psychological Distress <sup>4</sup>	-0.3	0.7	-1.0	-0.71	0.4816	-0.3	0.0	-0.3	-0.23	0.8179	-0.3	0.1	-0.4	-0.28	0.7817
Average K6 Score <sup>5</sup>	-0.3	0.0	-0.3	-0.99	0.3244	-0.3	-0.1	-0.2	-0.87	0.3886	-0.3	-0.1	-0.2	-0.89	0.3776

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from twelve questions asking the frequency that a respondent experienced symptoms of psychological distress. Six new questions were asked for the first time in 2008 to all respondents aged 18 or older about their past 30 day symptoms. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. The original six questions asked are then only asked to respondents who reported that there was a month in the past year when they felt more symptoms than they felt in the past 30 days and a score ranging from 0 to 24 is produced. The maximum of these two scores is taken to create the past year K6 score. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.13 Significance Tests of Percentages of Past Month Substance Use Measures among Persons Aged 12 to 17 on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Month Substance Use	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE USE</b>															
Illicit Drugs <sup>1</sup>	1.2	-0.4	1.6	0.96	0.3429	1.2	0.5	0.6	0.45	0.6572	1.2	0.4	0.7	0.50	0.6160
Marijuana	-0.7	0.9	-1.6	-1.20	0.2352	-0.7	1.0	-1.7	-1.39	0.1697	-0.7	1.0	-1.6	-1.39	0.1694
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.6	-0.3	1.0	0.91	0.3676	0.6	-0.4	1.0	1.09	0.2785	0.6	-0.3	1.0	1.09	0.2798
Pain Relievers	0.7	-0.6	1.4	1.40	0.1675	0.7	-0.3	1.0	1.18	0.2422	0.7	-0.3	1.0	1.22	0.2271
Cigarettes	-0.9	-2.5	1.6	0.70	0.4889	-0.9	-1.5	0.6	0.31	0.7573	-0.9	-1.6	0.7	0.35	0.7275
Alcohol	-3.6	-3.0	-0.6	-0.25	0.8014	-3.6	-1.8	-1.8	-0.83	0.4109	-3.6	-1.9	-1.7	-0.78	0.4392
Binge Alcohol <sup>3</sup>	-1.8	-2.2	0.5	0.24	0.8076	-1.8	-1.7	0.0	-0.02	0.9813	-1.8	-1.8	0.0	0.00	1.0000
Heavy Alcohol <sup>3</sup>	-1.2	-0.9	-0.3	-0.38	0.7032	-1.2	-0.6	-0.6	-0.80	0.4250	-1.2	-0.6	-0.6	-0.77	0.4448

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.14 Significance Tests of Percentages of Past Month Substance Use and Psychological Distress Measures among Persons Aged 18 to 25 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Month Substance Use/ Psychological Distress	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t- statistic	P value	Gulf Coast Oil Spill Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t- statistic	P value	Gulf Coast Oil Spill Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t- statistic	P value
<b>SUBSTANCE USE</b>															
Illicit Drugs <sup>1</sup>	1.5	1.5	0.0	0.01	0.9908	1.5	1.1	0.4	0.18	0.8594	1.5	1.1	0.4	0.16	0.8708
Marijuana	3.1	2.6	0.5	0.21	0.8333	3.1	1.8	1.3	0.57	0.5715	3.1	1.9	1.2	0.54	0.5906
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	-2.6	-2.0	-0.6	-0.36	0.7214	-2.6	-1.0	-1.6	-1.12	0.2680	-2.6	-1.1	-1.5	-1.06	0.2961
Pain Relievers	-3.5	-1.9	-1.7	-1.25	0.2183	-3.5	-1.0	-2.6	-2.01	0.0499	-3.5	-1.1	-2.4	-1.95	0.0567
Cigarettes	0.1	-2.8	2.9	0.63	0.5342	0.1	-2.4	2.5	0.56	0.5751	0.1	-2.4	2.5	0.57	0.5690
Alcohol	1.9	0.6	1.3	0.28	0.7788	1.9	-0.8	2.8	0.66	0.5130	1.9	-0.7	2.6	0.63	0.5332
Binge Alcohol <sup>3</sup>	0.0	-2.7	2.7	0.65	0.5158	0.0	-1.8	1.7	0.45	0.6572	0.0	-1.8	1.8	0.47	0.6406
Heavy Alcohol <sup>3</sup>	0.1	-1.2	1.4	0.60	0.5523	0.1	-2.4	2.5	1.20	0.2355	0.1	-2.2	2.4	1.15	0.2534
<b>PSYCHOLOGICAL DISTRESS</b>															
Serious Psychological Distress <sup>4</sup>	0.4	0.9	-0.5	-0.25	0.8042	0.4	0.0	0.4	0.22	0.8276	0.4	0.0	0.3	0.17	0.8621
Average K6 Score <sup>5</sup>	0.4	0.0	0.5	1.23	0.2251	0.4	-0.1	0.5	1.63	0.1094	0.4	-0.1	0.5	1.60	0.1147

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from twelve questions asking the frequency that a respondent experienced symptoms of psychological distress. Six new questions were asked for the first time in 2008 to all respondents aged 18 or older about their past 30 day symptoms. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. The original six questions asked are then only asked to respondents who reported that there was a month in the past year when they felt more symptoms than they felt in the past 30 days and a score ranging from 0 to 24 is produced. The maximum of these two scores is taken to create the past year K6 score. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.15 Significance Tests of Percentages of Past Month Substance Use and Psychological Distress Measures among Persons Aged 26 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Month Substance Use/ Psychological Distress	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of the Effects (a-b)	t- statistic	P value	Gulf Coast Oil Spill Area Effect (d)	Remainder of United States Effect (e)	Difference of the Effects (d-e)	t- statistic	P value	Gulf Coast Oil Spill Area Effect (g)	Total United States Effect (h)	Difference of the Effects (g-h)	t- statistic	P value
<b>SUBSTANCE USE</b>															
Illicit Drugs <sup>1</sup>	3.0	0.4	2.6	1.46	0.1505	3.0	0.3	2.7	1.60	0.1160	3.0	0.3	2.7	1.60	0.1163
Marijuana	2.9	0.5	2.4	1.86	0.0686	2.9	0.6	2.4	1.98	0.0533	2.9	0.6	2.3	1.99	0.0523
Nonmedical Use of Prescription-Type Psychotherapeutics <sup>2</sup>	0.4	-0.2	0.6	0.46	0.6466	0.4	-0.2	0.6	0.48	0.6341	0.4	-0.2	0.6	0.48	0.6337
Pain Relievers	0.5	-0.2	0.6	0.62	0.5360	0.5	-0.2	0.6	0.63	0.5299	0.5	-0.2	0.6	0.63	0.5283
Cigarettes	0.9	-0.7	1.6	0.45	0.6553	0.9	-1.9	2.8	0.85	0.4011	0.9	-1.8	2.6	0.81	0.4191
Alcohol	6.4	0.6	5.8	1.51	0.1377	6.4	0.4	6.0	1.72	0.0918	6.4	0.5	5.9	1.72	0.0919
Binge Alcohol <sup>3</sup>	-1.6	-1.7	0.1	0.05	0.9633	-1.6	-0.5	-1.1	-0.40	0.6919	-1.6	-0.6	-1.0	-0.36	0.7214
Heavy Alcohol <sup>3</sup>	0.9	-0.2	1.1	0.83	0.4104	0.9	-0.5	1.5	1.28	0.2048	0.9	-0.5	1.4	1.26	0.2135
<b>PSYCHOLOGICAL DISTRESS</b>															
Serious Psychological Distress <sup>4</sup>	-0.4	0.7	-1.1	-0.68	0.4985	-0.4	0.0	-0.4	-0.29	0.7720	-0.4	0.1	-0.5	-0.33	0.7422
Average K6 Score <sup>5</sup>	-0.4	0.0	-0.4	-1.33	0.1878	-0.4	-0.1	-0.4	-1.29	0.2025	-0.4	-0.1	-0.4	-1.31	0.1963

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> Serious Psychological Distress (SPD) is defined as having a score of 13 or higher on the K6 scale. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

<sup>5</sup> The K6 score is derived from twelve questions asking the frequency that a respondent experienced symptoms of psychological distress. Six new questions were asked for the first time in 2008 to all respondents aged 18 or older about their past 30 day symptoms. Responses to these six questions are combined to produce the past month score ranging from 0 to 24. The original six questions asked are then only asked to respondents who reported that there was a month in the past year when they felt more symptoms than they felt in the past 30 days and a score ranging from 0 to 24 is produced. The maximum of these two scores is taken to create the past year K6 score. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008-2009 data only.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.16 Significance Tests of Percentages of Past Year Substance Dependence or Abuse among Persons Aged 12 or Older and Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>ILLCIT DRUG OR ALCOHOL DEPEDECE OR ABUSE<sup>1,2</sup></b>															
12+	0.1	-2.0	2.0	1.60	0.1159	0.1	-0.9	1.0	0.84	0.4055	0.1	-1.0	1.1	0.92	0.3602
18+	0.2	-2.1	2.2	1.59	0.1185	0.2	-1.0	1.1	0.88	0.3835	0.2	-1.0	1.2	0.96	0.3423
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT (AGED 18+)</b>															
Major Depressive Episode <sup>3</sup>	0.1	-0.4	0.5	0.36	0.7229	0.1	0.0	0.1	0.06	0.9536	0.1	0.0	0.1	0.09	0.9306
Serious Mental Illness <sup>4</sup>	-0.9	0.2	-1.1	-0.92	0.3601	-0.9	0.4	-1.3	-1.15	0.2542	-0.9	0.3	-1.2	-1.14	0.2585
Any Mental Illness <sup>4</sup>	-2.8	0.2	-3.0	-0.90	0.3702	-2.8	-0.2	-2.6	-0.84	0.4044	-2.8	-0.2	-2.6	-0.85	0.3983
Had Serious Thoughts of Suicide <sup>5</sup>	1.0	0.1	0.9	1.05	0.2994	1.0	-0.1	1.0	1.37	0.1776	1.0	0.0	1.0	1.36	0.1807
Made Any Suicide Plans <sup>5</sup>	0.7	-0.2	1.0	2.38	0.0209	0.7	0.0	0.7	1.98	0.0530	0.7	0.0	0.7	2.07	0.0431
Attempted Suicide <sup>5</sup>	0.3	0.0	0.3	0.74	0.4604	0.3	0.0	0.2	0.77	0.4422	0.3	0.0	0.2	0.78	0.4400
Received Mental Health Treatment/Counseling <sup>6</sup>	-1.8	-1.0	-0.9	-0.35	0.7298	-1.8	0.4	-2.2	-0.93	0.3591	-1.8	0.2	-2.1	-0.88	0.3849
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	-0.8	-1.0	0.2	0.10	0.9191	-0.8	0.1	-0.9	-0.57	0.5729	-0.8	0.0	-0.8	-0.51	0.6137

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008 and 2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008 and 2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.17 Significance Tests of Percentages of Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 12 to 17 On Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE DEPENDENCE, ABUSE, AND TREATMENT</b>															
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	-1.0	-1.2	0.2	0.11	0.9116	-1.0	-0.5	-0.5	-0.29	0.7699	-1.0	-0.6	-0.4	-0.26	0.7978
<b>YOUTH PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>															
Major Depressive Episode <sup>3</sup>	2.1	-0.8	3.0	1.56	0.1243	2.1	0.1	2.0	1.16	0.2529	2.1	0.1	2.1	1.21	0.2335
Received Specialty Mental Health Services <sup>4</sup>	-1.1	-1.4	0.4	0.19	0.8507	-1.1	0.4	-1.5	-0.79	0.4325	-1.1	0.2	-1.3	-0.70	0.4850

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Receipt of specialty mental health services for persons aged 12 to 17 is defined as having received treatment/counseling for emotional or behavioral problems not caused by drug or alcohol use from an outpatient source including (1) private therapist, psychologist, psychiatrist, social worker, or counselor; (2) mental health clinic or center; (3) partial day hospital or day treatment program; or (4) in-home therapist, counselor, or family preservation worker, or from an inpatient source with overnight or longer stay in a (1) hospital; (2) residential treatment center; or (3) foster care or therapeutic foster care home.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.18 Significance Tests of Percentages of Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 18 to 25 on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE DEPENDENCE, ABUSE, AND TREATMENT</b>															
Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	1.0	-1.0	2.0	0.70	0.4843	1.0	-2.2	3.1	1.27	0.2112	1.0	-2.0	3.0	1.22	0.2260
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b>															
Major Depressive Episode <sup>3</sup>	5.3	0.3	5.0	2.28	0.0266	5.3	0.1	5.2	2.54	0.0140	5.3	0.2	5.1	2.53	0.0143
Serious Mental Illness <sup>4</sup>	-0.5	0.7	-1.2	-0.64	0.5273	-0.5	0.2	-0.6	-0.36	0.7209	-0.5	0.2	-0.7	-0.39	0.6988
Any Mental Illness <sup>4</sup>	5.0	0.7	4.3	0.96	0.3395	5.0	-1.2	6.1	1.49	0.1409	5.0	-0.9	5.9	1.45	0.1521
Had Serious Thoughts of Suicide <sup>5</sup>	4.3	1.4	2.9	1.69	0.0973	4.3	0.3	4.1	2.74	0.0084	4.3	0.4	3.9	2.67	0.0101
Made Any Suicide Plans <sup>5</sup>	2.6	0.1	2.5	2.12	0.0384	2.6	-0.1	2.6	2.41	0.0196	2.6	0.0	2.6	2.40	0.0201
Attempted Suicide <sup>5</sup>	0.5	0.5	0.1	0.06	0.9533	0.5	0.0	0.5	0.69	0.4961	0.5	0.1	0.5	0.63	0.5318
Received Mental Health Treatment/Counseling <sup>6</sup>	1.3	0.0	1.3	0.46	0.6463	1.3	0.6	0.7	0.27	0.7881	1.3	0.6	0.8	0.29	0.7734
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	0.1	0.1	0.0	0.02	0.9863	0.1	0.4	-0.2	-0.14	0.8893	0.1	0.3	-0.2	-0.13	0.9006

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008 and 2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008 and 2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011.

**Table B.19 Significance Tests of Percentages of Past Year Substance Dependence or Abuse and Mental Health Problems and Treatment among Persons Aged 26 or Older on Area Effects between the Gulf Coast Oil Spill Disaster Area and Other Geographic Areas, Where the Area Effect is Defined as the Difference between Pre-Oil Spill and Post-Oil Spill Time Periods for Each Geographic Area, 2007-2009 and 2011 NSDUH**

Past Year Measure	Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of Gulf Coast States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Remainder of United States Effect					Gulf Coast Oil Spill Disaster Area Effect vs. Total United States Effect				
	Gulf Coast Oil Spill Disaster Area Effect (a)	Remainder of Gulf Coast States Effect (b)	Difference of Effects (a-b)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (d)	Remainder of United States Effect (e)	Difference of Effects (d-e)	t-statistic	P value	Gulf Coast Oil Spill Disaster Area Effect (g)	Total United States Effect (h)	Difference of Effects (g-h)	t-statistic	P value
<b>SUBSTANCE DEPENDENCE, ABUSE, AND TREATMENT</b> Illicit Drug or Alcohol Dependence or Abuse <sup>1,2</sup>	0.0	-2.2	2.3	1.36	0.1797	0.0	-0.7	0.8	0.51	0.6155	0.0	-0.9	0.9	0.59	0.5557
<b>ADULT PAST YEAR MENTAL HEALTH PROBLEMS &amp; TREATMENT</b> Major Depressive Episode <sup>3</sup>	-0.8	-0.5	-0.2	-0.15	0.8838	-0.8	0.0	-0.8	-0.51	0.6155	-0.8	-0.1	-0.7	-0.48	0.6366
Serious Mental Illness <sup>4</sup>	-1.0	0.1	-1.1	-0.79	0.4337	-1.0	0.4	-1.4	-1.10	0.2768	-1.0	0.4	-1.3	-1.08	0.2851
Any Mental Illness <sup>4</sup>	-4.1	0.0	-4.1	-1.14	0.2584	-4.1	0.0	-4.1	-1.20	0.2358	-4.1	-0.1	-4.0	-1.20	0.2350
Had Serious Thoughts of Suicide <sup>5</sup>	0.4	-0.1	0.5	0.61	0.5432	0.4	-0.1	0.5	0.68	0.5004	0.4	-0.1	0.5	0.68	0.4969
Made Any Suicide Plans <sup>5</sup>	0.4	-0.3	0.7	1.57	0.1213	0.4	0.1	0.3	0.96	0.3417	0.4	0.0	0.4	1.05	0.2969
Attempted Suicide <sup>5</sup>	0.2	-0.1	0.3	0.84	0.4032	0.2	0.0	0.2	0.62	0.5369	0.2	0.0	0.2	0.65	0.5185
Received Mental Health Treatment/Counseling <sup>6</sup>	-2.4	-1.1	-1.3	-0.45	0.6580	-2.4	0.4	-2.7	-1.02	0.3104	-2.4	0.2	-2.6	-0.98	0.3337
Received Outpatient Mental Health Treatment/Counseling <sup>6</sup>	-1.0	-1.2	0.2	0.10	0.9212	-1.0	0.0	-1.0	-0.56	0.5761	-1.0	-0.1	-0.9	-0.50	0.6165

NOTE: The Gulf Coast Oil Spill Disaster Area includes the 32 counties in Louisiana, Mississippi, Alabama, and Florida that were most affected by the April 2010 oil spill: St. Tammany, St. Mary, Iberia, Vermillion, St. Bernard, Lafourche, Plaquemines, Terrebonne, Jefferson, Orleans, St. Martin, and Lafayette of Louisiana; Hancock, Jackson, Harrison, George, Pearl River, and Stone of Mississippi; Baldwin, Mobile, Clarke, Escambia, Monroe, and Washington of Alabama; Walton, Escambia, Okaloosa, Santa Rosa, Bay, Franklin, Gulf, and Wakulla of Florida. The Remainder of Gulf Coast States includes all other counties in Louisiana, Mississippi, Alabama, and Florida. The Remainder of the United States includes all other states and the District of Columbia.

NOTE: Estimates in this table are based on a revised weight, in which the standard analysis weight was further poststratified to the control totals derived from aggregated county level population estimates for the Gulf Coast Oil Spill Disaster Area and the Remainder of the Gulf States.

NOTE: Each area effect is defined as the Post-Oil Spill Period estimate (2011) minus the Pre-Oil Spill Period estimate (2007-2009). The Difference of Effects (which is the difference of differences) is defined as the Gulf Coast Oil Spill Disaster Area effect minus the effect for the Remainder of Gulf Coast States, Remainder of United States, or Total United States, respectively.

<sup>1</sup> 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 new methamphetamine items added in 2005 and 2006.

<sup>2</sup> Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>3</sup> Major Depressive Episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. Respondents with unknown past year MDE were excluded. The adult MDE estimates for 2007 and 2008 are based on an adjusted MDE variable.

<sup>4</sup> Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories. For details on the methodology, see Section B.4.3 in Appendix B of the *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings*. These measures are not available for 2007; therefore the pre-oil spill estimates are based on 2008 and 2009 data only. The 2008 estimate of any mental illness uses only data from the WHODAS half-sample.

<sup>5</sup> Estimates in this table are based only on responses to suicide items in the Mental Health module. Respondents with unknown suicide information were excluded. This measure is not available for 2007; therefore the pre-oil spill estimate is based on 2008 and 2009 data only.

<sup>6</sup> Mental Health Treatment/Counseling is defined as having received inpatient care or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Estimates were based only on responses to items in the Adult Mental Health Service Utilization module.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2007-2009 (revised March 2012) and 2011..

# Appendix C: GSPS Methods

## C.1 General Information on the Gulf States Population Survey

The Gulf States Population Survey (GSPS) was conducted by the Centers for Disease Control and Prevention's (CDC's) Division of Behavioral Surveillance (DBS), within the Office of Surveillance, Epidemiology and Laboratory Services (OSELS), which is the Federal home of the Behavioral Risk Factor Surveillance System (BRFSS), a State-based nationwide survey of self-reported health behaviors conducted since 1984.

On September 15, 2010, CDC and SAMHSA entered into an intra-agency agreement to conduct the GSPS in coastal counties within the Gulf Coast States affected by the *Deepwater Horizon* oil spill. DBS was charged with conducting a random-digit-dial telephone survey designed to examine the mental and behavioral health of adults living in selected coastal counties affected by the oil spill.

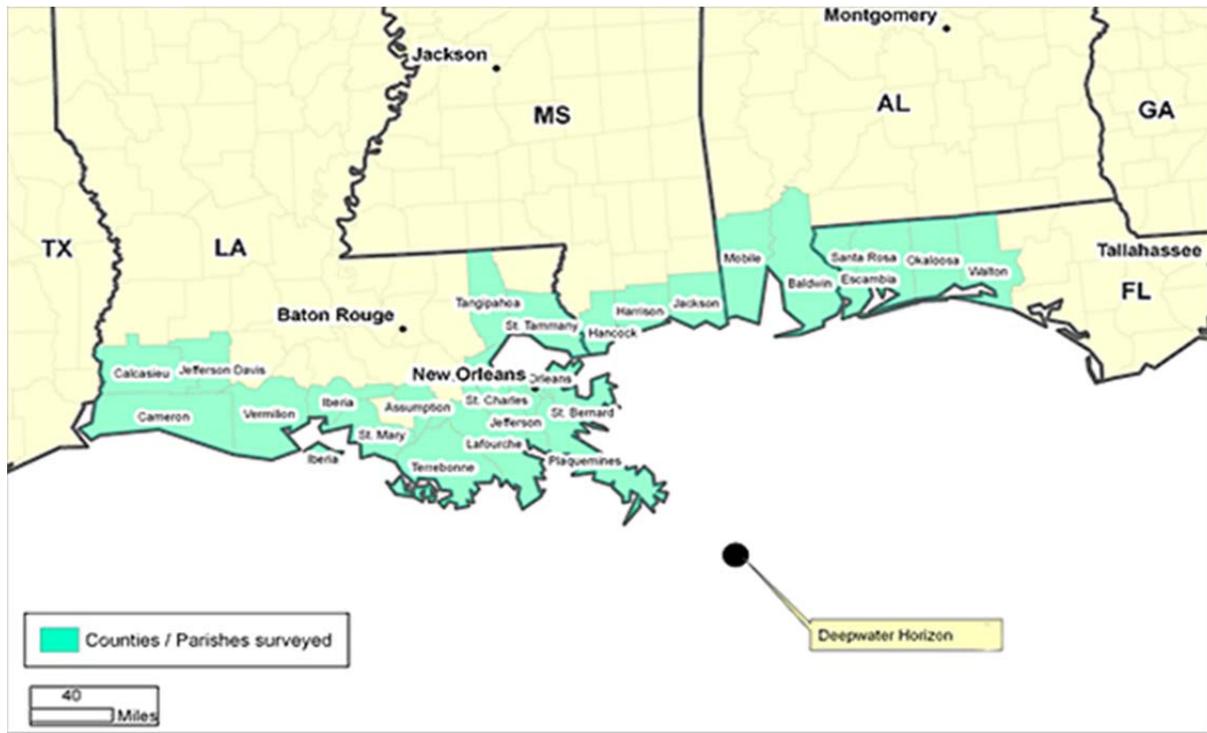
On October 7, 2010, the Federal Office of Management and Budget (OMB) granted emergency clearance to DBS (OMB control number 0920-0868) to conduct the GSPS through April 30, 2011. DBS awarded a contract to a data collection contractor on November 29, 2010, and data collection began on December 15, 2010, and continued through December 16, 2011. The vendor conducted the interviews in accordance with the survey protocol and provided monthly data files to CDC/DBS.

On April 29, 2011, the OMB approved a new Information Collection Request (OMB control number 0920-0885) to allow continuation of the GSPS after the end of the emergency clearance. The new request allowed the following modifications to the survey: (1) addition of a Spanish version (Spanish was chosen as the second language of administration because Census population data indicate that the coastal areas have higher percentages of Hispanic/Latino populations than any other non-English-speaking residents); (2) modification of one particular question regarding history of mental health medication use that had proved difficult for respondents to understand; (3) extension of the sample area to the entirety of the four States to allow comparison of results between Gulf Coast counties and noncoastal counties; and (4) addition of cell phones to the sampling frame, which had included only landline phones.

## C.2 Survey Methods

The GSPS used a complex survey design, which included stratification and clustering. GSPS was designed to sample the coastal populations of the four states directly exposed to the oil spill (Louisiana, Mississippi, Alabama, and Florida). Persons were included in the coastal sample population if they resided in those States and in 1 of 25 coastal counties that lie within 32 miles of areas closed to fishing following the oil spill (Figure C.1). The 2010 coastal population consisted of 3.3 million persons: 1.9 million in Louisiana (57 percent of the coastal population), 0.4 million in Mississippi (11 percent), 0.4 million in Alabama (11 percent), and 0.7 million in Florida (21 percent). The largest cities included in the coastal sample were New Orleans, Louisiana, and Mobile, Alabama.

**Figure C.1 Gulf State Population Survey Coastal Counties/Parishes Sampled**



Beginning in May 2011, CDC added counties in the four States that were farther from the Gulf to the survey sample in order to allow comparison of results from the Gulf Coast counties to noncoastal counties. The noncoastal counties included all counties within the four States that were not part of the 25-county coastal area. Also beginning in May 2011, CDC added cell phone respondents to the sample. Inclusion of cell phones in the frame was deemed especially important for purposes of coverage and validity because of the rising proportion of households in the United States that no longer contain a landline (Blumberg & Luke, 2010).

The general methods used to develop and deploy the survey questionnaire were based on previously tested methods used for the BRFSS. Detailed information on the BRFSS methodology is available on the BRFSS Web site at <http://www.cdc.gov/BRFSS/>. Like the BRFSS, the GSPS uses a disproportionate stratified sample (DSS) random-digit dialing (RDD) methodology for landline samples. DSS design increases efficiency of RDD phone surveys by dividing listed phone numbers into those expected to belong mostly to households (high-density) and those expected to contain a smaller proportion of household numbers (medium-density). Available phone numbers in each county were divided into blocks of 100 (e.g., 404-555-1100 through 404-555-1199 would comprise a block). Within each block, high density was defined as all numbers containing a known attribution to a household. Medium density included all remaining numbers in the block (i.e., those not in the published household listing). High- and medium-density numbers were sampled at a 1.5:1 ratio (high to medium) to obtain a probability sample of all households with landline telephones in all parts of the coastal area. Cell phone numbers were not subject to DSS because data on their location are less specific and less reliable than that associated with landline phone numbers.

Once household contact was made, a single respondent was selected at random from all eligible adults within the household. After collection, the data were cleaned of errors and subjected to weighting procedures. Landline and cell phone data sets were merged, and data were weighted to adjusted U.S. Census population estimates by county, using age, race, gender, geographic location, and phone type (landline or cell phone). Data were weighted using county-level characteristics.

### **C.2.1 Survey Protocol**

The GSPS used the following survey protocol:

1. All interviews were conducted using a single computer-assisted telephone interview (CATI) questionnaire, which interviewers asked without modification.
2. Systematic, unobtrusive electronic monitoring was conducted as a routine and integral part of monthly survey quality control procedures for all interviewers.
3. An eligible household in the GSPS was a housing unit with a separate entrance, where occupants ate separately from other persons on the property, and that was occupied by its members as their principal or secondary place of residence. Noneligible households were (1) vacation homes not occupied by household members for more than 30 days per year, (2) group homes, and (3) institutions.
4. Eligible household members included all related adults (aged 18 years or older), unrelated adults, roomers, and domestic workers who considered the household their home, even though they may not have been home at the time of the call. Household members did not include adult family members who were currently living elsewhere.
5. Proxy interviews were not conducted by the GSPS. Individual respondents were randomly selected from all adults aged 18 years or older living in a household.
6. An interview was considered complete if respondents completed all survey questions.
7. Verification callbacks were conducted for 10 percent of all interviews.
8. With the exception of verbally abusive respondents, eligible persons who initially refused to be interviewed were contacted at least one additional time and given the opportunity to be interviewed.
9. Call attempts on most sample pieces were completed during the calendar month of the sample selection. A few exceptions were made when delayed sample production moved some interviews to the first few days of the next sample month. Sample months began on the 15th day of each month and ended on the 14th day of the following month.

The survey did not include advance letters, respondent incentives, or other modes of respondent contact other than RDD telephone interviews.

## C.2.2 Survey Questionnaire

CDC/DBS developed the survey questionnaire in partnerships with SAMHSA, other groups within CDC, and State public health and mental health departments from the four States in which the survey was conducted. Landline and cell phone surveys were identical other than the questions used in the screeners and the placement of phone use questions in the demographics sections of the two questionnaires.

Questions on the GSPS concerned a wide range of health topics: life satisfaction and emotional support, quality of life, health status and chronic physical illnesses, resiliency and coping, mental illness, health care access, and economic and financial conditions. Many of the GSPS questions were taken from the 2010 BRFSS questionnaire (<http://www.cdc.gov/BRFSS/questionnaires/pdf-ques/2010brfss.pdf>). For mental health, the measures used in the GSPS were identical to validated measures that were used in previous postdisaster mental health surveys. Specifically, questions were taken from the Patient Health Questionnaire (PHQ) and General Anxiety Disorder (GAD) questionnaire or from other surveys designed to measure anxiety, depression, and potential stress-associated physical health effects. Sixteen GSPS questions related specifically to contact with oil from the spill and impacts of the event on the respondents' household incomes. The survey was available in English (December 2010–December 2011) and Spanish (May 2011–December 2011). Landline and cell phone surveys were identical other than the questions used in the screeners. The GSPS questionnaire can be viewed at [http://www.cdc.gov/osels/phsipo/docs/pdf/GSPS\\_questionnaire.pdf](http://www.cdc.gov/osels/phsipo/docs/pdf/GSPS_questionnaire.pdf).

In some cases, comparisons between data from the GSPS and other surveys might provide context for the GSPS results, and CDC designed the GSPS to facilitate such comparisons. The main potential source of comparison data is the BRFSS. All four States conducted the core BRFSS survey annually before the oil spill. In addition, some of the States have conducted certain BRFSS optional modules in various years (Table C.1). For example, Louisiana and Mississippi administered the 2008 and 2010 BRFSS Anxiety and Depression Modules, and Louisiana administered the BRFSS 2006 Intimate Partner Violence Module. In some cases, comparisons also might be made to non-BRFSS surveys, although dissimilarities between surveys may limit direct comparison.

**Table C.1 Topics from GSPS and Examples of Possible Sources of Comparison Data**

<b>GSPS Topic</b>	<b>Data Collected within Topic</b>	<b>Examples of Comparison Data</b>
Demographics	Sex, age, race/ethnicity, marital status, employment	BRFSS; U.S. Census
Income	Current household income	BRFSS; U.S. Census
Health Status	General health, physical health, mental health	BRFSS
Quality of Life	Physically unhealthy days Mentally unhealthy days	BRFSS
Life Satisfaction & Social Support	Life satisfaction and social/emotional support	BRFSS
Disability	Work days lost: physical health problem Work days lost: mental/emotional health Use special health equipment	BRFSS
Patient Health Questionnaire-8	Screen for moderate/severe depression	BRFSS (some States); National Comorbidity Survey Replication 2002
Generalized Anxiety Disorder 7	Screen for moderate/severe anxiety	National Comorbidity Survey Replication 2002
Lifetime Anxiety & Depression	Past diagnosis: depressive disorder Past diagnosis: anxiety disorder	BRFSS (some States); National Comorbidity Survey Replication 2002
Suicidal Thoughts and Behaviors	Suicidal ideation, planning, attempts	National Survey on Drug Use and Health 2009 National Intimate Partner and Sexual Violence Survey
Chronic Health Conditions	Past diagnosis: selected chronic medical conditions	BRFSS
Health Care Access	Insurance coverage	BRFSS; U.S. Census
Mental Health Treatment	Mental health counseling, frequency, prescription medications	Hurricane Katrina Community Advisory Group Study
Resiliency/Coping	Locus of control	Not available
Health Behaviors	Selected health risk behaviors	BRFSS
Social Context	Worry: pay mortgage Worry: buy food	BRFSS modules (2010, 2 States)
Intimate Partner Violence	Physical violence Emotional abuse	BRFSS 2006 (8 States); National Intimate Partner and Sexual Violence Survey
Environmental Questions	Direct contact with oil from spill	Not available
Employment Status Questions	Oil-spill-specific issues (employment before spill, job loss due to spill, income changes due to spill, participation in cleanup)	Not available
Gulf Oil Spill Awareness	Aware of the Gulf spill	Not available
Child Questions	Children's behavior questions	Not available

GSPS = Gulf State Population Survey; BRFSS = Behavioral Risk Factor Surveillance System.

### C.3 GSPS Data Collection

Over the course of data collection (December 15, 2010-December 16, 2011), 38,361 surveys were completed. Of these, 32,813 were collected from respondents on landline phones, and 5,548 were collected from respondents on cell phones (Table C.2). A total of 27,947 interviews were completed in coastal counties, and a total of 10,414 interviews were completed in noncoastal counties.

**Table C.2 Number of Completed Surveys by Telephone Type and Location: Gulf States Population Survey (GSPS), December 2010-December 2011**

Type of Telephone	Total Number of Surveys Completed	Number Completed in Coastal Counties	Number Completed in Noncoastal Counties
Landline	32,813	24,468	8,345
Cell Phone	5,548	3,479	2,069
Total	38,361	27,947	10,414

On average, the survey took 18.7 minutes to complete on landline telephones and 20.3 minutes to complete on cell phones. A total of 122 surveys were conducted in Spanish; all others were conducted in English. Response rates (calculated according to industry standards set by the Council of American Survey Research Organizations [CASRO]), averaged 33.1 percent for landline respondents (December 15, 2010-December 16, 2011) and 25.8 percent for cell phone respondents (May 15, 2011-December 16, 2011). Although the GSPS response rates were relatively low, they were similar to recent BRFSS response rates for these four States. For example, in 2010, overall BRFSS response rates for Alabama, Florida, Louisiana, and Mississippi were 31.9, 26.9, 35.8, and 29.8 percent, respectively.