

Prevalence of Substance Use Disorders and Unmet Treatment Need Among Adults and Young Adults in the Greater New Orleans Area

Executive Summary

The National Survey on Drug Use and Health (NSDUH) is conducted annually by the Substance Abuse and Mental Health Services Administration in about 70,000 households nationally. NSDUH provides the most comprehensive information available based on a national standard and permits comparisons across sub-state areas, states and regions as well as monitoring of trends over time. Analysis of NSDUH reports of sub-state data from 2008 through 2010 provides the following prevalence estimates of substance use disorders (SUDs) and the unmet need for treatment:

- Over 50,000 adults (7.8%) in the 4-parish Metro Area *experience a substance use disorder in the course of a year*, including 21,000 in Orleans and 26,000 in Jefferson parishes.
- About 17,000 young adults (17.1%) in the 4-parish Metro Area experience a substance use disorder in the course of a year—a third of the adult total—including 8,000 each in the Orleans and Jefferson parishes.
- Approximately 50,000 adults (7.7%) in the 4-parish Metro Area *needed but did not receive treatment in the course of a year*, including almost 21,000 in Orleans and almost 26,000 in Jefferson parishes. (See note of caution below.)
- Approximately 17,000 young adults (16.8%) in the 4-parish Metro Area *needed but did not receive treatment in the course of a year*—a third of the adult total—including about 8,000 each in the Orleans and Jefferson parishes. (See note of caution below.)

(NSDUH's method of calculating unmet need is discussed in this report as well as the similarity of SUD and unmet need prevalence estimates.)

Although the data used in this analysis is on average about four years old, it is reasonable to use the SUD prevalence estimates because changes in SUD prevalence are likely to be slow and there is no other source from which better estimates can be derived. In regard to estimates of unmet need, caution is advised. The treatment service system today is probably substantially different from what it was in 2008-2010, and it is likely that the system will continue to change relatively rapidly. Therefore, for purposes of estimating unmet need, access to and utilization of treatment services should be measured through reporting systems and or provider surveys rather than through the NSDUH population survey.

- **National Survey on Drug Use and Health**
- **Substance Use Disorders**
- **Unmet Treatment Need**
- **Discussion**

National Survey on Drug Use and Health

The National Survey on Drug Use and Health (NSDUH) is conducted annually by the Substance Abuse and Mental Health Services Administration (SAMHSA).¹ This survey provides sub-state estimates for a limited number of indicators measuring substance use, substance use disorders (SUDs) and risk factors. Separate SUD estimates are provided for alcohol and illicit drugs but, at the sub-state level, not for specific illicit drugs. For Louisiana, sub-state areas include the Metropolitan District (Orleans, Plaquemines and St. Bernard parishes) combined with the South Central parishes (Health Region 3). In this report, these parishes will be referred to as the “Metropolitan & South Central” area. (NSDUH provides separate estimates for Jefferson Parish.) Thus NSDUH does not currently provide Orleans-specific or Metropolitan-specific statistics, and therefore may not be sensitive to the unique substance use aspects of New Orleans.² While NSDUH interviews about 70,000 persons nationally each year, the number of respondents in each sub-state area is limited. Therefore, estimates are made by pooling 3 years of data. The most current estimates available are based on data from 2008, 2009 and 2010; on average the data are four years old. This is an important limitation given the dynamic population changes resulting from Hurricane Katrina. Estimates are available for the same sub state areas from pooled data for 2006 through 2008—two years earlier—but it is suggested here that, due to population change, those estimates cannot easily be compared to the 2008-10 estimates. Nevertheless, *NSDUH provides the most comprehensive information available based on a national standard and permits comparisons across sub-state areas, states and regions as well as monitoring of trends over time.*

Substance Use Disorders

Substance use disorder (SUD) is defined in the *Diagnostic and Statistical Manual (DSM-IV)* of the American Psychiatric Association as “a maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by ... [criteria], occurring at any time in the same 12-month period.” Both dependence and abuse conditions are defined³ A dependence condition can be considered more clinically serious or a progression from an abuse condition, but consequences and costs can be substantial in any case. An assessment of dependence or abuse based on DSM-IV criteria is generally accepted as a requirement for admission to treatment services, but does not itself determine the level of care needed.

¹ Refer to <http://www.samhsa.gov/data/NSDUH.aspx> ..

² Based on the recommendation of the Metropolitan Human services District, the Louisiana Office of Behavioral Health has requested that SAMHSA redefine sub-state areas to provide estimates for MHSD parishes and Jefferson Parish separately and combined. SAMHSA has agreed to do this for future reports and analyses.

³ American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*. Washington DC, 1994, pp. 181-2. Separate criteria are provided for dependence and abuse. *Dependence* criteria are the following (paraphrased): tolerance; withdrawal; loss of control; unsuccessful attempts to control use; preoccupation with obtaining or using; reduced social, occupational or recreational activities; continued use despite negative consequences. Presence of any 3 of these 7 criteria indicates dependence. (Physiological dependence symptoms, withdrawal and/or tolerance, are neither necessary nor sufficient conditions for a dependence diagnosis since 3 of 7 criteria must be met.) *Abuse* is the recurrent use despite: failure to fulfill important roles; hazardous situations; legal problems; social/interpersonal problems. Presence of any 1 of these 4 criteria is sufficient for an abuse diagnosis. Thus dependence and abuse conditions have separate sets of criteria, although a diagnosis of dependence supersedes a diagnosis abuse. Substance use disorders (SUDs) are defined for different classes of substances using the same criteria.

Among all adults (ages 18+) residing in the Metropolitan & South Central health regions, 7.9 percent experienced a substance use disorder (dependence or abuse) in the past year. For those residing in Jefferson Parish, a similar proportion (7.8%) experienced a substance use disorder. These figures are slightly lower than the statewide (8.2%) and national (9.1%) rates.

Prevalence of Substance Use Disorders (SUDs) by Region, based on the National Survey on Drug Use and Health (NSDUH) Pooled Survey Data from 2008, 2009 and 2010.

| Substance Use Disorders and Persons Needing But Not Receiving Treatment Services (percentages) | Regions | | | | |
|------------------------------------------------------------------------------------------------|----------------------------|------------------|--------------|-----------------|---------------------|
| | Metropolitan & So. Central | Jefferson Parish | Louisiana | Southern States | Total United States |
| <i>Alcohol Dependence in Past Year</i> | | | | | |
| All Adults (ages 18 and older) | 3.40 | 3.29 | 3.38 | 3.42 | 3.64 |
| Young Adults (ages 18-25) | 5.07 | 5.34 | 5.55 | 6.04 | 6.82 |
| <i>Illicit Drug Dependence in Past Year</i> | | | | | |
| All Adults (ages 18 and older) | 2.00 | 1.77 | 1.92 | 1.76 | 1.87 |
| Young Adults (ages 18-25) | 5.29 | 5.22 | 5.24 | 5.04 | 5.51 |
| <i>Alcohol Dependence or Abuse in Past Year</i> | | | | | |
| All Adults (ages 18 and older) | 6.62 | 6.59 | 6.84 | 7.01 | 7.57 |
| Young Adults (ages 18-25) | 13.56 | 14.72 | 13.96 | 14.73 | 16.34 |
| <i>Illicit Drug Dependence or Abuse in Past Year</i> | | | | | |
| All Adults (ages 18 and older) | 2.62 | 2.51 | 2.49 | 2.54 | 2.63 |
| Young Adults (ages 18-25) | 7.12 | 7.82 | 6.95 | 7.25 | 7.81 |
| <i>Dependence on or Abuse of Illicit Drugs or Alcohol in Past Yr.</i> | | | | | |
| All Adults (ages 18 and older) | 7.88 | 7.77 | 8.19 | 8.44 | 9.05 |
| Young Adults (ages 18-25) | 16.41 | 18.01 | 17.82 | 18.61 | 20.31 |

Among just young adults (ages 18-25) residing in the Metropolitan & South Central area, 16.4 percent experienced a substance use disorder in the past year. For those residing in Jefferson Parish, a slightly larger proportion (18.0%) experienced a substance use disorder. These figures are similar to the statewide rate (17.8%) but lower than the national rate (20.3%).

Based on the 2010 US Census estimates for the adult population, these rates imply that **over 50,000 adults (7.8%) in the 4-parish Metro Area experience a substance use disorder in the course of a year, including 21,000 in Orleans and 26,000 in Jefferson parishes.**

Again, based on the 2010 US Census estimates for the young adult population, these rates imply that about **17,000 young adults (17.1%) in the 4-parish Metro Area experience a substance use disorder in the course of a year—a third of the adult total—including 8,000 each in the Orleans and Jefferson parishes.**

Population Estimates for Substance Use Disorder (SUD) by Age Categories Based on the National Survey of Drug Use and Health using the 2010 US Census SF-1 Data for Parishes

| Age Group | Orleans | Jefferson | St. Bernard | Plaque-mines | Metro Area | Louisiana |
|----------------------|---------|-----------|-------------|--------------|---------------|-----------|
| All Adults (18+) | | | | | | |
| Population | 270,614 | 335,155 | 26,720 | 16,713 | 649,202 | 3,415,357 |
| Rate (%) | 7.88 | 7.77 | 7.88 | 7.88 | 7.82 | 8.19 |
| Prevalence | 21,324 | 26,042 | 2,106 | 1,317 | 50,788 | 279,718 |
| Young Adults (18-25) | | | | | | |
| Population | 49,215 | 44,705 | 4,538 | 2,151 | 100,609 | 528,543 |
| Rate (%) | 16.41 | 18.01 | 16.41 | 16.41 | 17.12 | 17.82 |
| Prevalence | 8,076 | 8,051 | 745 | 353 | 17,225 | 94,186 |

Source: National Center for Health Statistics from 2010 US Census. www.cdc.gov/nchs/nvss/bridged_race.htm . Population for age 25 is estimated by interpolation.

Unmet Treatment Need

One method of determining the unmet need for substance use treatment services is to count or estimate the number of persons receiving treatment based on data reported by treatment providers, and then compare this estimate against an estimate of the number of persons-in-need obtained from a population survey. If reporting and record systems are accurate and comprehensive (covering all appropriate treatment services), this facilitates planning and resource allocation decisions since the nature, extent and location of the services are known.

A different method for estimating unmet need is to measure treatment utilization from the same survey used to estimate the need (e.g., the prevalence of substance use disorders). If the same method is used to estimate both need and treatment utilization, the comparison should be valid and, in theory, treatment utilization estimates from service reporting systems and population surveys should be similar. However, reporting systems are likely to miss some of the population that receive treatment service (for instance, when services are received out of state); and, perhaps more importantly, household-based population surveys are likely to miss important components of the treatment population including those who are not responsive to surveys and those who are homeless.

NSDUH includes data on treatment utilization, asking respondents whether they received any substance use treatment in the past year and whether that treatment was received in a specialty treatment facility (such as would be licensed by the state Office of Behavioral Health).⁴ NSDUH calculates *treatment need* by counting those respondents who received specialty treatment or experienced a substance use disorder in the past year.⁵ Unmet treatment need is estimated by counting those in need who did not receive specialty treatment in the past year. This can be divided by the total population to yield the proportion of residents *needing but not receiving treatment in past year*.

For sub-state areas, the percent of residents *needing but not receiving treatment in past year* is provided separately for alcohol and illicit drugs, but not for alcohol and drugs combined.⁶ However, the unmet treatment need for alcohol and drug use combined can be approximated from nation-level statistical tables showing the cross-prevalence of unmet alcohol and drug use treatment need, as shown in the table below.

⁴ NSDUH considers the following responses to be specialty treatment facilities: hospital inpatient, inpatient or outpatient rehabilitation, and mental health centers. The following responses are not considered specialty treatment: self-help groups, prison/jail, emergency room and private doctor's office.

⁵ There are a number of rationales for this calculation. (1) We could assume that persons receiving specialty care had a substance use disorder but were not included in the estimate of substance use disorder due to social desirability bias or other downward bias in the survey. (2) Persons in treatment or completing treatment may not have experienced the symptoms (criteria) during the past year although clinically they would have carried the diagnosis.

⁶ While NSDUH provides sub-state estimates of unmet treatment need, the components, treatment need itself and specialty treatment utilization, are not available without requesting a special analysis.

**Prevalence Rates for Persons Needing But Not Receiving Treatment Services,
based on the National Survey on Drug Use and Health (NSDUH)
Pooled Survey Data from 2008, 2009 and 2010.**

| Persons Needing But Not Receiving Treatment Services (percentages) | Regions | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------|--------------|-----------------|---------------------|
| | Metropolitan & So. Central | Jefferson Parish | Louisiana | Southern States | Total United States |
| <i>Needing, Not Receiving Treatment for Alcohol Use in Past Year</i> | | | | | |
| All Adults (ages 18 and older) | 6.46 | 6.38 | 6.67 | 6.66 | 7.15 |
| Young Adults (ages 18-25) | 13.04 | 13.54 | 13.68 | 14.16 | 15.66 |
| <i>Needing, Not Receiving Treatment for Drug Use in Past Yr.</i> | | | | | |
| All Adults (ages 18 and older) | 2.29 | 2.30 | 2.26 | 2.26 | 2.35 |
| Young Adults (ages 18-25) | 6.25 | 7.33 | 6.32 | 6.64 | 7.16 |
| Approximation based on national cross-prevalence rates: <i>Needing Treatment for Alcohol <u>and</u> Drugs, Not Receiving Either</i> | | | | | |
| All Adults (ages 18 and older) | 1.01 | 1.01 | 1.04 | na | 1.10 |
| Young Adults (ages 18-25) | 3.04 | 3.29 | 3.16 | na | 3.56 |
| Approximation based on national cross-prevalence rates: <i>Needing Treatment for Alcohol <u>or</u> Drugs, Not Receiving Either</i> | | | | | |
| All Adults (ages 18 and older) | 7.74 | 7.67 | 7.89 | na | 8.35 |
| Young Adults (ages 18-25) | 16.25 | 17.58 | 16.84 | na | 18.70 |

Based on the 2010 US Census estimates for the adult population, these rates imply that **approximately 50,000 adults (7.7%) in the 4-parish Metro Area needed but did not receive treatment in past year, including almost 21,000 in Orleans and almost 26,000 in Jefferson parishes.**⁷

Again, based on the 2010 US Census estimates for the young adult population, these rates imply that **approximately 17,000 young adults (16.8%) in the 4-parish Metro Area needed but did not receive treatment in past year—a third of the adult total—including about 8,000 each in the Orleans and Jefferson parishes.**

**Population Approximations for Unmet Treatment Need by Age Categories
Based on the National Survey of Drug Use and Health
Using the 2010 US Census SF-1 Data for Parishes**

| Age Group | Orleans | Jefferson | St. Bernard | Plaque-mines | Metro Area | Louisiana |
|----------------------|---------|-----------|-------------|--------------|---------------|-----------|
| All Adults (18+) | | | | | | |
| Population | 270,614 | 335,155 | 26,720 | 16,713 | 649,202 | 3,415,357 |
| Rate (%) | 7.74 | 7.67 | 7.74 | 7.74 | 7.70 | 7.89 |
| Prevalence | 20,932 | 25,717 | 2,067 | 1,293 | 50,009 | 269,616 |
| Young Adults (18-25) | | | | | | |
| Population | 49,215 | 44,705 | 4,538 | 2,151 | 100,609 | 528,543 |
| Rate (%) | 16.25 | 17.58 | 16.25 | 16.25 | 16.84 | 16.84 |
| Prevalence | 7,996 | 7,858 | 737 | 349 | 16,941 | 89,032 |

Source: National Center for Health Statistics from 2010 US Census. www.cdc.gov/nchs/nvss/bridged_race.htm . Population for age 25 is estimated by interpolation.

Note that unmet need estimates based on data from 2008 through 2010 may not provide useful estimates of current unmet need.

⁷ In the context of the NSDUH survey, several factors may account for the estimates of unmet need being only slightly less than the estimates of SUD prevalence, including: (1) very few residents in fact receive treatment at specialty facilities; (2) residents who did receive treatment at specialty facilities were poorly represented in the survey sample; (3) many residents who received treatment in the past year did not respond positively to the SUD criteria items. None of these factors cited imply that the unmet need estimates are too high.

Discussion

The National Survey on Drug Use and Health (NSDUH) provides the most comprehensive information available based on a national standard and permits comparisons across sub-state areas, states and regions as well as monitoring of trends over time. However, because estimates for sub-state areas require pooling three years of survey data, the average age of the data when it becomes available will always be at least 3 years old. While NSDUH may be useful for monitoring changes in substance use patterns at the national and regional levels, monitoring year-over-year trends at the sub-state level essentially means using 3-year moving averages with data that is at least three years old. Thus NSDUH does not provide a sensitive method for timely measurement of change at the sub-state level.

Substance use disorders develop over time, and once developed tend to persist over time. Even if the incidence of new cases is declining or the recovery rate is increasing, the prevalence of SUDs may remain stable in the population for some time. In any case, due to sampling error, it is unlikely that a substantial change in prevalence could be detected in the short term if it were occurring. Therefore, although the data is several years old, NSDUH remains the best source for estimating the prevalence of SUDs at the local level.

At the sub-state level SUD prevalence may change as a result of population change, both in terms of the size of the population and the mix of different population components (e.g., age, gender, and ethnicity) which may have different prevalence rates. This is especially relevant in New Orleans. Most important for improving estimates will be obtaining the most current, accurate estimate of population by age category.

In regard to estimates of unmet need, caution is advised. The treatment service system today is probably substantially different from what it was in 2008-2010, and it is likely that the system will continue to change relatively rapidly. Therefore, for purposes of estimating unmet need, access to and utilization of treatment services should be measured through reporting systems or provider surveys rather than through the NSDUH population survey.