

# The NSDUH Report

Issue 25

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## Alcohol Dependence or Abuse in Substate Areas

Use of illicit drugs, alcohol, and cigarettes is known to vary across States.<sup>1</sup> Estimates for these variations are derived from the National Survey on Drug Use and Health (NSDUH), which asks persons aged 12 or older to report on their use of cigarettes, alcohol, and

illicit drugs in the past year and in the past month. NSDUH defines *any illicit drug* as marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically. NSDUH defines *dependence or abuse* for alcohol and other substances using criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which include such symptoms as withdrawal, tolerance, use in dangerous situations, trouble with the law, and interference in major obligations at work, school, or home during the past year.<sup>2</sup>

This issue of *The NSDUH Report* uses data from the combined 2002 to 2004 surveys to present estimates of past year alcohol dependence or abuse for 340 geographic areas within the 50 States and the District of Columbia. The data are extracted from a more extensive report that includes substate estimates of 22 substance use or related measures, *Substate Estimates from the 2002-2004 National Surveys on Drug Use and Health*,<sup>3</sup> which is available online at <http://oas.samhsa.gov/metro.htm>.

### In Brief

- By combining 3 years of data from the National Survey on Drug Use and Health (NSDUH), substate estimates of substance use can be produced
- In 2002 to 2004, past year alcohol dependence or abuse varied from a low of 5.4 percent in southern Utah and in north central Florida to a high of 13.5 percent in south central Wyoming
- Of the 15 substate areas with the highest rates of past year alcohol dependence or abuse, most were in northern States in the West and Midwest

### Methodology

Estimates presented in this issue and in the full report are based on a small area estimation (SAE) procedure in which NSDUH data at the substate level are combined with local-area county and census block group/tract-level data from the area

to provide more precise estimates. The same methodology is used to produce State estimates from NSDUH.<sup>1</sup>

Substate areas were developed collaboratively between staff at the Substance Abuse and Mental Health Services Administration (SAMHSA) and State substance abuse treatment representatives. The State officials made the final decisions on the geographic boundaries.

In most States, the substate areas are defined in terms of counties or groups of counties; in some States, the areas are defined in terms of census tracts. For each of the 22 measures presented in the complete report, estimates for the substate areas were ranked from lowest to highest and grouped into seven categories.<sup>4</sup> By combining 3 years of data from NSDUH, substate estimates of substance use can be produced. The sample sizes in the substate areas range from a minimum of 200 persons to a high of more than 4,000 persons.

It is important to note that these estimates are based on a sample, and a different sample could result in slightly different high and low areas. For example, Wyoming's Judicial District 2 had the highest rate (13.5 percent) of alcohol dependence or abuse of any substate area in the Nation. It can be stated with 95 percent certainty that the true value for Judicial District 2 falls between 11.4 and 16.0 percent (based on the tables in the full report that

include the 95 percent prediction intervals). However, note that Wyoming's Judicial District 2 may not truly have the highest rate of past year alcohol dependence or abuse, but it can be said that the probability that it is truly in the *top 15 areas* is 99.1 percent.

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### Alcohol Dependence or Abuse at the Substate Level

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Nationally, 7.7 percent of persons aged 12 or older had alcohol dependence or abuse in the past year from 2002 through 2004. Alcohol dependence or abuse levels among all the substate areas tend to be highly correlated with levels of past month binge alcohol use (0.79).<sup>5</sup> For binge use of alcohol, 9 of the top 15 substate areas were also in the top 15 for alcohol dependence or abuse. Those nine areas included the top six areas for alcohol dependence or abuse.

In 2002 to 2004, past year alcohol dependence or abuse varied from a low of 5.4 percent in southern Utah<sup>6</sup> and in north central Florida<sup>7</sup> to a high of 13.5 percent in south central Wyoming.<sup>8</sup> (Figure 1). Of the 15 substate areas with the highest rates of past year alcohol dependence or abuse, most were in northern States in the West and Midwest (Montana, Nebraska, New Mexico, North Dakota, South Dakota, Wisconsin, and Wyoming). Rhode Island and the District of Columbia also

were represented in the top 15. The District of Columbia, North Dakota, South Dakota, and Wisconsin all had more than 1 of its substate areas in the top 15.

Only 4 of the top 15 substate areas for alcohol dependence or abuse were also in the top 15 for illicit drug dependence or abuse: the District of Columbia's Wards 1 and 2, Bernalillo County in New Mexico, and Washington County in Rhode Island. The correlation among the substate areas between alcohol dependence or abuse and illicit drug dependence or abuse was only 0.26.

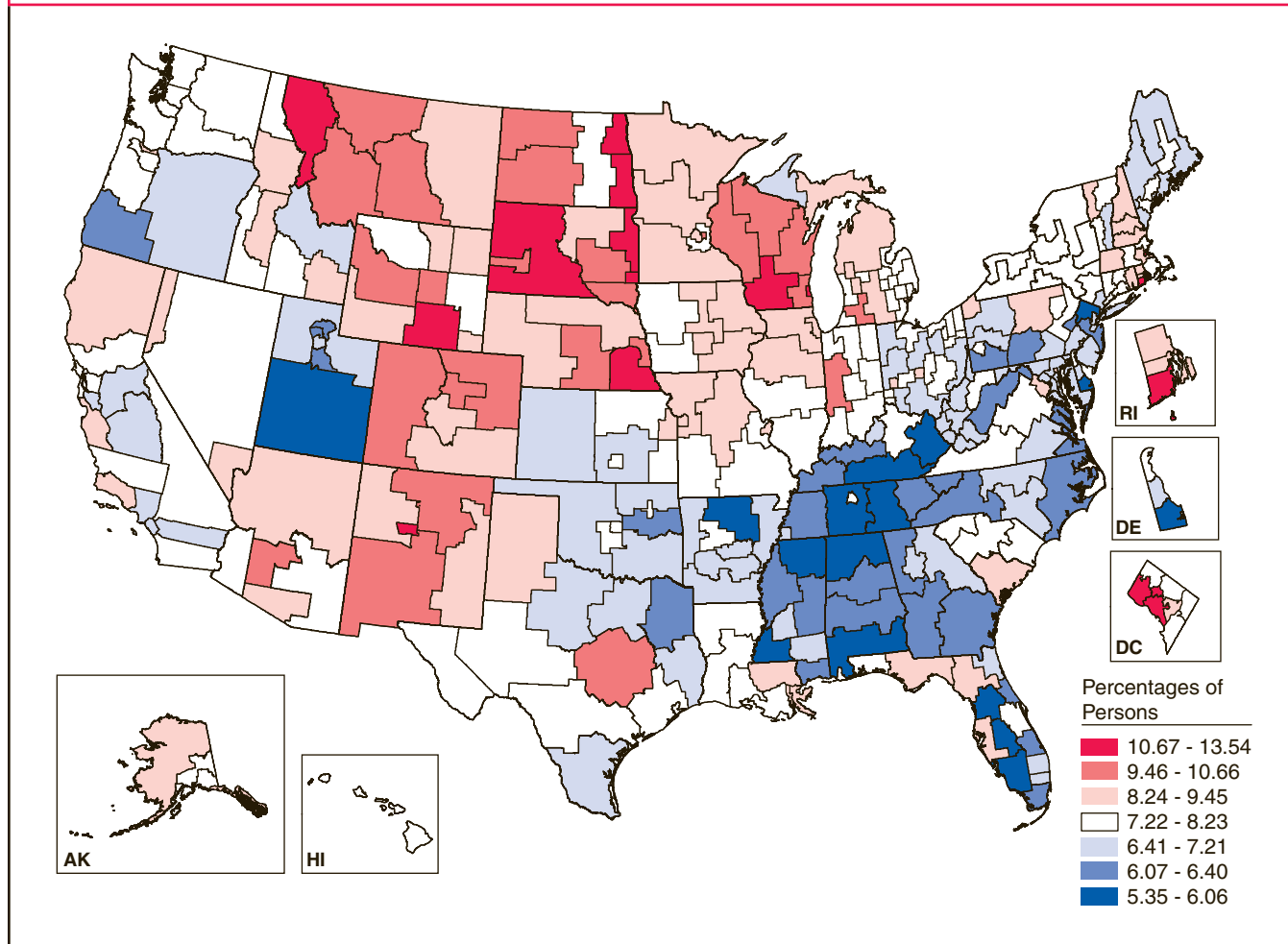
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### Complete Report

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The full report with estimates for 22 measures of substance use is available online at <http://oas.samhsa.gov/metro.htm>. In addition to past year alcohol dependence or abuse, estimates are presented for 21 other measures of substance use among persons aged 12 or older, including alcohol use, illicit drug use, tobacco use, substance dependence or abuse, needing but not receiving treatment, and serious psychological distress. Also included in that report are estimates for underage alcohol and binge alcohol use. Moreover, national maps for all measures showing the 340 substate areas, detailed tables for the substate areas, and definitions and population counts for the substate areas are provided.

**Figure 1. Alcohol Dependence or Abuse in the Past Year among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUH Data**



Source: SAMHSA, 2002, 2003 and 2004 NSDUHs.

**End Notes**

- <sup>1</sup> Wright, D., & Sathe, N. (2006). *State estimates of substance use from the 2003-2004 National Surveys on Drug Use and Health* (DHHS Publication No. SMA 06-4142, NSDUH Series H-29). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. [Available at <http://www.oas.samhsa.gov/states.htm>]
- <sup>2</sup> American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: Author.
- <sup>3</sup> Office of Applied Studies. (2006). *Substate estimates from the 2002-2004 National Surveys on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://oas.samhsa.gov/metro.htm>]

- <sup>4</sup> In the national maps, substate areas are divided into thirds. The third with the lowest prevalence estimates are presented in blue (ranging from dark to light blue), the third with the highest prevalence estimates are in red (ranging from light to dark red), and the remainder (the middle third) are in white. The darkest shades represent the 15 areas with the lowest (dark blue) and highest (dark red) prevalence estimates. The medium shades represent the next 30 lowest and highest areas, and the light shades designate the next 68 lowest and highest areas.
- <sup>5</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>6</sup> Utah's Central, Four Corners, San Juan, and Southwest region includes the following counties: Beaver, Carbon, Emery, Garfield, Grand, Iron, Juab, Kane, Millard, Piute, San Juan, Sanpete, Sevier, Washington, and Wayne.
- <sup>7</sup> Florida's District 13 includes Citrus, Hernando, Lake, Marion, and Sumter Counties.
- <sup>8</sup> Wyoming's Judicial District 2 includes Albany and Carbon Counties.

**Figure Note**

For definitions of substate regions, see Section D of the 2002-2004 substate report at <http://oas.samhsa.gov/metro.htm>.

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Research findings from the SAMHSA 2002, 2003, and 2004 National Surveys on Drug Use and Health (NSDUHs)

## Alcohol Dependence or Abuse in Substate Areas

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The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). Prior to 2002, this survey was called the National Household Survey on Drug Abuse (NHSDA). The combined 2002, 2003, and 2004 data are based on information obtained from 203,670 persons aged 12 or older. The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

*The NSDUH Report* is prepared by the Office of Applied Studies (OAS), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Information on NSDUH used in compiling data for this issue is available in the following publications:

Office of Applied Studies. (2005). *Results from the 2004 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 05-4062, NSDUH Series H-28). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2004). *Results from the 2003 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 04-3964, NSDUH Series H-25). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2003). *Results from the 2002 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 03-3836, NSDUH Series H-22). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Also available online: <http://www.oas.samhsa.gov>.

Because of improvements and modifications to the 2002 NSDUH, estimates from the 2002, 2003, and 2004 surveys should not be compared with estimates from the 2001 or earlier versions of the survey to examine changes over time.



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