

# The NSDUH Report

September 18, 2012

## Substance Use Disorders in Substate Regions: 2008 to 2010

### In Brief

- Data collected from 203,739 people over the period 2008 through 2010 show that substance use disorders vary extensively among regions within each State and throughout the Nation
- Past year alcohol use disorders (i.e., past year dependence or abuse of alcohol) ranged from 5.1 percent in south-central Kentucky (Adanta, Cumberland River, and Lifeskills region) to 12.3 percent in the west-central region (Ward 2) of the District of Columbia
- Past year illicit drug use disorders (i.e., past year dependence or abuse of illicit drugs) ranged from 1.7 percent in Iowa's Northwest substate region and North Dakota's North Central and Northwest substate region to 5.1 percent in the east-central region (Ward 7) of the District of Columbia

Substance use disorders (substance dependence or abuse) have a tremendous impact on the lives of our citizens, imposing burdens on individuals, families, communities, and governments. Nevertheless, substance use disorders are not distributed equally across all States,<sup>1</sup> and within each State, there are different patterns of substance use problems in different regions. Data on small geographic areas provide insight into the nature and scope of substance use problems and help State and local public health authorities to better understand and effectively address the needs in their communities.

The National Survey on Drug Use and Health (NSDUH) can help address the need for more localized information. This issue of *The NSDUH Report* highlights substate estimates of alcohol use disorders and illicit drug use disorders extracted from tables at <http://www.samhsa.gov/data/NSDUH/substate2k10/toc.aspx>. In addition to presenting estimates for these two substance use disorders, these tables

also present estimates for 23 other measures of substance use and mental health problems including use of illicit drugs, alcohol, and tobacco; needing and not receiving treatment for substance use problems; serious mental illness; depression; and suicidal thoughts.

NSDUH asks persons aged 12 or older questions to assess symptoms of substance use disorders during the past year using criteria in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.<sup>2</sup> It includes 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. Findings in this report are based on combined 2008 to 2010 NSDUH data from 203,739 respondents and present estimates of past year alcohol use disorders and past year illicit drug use disorders for 362 substate regions within the 50 States and the District of Columbia.<sup>3</sup>

Substate regions were defined initially by State substance abuse agency representatives (usually persons responsible for the Substance Abuse Prevention and Treatment [SAPT] Block Grant application). In collaboration with staff at the Substance Abuse and Mental Health Services Administration (SAMHSA), the final substate region boundaries were based on the State's initial recommendations but were revised, if necessary, to ensure that the NSDUH sample sizes were large enough to provide estimates with adequate precision. In most States, the substate regions are defined in terms of counties or groups of counties; in some States, the regions are defined entirely in terms of census tracts (in Connecticut, the District of Columbia, and Massachusetts), parishes (in Louisiana), or boroughs/census areas (in Alaska). For each of the 25 measures presented in the data tables available online, estimates for the substate regions nationwide were ranked from lowest to highest and grouped into seven categories.<sup>4</sup>

The estimates in this report and the full report were derived from a statistical model in which substate data from NSDUH were

combined with other local area data to provide enhanced precision.

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## Alcohol Use Disorders at the Substate Level

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Nationally, 7.3 percent of all persons aged 12 or older were classified as having alcohol use disorders in the past year. Estimates ranged from 5.1 percent in the Adanta, Cumberland River, and Lifeskills region of Kentucky (located in the south-central section of the state) to 12.3 percent in the District of Columbia's Ward 2 (located in the west-central section of the city) (Figure 1).<sup>5,6</sup>

Of the 16 substate regions with the highest rates of alcohol use disorders, 6 were in the Midwest (including 3 in South Dakota), 5 were in the West (including 2 in Montana), 4 were in the South (all in the District of Columbia), and 1 was in the Northeast.<sup>7</sup>

Of the 16 substate regions with the lowest rates of alcohol use disorders, 5 were in Kentucky, 6 were in Utah, and 2 were in West Virginia. Other States with 1 substate region each were Maine, Maryland, and North Carolina.

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## Illicit Drug Use Disorders at the Substate Level

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Nationally, 2.8 percent of all persons aged 12 or older were classified as having illicit drug use disorders in the past year. Estimates ranged from 1.7 percent in the Northwest substate region of Iowa and in the North Central and Northwest substate region of North Dakota to 5.1 percent in the District of Columbia's Ward 7 (located in the east-central section of the city) (Figure 2).<sup>8,9,10</sup>

Of the 16 substate regions with the highest rates of illicit drug use disorders, 5 were in the West (including 2 in California), 5 were in the South (3 in the District of Columbia and 2 in Florida), 4 were in the Northeast (2 each in Massachusetts and Rhode Island), and 2 were in the Midwest (Figure 2).

Of the 16 substate regions with the lowest rates of illicit drug use disorders, there were 6 in Iowa, 4 in North Dakota, 3 in Nebraska, and 3 in Wyoming (Figure 2).

to 8.3 percent in Franklin County (Board 25). Illicit drug disorders in Ohio ranged from 2.1 percent in a region in the east-central portion (Boards 7, 15, 41, 79, and 84) of the State<sup>12</sup> to 3.9 percent in Franklin County.

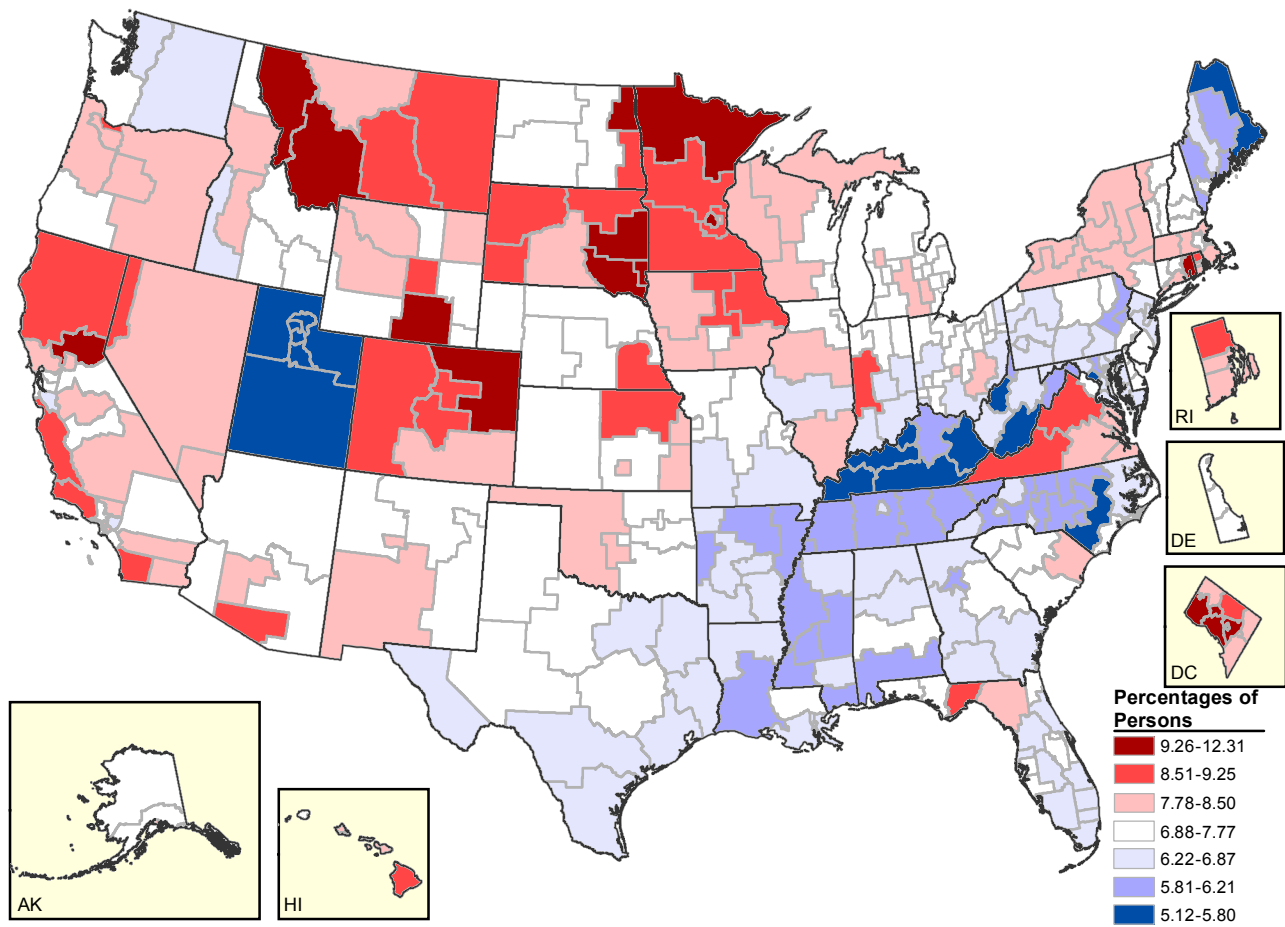
### Variations within States

Regions within the same State can vary in the prevalence of drug and alcohol disorders, as illustrated in Figures 1 and 2. In Ohio, for example, alcohol use disorders ranged from 6.5 percent in a region in the west-central portion (Boards 2, 46, 55, and 68)<sup>11</sup> of the State

### Discussion

Data in this *NSDUH Report* highlight that the prevalence of substance use disorders varies among and within States. These data can be used to help States more effectively allocate funds for prevention and treatment programs.

**Figure 1. Alcohol Use Disorders in the Past Year among Persons Aged 12 or Older, by Substate Region\*:** Percentages, Annual Averages Based on 2008 to 2010 NSDUHs



\* Substate definitions and estimates covering the combined period of 2008 to 2010 for alcohol use disorders are available online at <http://www.samhsa.gov/data/NSDUH/substate2k10/toc.aspx>

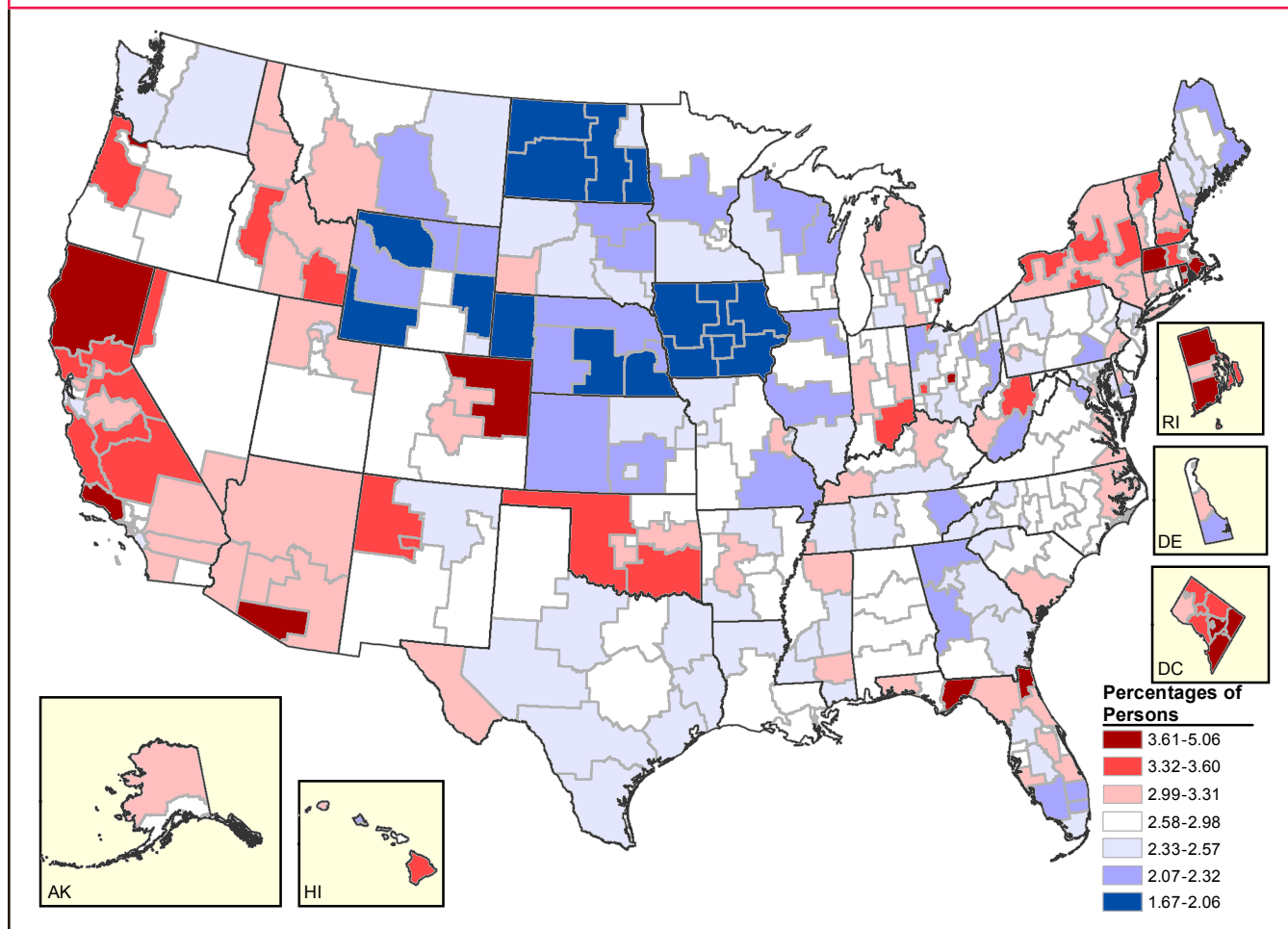
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2008, 2009, and 2010 (revised March 2012).

## Other Available NSDUH Substate Measures

Substate estimates covering the combined period of 2008 to 2010 for 25 measures of substance use and mental disorders (including the two discussed in this report) are available online at <http://www.samhsa.gov/data/NSDUH/substate2k10/toc.aspx>. In addition to substance use disorders, estimates are provided for measures of substance use and mental health problems, including use of illicit drugs (e.g.,

marijuana use, cocaine use, and nonmedical use of prescription pain relievers), alcohol, and tobacco; needing but not receiving treatment for a substance use problem; serious mental illness; depression; and suicidal thoughts. National maps for all measures and detailed tables including percentages for each substate region, State, census region, and the Nation by age group also are provided. A detailed description of the methodology used to generate these estimates is also available.

**Figure 2. Illicit Drug Use Disorders in the Past Year among Persons Aged 12 or Older, by Substate Region\*: Percentages, Annual Averages Based on 2008 to 2010 NSDUHs**



\* Substate definitions and estimates covering the combined period of 2008 to 2010 for illicit drug use disorders are available online at <http://www.samhsa.gov/data/NSDUH/substate2k10/toc.aspx>

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2008, 2009, and 2010 (revised March 2012).

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## End Notes

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- <sup>1</sup> Substance Abuse and Mental Health Services Administration. (2012). *State estimates of substance use and mental disorders from the 2009-2010 National Surveys on Drug Use and Health* (NSDUH Series H-43, HHS Publication No. SMA 12-4703). Rockville, MD: Author. Retrieved from <http://www.samhsa.gov/data/NSDUH/2k10State/NSDUHsaeTOC2010.pdf>
- <sup>2</sup> American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- <sup>3</sup> NSDUH defines illicit drugs as marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically. Nonmedical use is defined as use of prescription-type pain relievers, sedatives, stimulants, or tranquilizers not prescribed for the respondent by a physician or used only for the experience or feeling they caused. Nonmedical use of prescription-type drugs does not include over-the-counter drugs; nonmedical use of stimulants includes methamphetamine use.
- <sup>4</sup> The national maps in this *NSDUH Report* show 362 substate regions that were ranked from lowest to highest for each measure and divided into 7 categories. Colors were assigned to all substate regions so that the third having the lowest prevalence are blue (121 substate regions), the middle third are white (120 substate regions), and the third with the highest prevalence are red (121 substate regions). To further distinguish among the substate regions that display relatively higher prevalence, the "highest" third has been further subdivided into (1) dark red for the 16 substate regions with the highest estimates, (2) medium red for the 33 substate regions with the next highest estimates, and (3) light red for the 72 substate regions in the third highest group. The "lowest" third is categorized in a similar way, using three distinct shades of blue. In some cases, a group (or category) could have more or fewer substate regions because two (or more) substate regions have the same estimate (to two decimal places). When such ties occurred at the "boundary" between two groups, all substate regions with the same estimate were assigned to the lower group. These national maps are available at <http://www.samhsa.gov/data/NSDUH/substate2k10/toc.aspx>.
- <sup>5</sup> The Adanta, Lifeskills, and Cumberland River substate region of Kentucky consists of Adanta: Adair, Casey, Clinton, Cumberland, Green, McCreary, Pulaski, Russell, Taylor, and Wayne Counties; Lifeskills: Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson, and Warren Counties; and Cumberland River: Bell, Clay, Harlan, Jackson, Knox, Laurel, Rockcastle, and Whitley Counties.
- <sup>6</sup> Ward 2 includes census tracts primarily in the west-central part of the District of Columbia.
- <sup>7</sup> The West has 13 States: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, and WY. The South has 16 States plus the District of Columbia: AL, AR, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, and WV. The Northeast has 9 States: CT, MA, ME, NH, NJ, NY, PA, RI, and VT. The Midwest has 12 States: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, and WI.
- <sup>8</sup> The Northwest substate region of Iowa consists of Audubon, Buena Vista, Calhoun, Carroll, Cherokee, Clay, Crawford, Dickinson, Emmet, Greene, Guthrie, Hamilton, Humboldt, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Shelby, Sioux, Webster, Woodbury, and Wright Counties.
- <sup>9</sup> This North Central and Northwest substate region of North Dakota consists of North Central: Bottineau, Burke, McHenry, Mountrail, Pierce, Renville, and Ward Counties; and Northwest: Divide, McKenzie, and Williams Counties.
- <sup>10</sup> Ward 7 includes census tracts primarily in the east-central part of the District of Columbia.
- <sup>11</sup> The Boards 2, 46, 55, and 68 substate region of Ohio consists of Board 2: Allen, Auglaize, and Hardin Counties; Board 46: Champaign and Logan Counties; Board 55: Darke, Miami, and Shelby Counties; and Board 68: Preble County.
- <sup>12</sup> The Boards 7, 15, 41, 79, and 84 substate region of Ohio consists of Board 7: Belmont, Harrison, and Monroe Counties; Board 15: Columbiana County; Board 41: Jefferson County; Board 79: Carroll and Tuscarawas Counties; and Board 84: Washington County.

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## Suggested Citation

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Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (September 18, 2012). *The NSDUH Report: Substance Use Disorders in Substate Regions: 2008 to 2010*. Rockville, MD.

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Findings from SAMHSA's 2008 to 2010 National Surveys on Drug Use and Health (NSDUHs)

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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). The 2008 to 2010 data used in this report are based on information obtained from 203,739 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 Center for Behavioral Health Statistics and Quality (CBHSQ), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Information on the most recent NSDUH is available in the following publication:

Center for Behavioral Health Statistics and Quality. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of national findings* (NSDUH Series H-41, HHS Publication No. SMA 11-4658). Rockville, MD: Substance Abuse and Mental Health Services Administration.

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



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