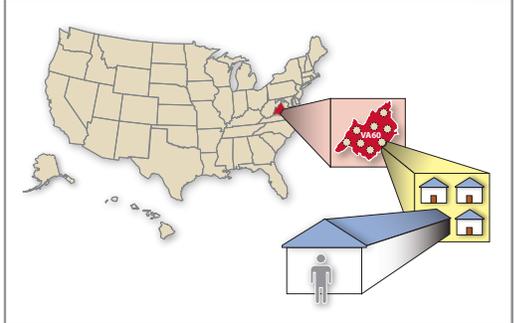


The NSDUH Report

February 28, 2014

State Estimates of Adult Mental Illness from the 2011 and 2012 National Surveys on Drug Use and Health



Mental illness is a major public health concern in the United States.¹ Information on the prevalence of mental illness is needed to help guide and inform effective treatment and prevention programs. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides block grant funding to States in support of programs and services for adults with mental illness with the goal to improve the life of adults and their capacity to work in their community.²

SAMHSA defines mental illness based on diagnostic criteria in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).³ Any mental illness (AMI) among adults aged 18 or older is the presence of any mental, behavioral, or emotional disorder in the past year that met DSM-IV criteria. Among adults with a disorder, those adults whose disorder caused substantial functional impairment (i.e., a disorder that substantially interfered with or limited one or more major life activities) are defined as having serious mental illness (SMI) and have the most urgent need for treatment.⁴ In 2012, only 62.9 percent of adults with SMI (6.0 million people) had received mental health treatment nationally in the past 12 months.⁴

This issue of *The NSDUH Report* presents State-level estimates of SMI based on data collected from approximately 92,400 adults aged 18 or older from the combined 2011 and 2012 National Surveys on Drug Use and Health (NSDUHs).⁵ Estimates are displayed in two tables and on two U.S. maps. In the tables, State estimates are listed alphabetically for easy reference. To produce the maps, State estimates shown to two decimal places were first rank ordered from lowest to highest and then divided into quintiles (fifths).⁶ States with the lowest estimates (i.e., the lowest fifth) are assigned to the bottom quintile and are shown in dark blue. States with the highest estimates are assigned to the top quintile and are shown in dark red. All other States are assigned to one of three quintiles between the lowest and

IN BRIEF

New State-level estimates produced by SAMHSA will advance our understanding of the nature and extent of mental illness; State-level data is critical to policymakers responsible for the planning and implementation of effective programs and services in communities

Among adults aged 18 or older, the rate of serious mental illness (SMI) in the past year ranged from 3.1 percent in New Jersey to 5.5 percent in West Virginia; nationally the rate was 4.0 percent, which equates to 9.3 million Americans with SMI

Nationally, 42.5 million adults aged 18 or older experienced any mental illness (AMI) in the past year, corresponding to a rate of 18.2 percent of the adult population; among States, AMI rates ranged from 14.7 percent in New Jersey to 22.3 percent in Utah

highest quintiles. In some cases, a “quintile” could have more or fewer States than desired because two (or more) States have the same estimate (to two decimal places). When such ties occurred at the “boundary” between two quintiles, all States with the same estimate were assigned to the lower quintile. These estimates are the result of an expanded mental health questionnaire that has provided State estimates of various mental health indicators annually since 2008.⁷

Serious Mental Illness

Among adults aged 18 or older, the national rate of SMI was 4.0 percent, which equates to 9.3 million Americans. Among individual States, the percentage of adults aged 18 or older with SMI ranged from 3.1 percent in New Jersey to 5.5 percent in West Virginia (Figure 1, Table 1). New Jersey shares the lowest quintile with Hawaii, Illinois, and Connecticut (at 3.2 percent each); Maryland (3.3 percent); and the District of Columbia (3.4 percent). The remaining States in the lowest quintile for SMI are Louisiana, New York, California, and Georgia. Along with West Virginia, States with the highest SMI rates include Oklahoma (5.2 percent), along with Utah, Washington, and Arkansas (each with a rate of 5.1 percent). Kentucky, Vermont, New Mexico, Mississippi, and Idaho make up the rest of the States in the top quintile. States with high and low rates of SMI occurred in all regions of the United States, with no notable regional clustering of high and low rates.

Any Mental Illness

Nationally, 42.5 million adults aged 18 or older experienced any mental illness in the past year, corresponding to a rate of 18.2 percent. Among States, AMI rates ranged from 14.7 percent in New Jersey to 22.4 percent in Utah (Figure 2, Table 2). Including New Jersey, States with the lowest rates include Illinois (15.9 percent), Nevada (16.1 percent), Connecticut (16.7 percent), and North Carolina (16.8 percent). Texas, Florida, Minnesota, North Dakota, and Massachusetts complete the list of States in the bottom quintile. Along with Utah, the States with the highest rates include Oklahoma (21.9 percent), West Virginia (21.4 percent), Oregon (20.9 percent), and Washington (20.8 percent). Other States in the top quintile are

Idaho, Mississippi, Tennessee, Maine, and Indiana. As with SMI, high and low rates of AMI occurred in all regions of the United States.

Discussion

Although there is wide variation in the rates of SMI and AMI among States, there were people with SMI and AMI in every State. States with high and low rates of SMI and AMI are located in all regions of the United States. Idaho, Mississippi, Oklahoma, Utah, Washington, and West Virginia had the highest rates for both SMI and AMI. Connecticut, Illinois, and New Jersey had the lowest rates across both measures. The presence of SMI and AMI in every state reinforces that mental illness is a major public health concern in the United States. Factors that potentially contribute to the variation are not well understood and need further study. However, policymakers can use State-level information to help inform their assessments of mental health needs in their communities. As data from a number of years of NSDUHs are accumulated, in-depth analysis of these State-level data will continue to provide insight into the patterns of mental illness, such as variations over time and by age and gender within each State.

End Notes

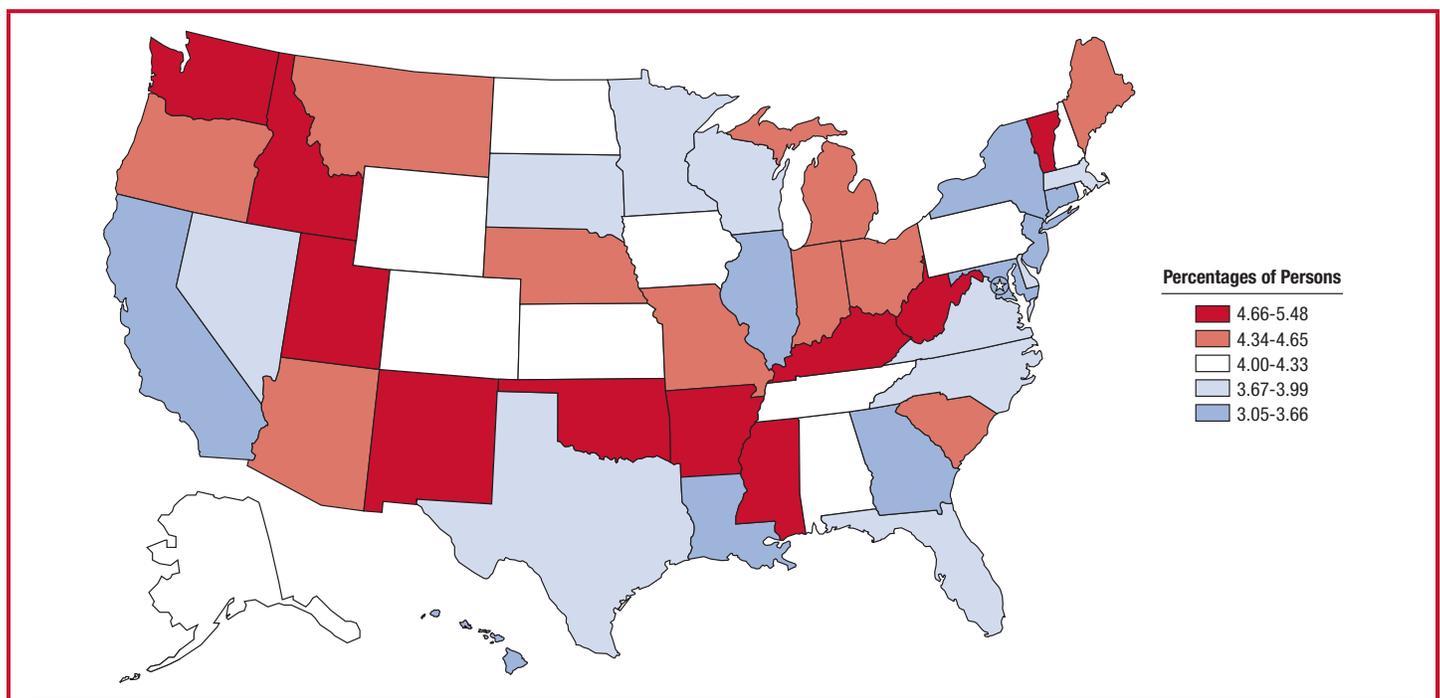
1. Center for Behavioral Health Statistics and Quality. (2013). *Behavioral Health, United States, 2012* (HHS Publication No. SMA 13-4797). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.samhsa.gov/data/2012BehavioralHealthUS/2012-BHUS.pdf>
2. Public Law No. 102-321, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) Reorganization Act of 1992, established a block grant for States within the United States to fund community mental health services for adults with serious mental illness. The law required States to include prevalence estimates in their annual applications for block grant funds. This legislation also required SAMHSA to develop an operational definition of serious mental illness. Information about SAMHSA's block grant programs can be found at <http://www.samhsa.gov/grants/blockgrant/>.
3. American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC: Author.
4. A discussion of the methodology used to generate serious mental illness and any mental illness estimates can be found in Appendix B of the 2012 NSDUH mental health findings. For information on mental illness and mental health service utilization, see chapter 2 in Center for Behavioral Health Statistics and Quality. (2013). *Results from the 2012 National Survey on Drug Use and Health: Mental health findings*

Table 1. Serious Mental Illness (SMI) in the Past Year among Persons Aged 18 or Older, by State: Percentages, Annual Averages Based on 2011 and 2012 NSDUHs

State	Percentage	95% Confidence Interval (Lower, Upper)	State	Percentage	95% Confidence Interval (Lower, Upper)
Total United States	3.97%	(3.78%, 4.17%)	Missouri	4.51%	(3.60%, 5.64%)
Alabama	4.06%	(3.22%, 5.12%)	Montana	4.43%	(3.52%, 5.56%)
Alaska	4.15%	(3.30%, 5.19%)	Nebraska	4.40%	(3.51%, 5.49%)
Arizona	4.60%	(3.62%, 5.83%)	Nevada	3.95%	(3.07%, 5.05%)
Arkansas	5.07%	(4.01%, 6.39%)	New Hampshire	4.05%	(3.17%, 5.16%)
California	3.61%	(3.08%, 4.21%)	New Jersey	3.05%	(2.34%, 3.98%)
Colorado	4.15%	(3.28%, 5.23%)	New Mexico	4.72%	(3.75%, 5.93%)
Connecticut	3.24%	(2.54%, 4.13%)	New York	3.60%	(3.05%, 4.25%)
Delaware	3.74%	(2.94%, 4.76%)	North Carolina	3.92%	(3.08%, 4.99%)
District of Columbia	3.35%	(2.63%, 4.24%)	North Dakota	4.04%	(3.21%, 5.07%)
Florida	3.75%	(3.17%, 4.44%)	Ohio	4.65%	(4.04%, 5.35%)
Georgia	3.66%	(2.88%, 4.63%)	Oklahoma	5.24%	(4.14%, 6.63%)
Hawaii	3.15%	(2.42%, 4.10%)	Oregon	4.60%	(3.67%, 5.73%)
Idaho	4.67%	(3.67%, 5.93%)	Pennsylvania	4.06%	(3.49%, 4.71%)
Illinois	3.21%	(2.72%, 3.79%)	Rhode Island	4.25%	(3.30%, 5.46%)
Indiana	4.51%	(3.58%, 5.67%)	South Carolina	4.50%	(3.53%, 5.71%)
Iowa	4.12%	(3.26%, 5.20%)	South Dakota	3.85%	(3.03%, 4.88%)
Kansas	4.33%	(3.41%, 5.49%)	Tennessee	4.25%	(3.38%, 5.33%)
Kentucky	4.74%	(3.71%, 6.05%)	Texas	3.68%	(3.12%, 4.34%)
Louisiana	3.56%	(2.79%, 4.54%)	Utah	5.14%	(4.10%, 6.43%)
Maine	4.38%	(3.45%, 5.54%)	Vermont	4.74%	(3.76%, 5.98%)
Maryland	3.27%	(2.53%, 4.22%)	Virginia	3.87%	(3.06%, 4.89%)
Massachusetts	3.71%	(2.91%, 4.71%)	Washington	5.14%	(4.06%, 6.50%)
Michigan	4.53%	(3.91%, 5.24%)	West Virginia	5.48%	(4.36%, 6.87%)
Minnesota	3.86%	(3.06%, 4.86%)	Wisconsin	3.99%	(3.12%, 5.09%)
Mississippi	4.69%	(3.68%, 5.97%)	Wyoming	4.23%	(3.36%, 5.31%)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 (revised October 2013) and 2012.

Figure 1. Serious Mental Illness (SMI) in the Past Year among Persons Aged 18 or Older, by State: Percentages, Annual Averages Based on 2011 and 2012 NSDUHs



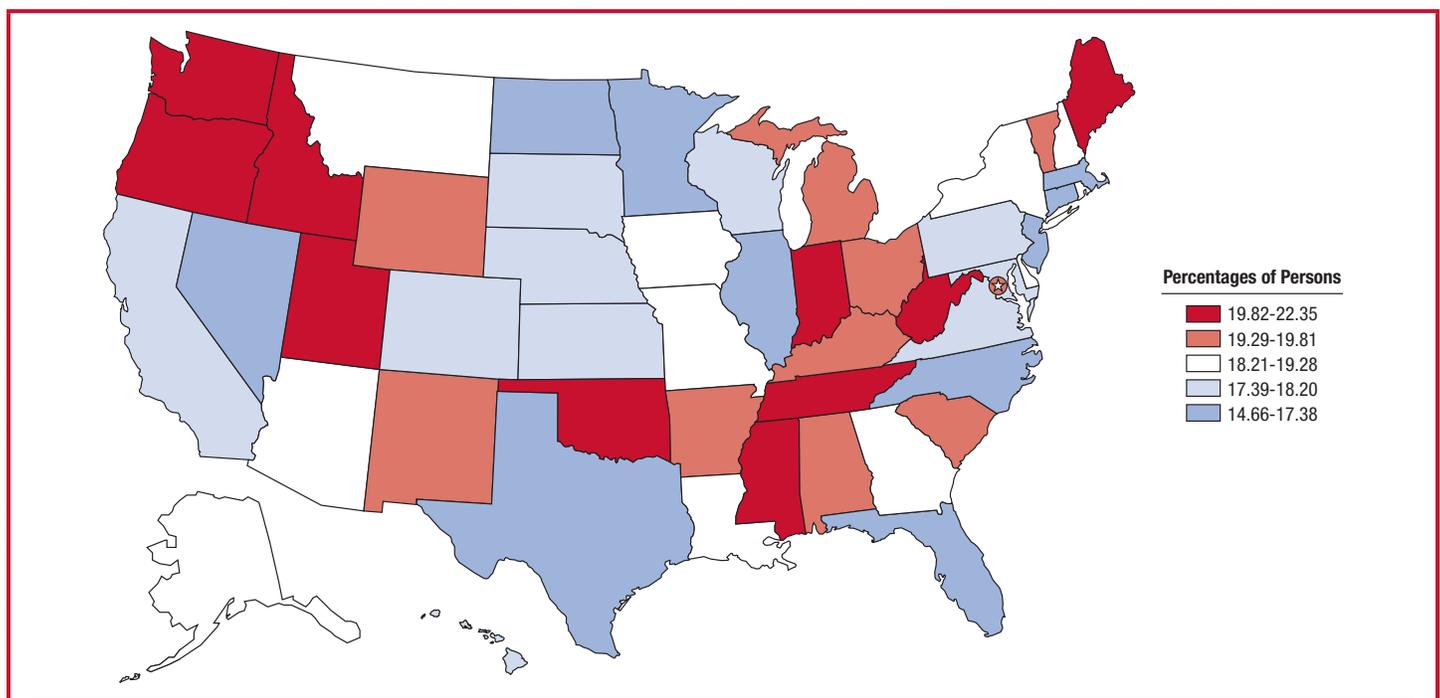
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 (revised October 2013) and 2012.

Table 2. Any Mental Illness (AMI) in the Past Year among Persons Aged 18 or Older, by State: Percentages, Annual Averages Based on 2011 and 2012 NSDUHs

State	Percentage	95% Confidence Interval (Lower, Upper)	State	Percentage	95% Confidence Interval (Lower, Upper)
Total United States	18.19%	(17.77%, 18.62%)	Missouri	18.99%	(16.80%, 21.38%)
Alabama	19.34%	(17.15%, 21.74%)	Montana	18.92%	(16.72%, 21.33%)
Alaska	18.94%	(16.73%, 21.35%)	Nebraska	17.89%	(15.72%, 20.29%)
Arizona	18.83%	(16.51%, 21.39%)	Nevada	16.05%	(13.91%, 18.44%)
Arkansas	19.81%	(17.43%, 22.43%)	New Hampshire	18.53%	(16.35%, 20.93%)
California	17.68%	(16.39%, 19.04%)	New Jersey	14.66%	(12.54%, 17.05%)
Colorado	18.12%	(15.97%, 20.50%)	New Mexico	19.59%	(17.17%, 22.25%)
Connecticut	16.71%	(14.63%, 19.03%)	New York	18.61%	(17.26%, 20.04%)
Delaware	18.26%	(16.15%, 20.58%)	North Carolina	16.84%	(14.63%, 19.33%)
District of Columbia	19.44%	(17.24%, 21.85%)	North Dakota	17.21%	(15.21%, 19.41%)
Florida	16.87%	(15.55%, 18.27%)	Ohio	19.64%	(18.34%, 21.02%)
Georgia	18.99%	(16.81%, 21.39%)	Oklahoma	21.88%	(19.46%, 24.50%)
Hawaii	17.48%	(15.35%, 19.85%)	Oregon	20.89%	(18.48%, 23.53%)
Idaho	20.58%	(18.24%, 23.14%)	Pennsylvania	17.99%	(16.72%, 19.34%)
Illinois	15.86%	(14.64%, 17.16%)	Rhode Island	18.80%	(16.61%, 21.22%)
Indiana	19.87%	(17.59%, 22.36%)	South Carolina	19.56%	(17.21%, 22.15%)
Iowa	18.40%	(16.19%, 20.84%)	South Dakota	17.77%	(15.61%, 20.15%)
Kansas	18.20%	(16.03%, 20.59%)	Tennessee	20.25%	(17.94%, 22.78%)
Kentucky	19.47%	(17.15%, 22.03%)	Texas	16.86%	(15.64%, 18.16%)
Louisiana	19.28%	(17.26%, 21.49%)	Utah	22.35%	(20.02%, 24.86%)
Maine	20.05%	(17.70%, 22.62%)	Vermont	19.39%	(17.17%, 21.82%)
Maryland	17.93%	(15.75%, 20.34%)	Virginia	17.50%	(15.35%, 19.87%)
Massachusetts	17.38%	(15.38%, 19.58%)	Washington	20.77%	(18.41%, 23.34%)
Michigan	19.81%	(18.52%, 21.16%)	West Virginia	21.38%	(19.04%, 23.93%)
Minnesota	17.18%	(15.01%, 19.58%)	Wisconsin	17.98%	(15.78%, 20.41%)
Mississippi	20.27%	(18.00%, 22.76%)	Wyoming	19.60%	(17.61%, 21.76%)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 (revised October 2013) and 2012.

Figure 2. Any Mental Illness (AMI) in the Past Year among Persons Aged 18 or Older, by State: Percentages, Annual Averages Based on 2011 and 2012 NSDUHs



Percentages of Persons

- 19.82-22.35
- 19.29-19.81
- 18.21-19.28
- 17.39-18.20
- 14.66-17.38

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 (revised October 2013) and 2012.

(HHS Publication No. SMA 13-4805, NSDUH Series H-47). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from http://www.samhsa.gov/data/NSDUH/2k12MH_FindingsandDetTables/Index.aspx

5. Model-based State estimates are presented in this short report using small area estimation methodology, which provides more precise estimates at the State level. Detailed tables containing these estimates, along with other measures of substance use and mental disorders, can be found at <http://www.samhsa.gov/data/NSDUH/2k12State/NSDUHsae2012/Index.aspx>.
6. In this report, State estimates are discussed in terms of their observed rankings because they provide useful context. A State having a highest or lowest rate does not imply that the State's rate is significantly higher or lower than the rate of the next highest or lowest State. When comparing two State prevalence rates, two overlapping 95 percent confidence intervals do not imply that the State prevalence rates are statistically equivalent at the 5 percent level of significance. For details on a more accurate test to compare State prevalence rates, please see Section B.12 in Appendix B of *2011-2012 National Survey on Drug Use and Health: Guide to state tables and summary of small area estimation methodology*, located at <http://www.samhsa.gov/data/NSDUH/2k12State/NSDUHsae2012/Index.aspx>.
7. SAMHSA has been publishing estimates of the prevalence of past year serious mental illness (SMI) and any mental illness among adults aged 18 or older since the release of the 2008 NSDUH National Findings report. Estimates were based on a model developed in 2008. In 2013, SAMHSA developed a more accurate model for the 2012 data and subsequently revised the SMI and any mental illness estimates for the years 2008, 2009, 2010, and 2011 based on the 2012 model. The combined 2011-2012 State estimates in this report are based on the 2012 model. For additional information, see the NSDUH short report titled *Revised Estimates of Mental Illness from the National Survey on Drug Use and Health* at <http://www.samhsa.gov/data/2k13/NSDUH148/sr148-mental-illness-estimates.pdf>.

Suggested Citation

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The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities.

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 2011 and 2012 data used in this report are based on information obtained from 92,400 persons aged 18 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 Behavior Health Statistics and Quality. (2013). *Results from the 2012 National Survey on Drug Use and Health: Summary of national findings* (HHS Publication No. SMA 13-4795, NSDUH Series H-46). Rockville MD: Substance Abuse and Mental Health Services Administration.

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



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