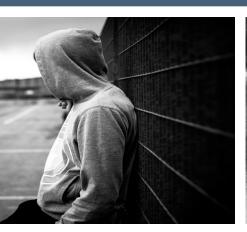
## 50 1010 beo minimum

# Behavioral Health Barometer Missouri, 2013













#### Acknowledgments

This report was prepared for the Substance Abuse and Mental Health Services Administration (SAMHSA) by RTI International under contract No. 283-07-0208 with SAMHSA, U.S. Department of Health and Human Services (HHS). MANILA Consulting Group, Inc., provided graphic design and editorial support under contract No. 283-10-0346.

#### **Public Domain Notice**

All material appearing in this report is in the public domain and may be reproduced or copied without permission from SAMHSA. Citation of the source is appreciated. However, this publication may not be reproduced or distributed for a fee without the specific, written authorization of the Office of Communications, SAMHSA, HHS.

#### **Electronic Access and Printed Copies**

This publication may be downloaded or ordered at <a href="http://store.samhsa.gov">http://store.samhsa.gov</a>. Or call SAMHSA at 1-877-SAMHSA-7 (1-877-726-4727) (English and Español).

#### **Recommended Citation**

Substance Abuse and Mental Health Services Administration. *Behavioral Health Barometer: Missouri, 2013.* HHS Publication No. SMA-13-4796MO. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.

#### **Originating Office**

Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 1 Choke Cherry Road, Rockville, MD 20857.

### CONTENTS



FOREWORD	iii
YOUTH SUBSTANCE USE	1
Illicit Drug Use	
Cigarette Use	2
Age at First Use and Risk Perceptions	3
YOUTH MENTAL HEALTH AND TREATMENT	5
Depression	
Treatment for Depression	
Treatifient for Depression	
MENTAL HEALTH AND TREATMENT	7
Thoughts of Suicide	7
Serious Mental Illness	8
Treatment for Any Mental Illness	9
Mental Health Consumers	10
SUBSTANCE USE	11
Alcohol Dependence or Abuse	
Illicit Drug Dependence or Abuse	
Heavy Alcohol Use	
rieavy Alcohol ose	
SUBSTANCE USE TREATMENT	14
Enrollment and Treatment Focus	14
Alcohol	
Opioids (Medication-Assisted Therapy)	
Illicit Drugs	17
FIGURE NOTES	18
DEFINITIONS	19
SOLIDOES	20

#### **FOREWORD**



The Substance Abuse and Mental Health Services Administration (SAMHSA), an operating division within the U.S. Department of Health and Human Services (HHS), is charged with reducing the impact of substance abuse and mental illness on America's communities. SAMHSA is pursuing this mission at a time of significant change. Health reform has been enacted, bringing sweeping changes to how the United States delivers, pays for, and monitors health care. Simultaneously, State budgets are shrinking, and fiscal restraint is a top priority.

This is the first edition of the *Behavioral Health Barometer: Missouri*, one of a series of State and national reports that provide a snapshot of behavioral health in the United States. The reports present a set of substance use and mental health indicators as measured through data collection efforts sponsored by SAMHSA, including the National Survey on Drug Use and Health and the National Survey of Substance Abuse Treatment Services. This array of indicators provides a unique overview of the Nation's behavioral health at a point in time as well as a mechanism for tracking change and trends over time. As new data become available, indicators highlighted in these reports will be updated to reflect the current state of the science and incorporate new measures of interest. The Behavioral Health Barometers will provide critical information to a variety of audiences in support of SAMHSA's mission of reducing the impact of substance abuse and mental illness on America's communities.

Behavioral Health Barometers for all 50 States, the District of Columbia, and the Nation will be published on a regular basis as part of SAMHSA's larger behavioral health quality improvement approach.

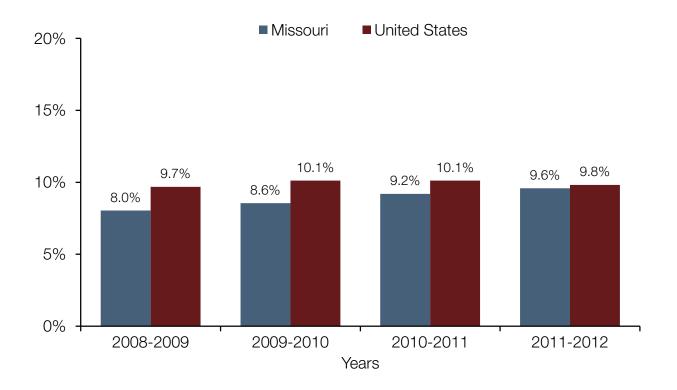
Pamela S. Hyde, J.D., Administrator Substance Abuse and Mental Health Services Administration

## YOUTH SUBSTANCE USE ILLICIT DRUG USE



Past-Month Illicit Drug Use among Persons Aged 12-17 in Missouri and the United States (2008-2012)<sup>1</sup>

Missouri's rate of illicit drug use among youths was similar to the national rate in 2011-2012.





In Missouri, about 40,000 youths (8.5% of all youths) per year in 2008-2012\* reported using illicit drugs within the month prior to being surveyed.

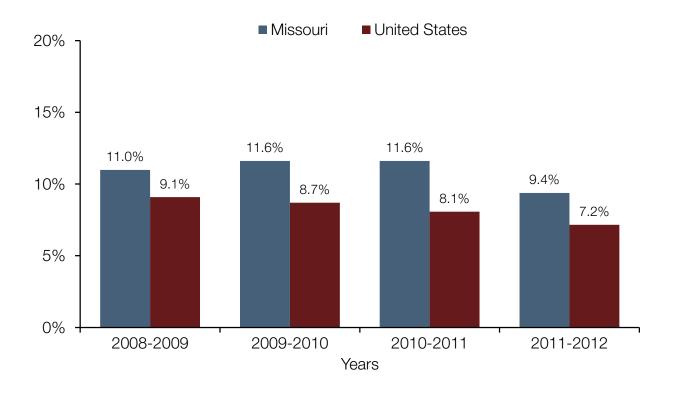
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

## YOUTH SUBSTANCE USE CIGARETTE USE



Past-Month Cigarette Use among Persons Aged 12-17 in Missouri and the United States (2008-2012)<sup>1</sup>

Missouri's rate of cigarette use among youths was higher than the national rate in 2011-2012.





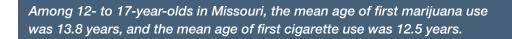
In Missouri, about 55,000 youths (11.5% of all youths) per year in 2008-2012\* reported using cigarettes within the month prior to being surveyed.

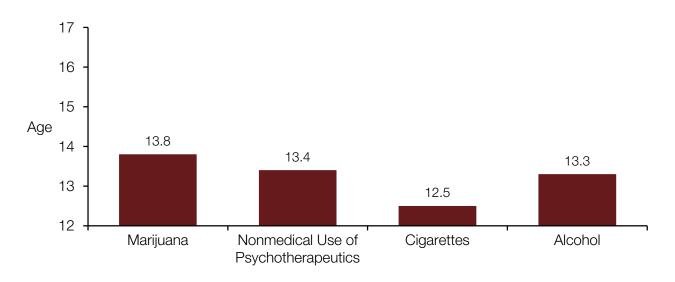
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

### YOUTH SUBSTANCE USE AGE AT FIRST USE AND RISK PERCEPTIONS

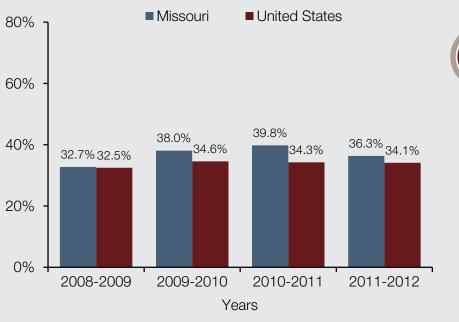


Mean Age of First Use of Selected Substances among Persons Aged 12-17 in Missouri (2008-2012)<sup>2</sup>





### Persons Aged 12-17 in Missouri and the United States Who Perceived No Great Risk from Smoking One or More Packs of Cigarettes a Day (2008-2012)<sup>1</sup>





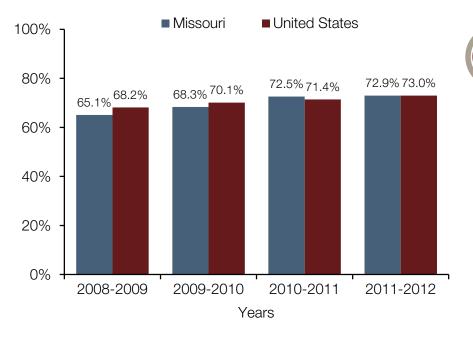
About 1 in 3 (36.3%) 12- to 17-year-olds in Missouri in 2011-2012 perceived no great risk from smoking one or more packs of cigarettes a day—a rate similar to the national rate.

The percentage of Missouri youths perceiving no great risk from smoking one or more packs of cigarettes a day did not change significantly from 2008 to 2012.

### YOUTH SUBSTANCE USE AGE AT FIRST USE AND RISK PERCEPTIONS



### Persons Aged 12-17 in Missouri and the United States Who Perceived No Great Risk from Smoking Marijuana Once a Month (2008-2012)<sup>1</sup>

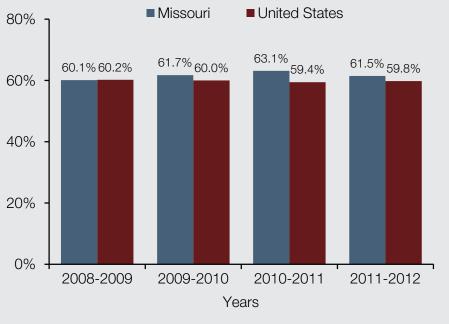


**72.9%** About 17-y 201 from

About 7 in 10 (72.9%) 12- to 17-year-olds in Missouri in 2011-2012 perceived no great risk from smoking marijuana once a month—a rate similar to the national rate.

The percentage of Missouri youths perceiving no great risk from marijuana use once a month increased from 2008 to 2012.

### Persons Aged 12-17 in Missouri and the United States Who Perceived No Great Risk from Having Five or More Drinks Once or Twice a Week (2008-2012)<sup>1</sup>





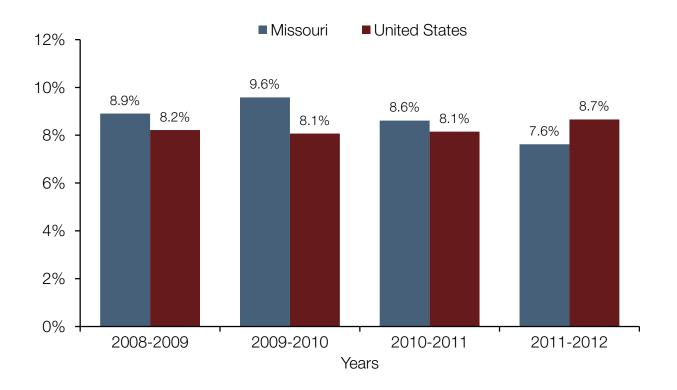
About 6 in 10 (61.5%) 12- to 17-year-olds in Missouri in 2011-2012 perceived no great risk from drinking five or more drinks once or twice a week.

### YOUTH MENTAL HEALTH AND TREATMENT DEPRESSION



Past-Year Major Depressive Episode (MDE) among Persons Aged 12-17 in Missouri and the United States (2008-2012)<sup>1,3</sup>

Missouri's rate of MDE among youths was similar to the national rate in 2011-2012.





In Missouri, about 42,000 youths (8.9% of all youths) per year in 2008-2012\* had at least one MDE within the year prior to being surveyed. The percentage did not change significantly over this period.

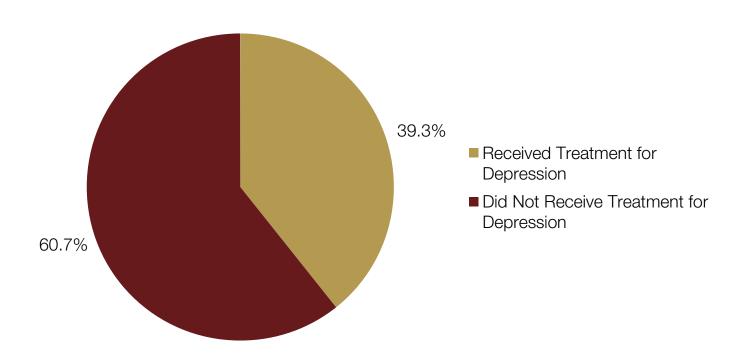
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

## YOUTH MENTAL HEALTH AND TREATMENT TREATMENT FOR DEPRESSION



Past-Year Depression Treatment among Persons Aged 12-17 with Major Depressive Episode (MDE) in Missouri (2008-2012)<sup>2,3</sup>

Missouri's rate of treatment for depression among youths with MDE was similar to the national rate in 2008-2012\*.



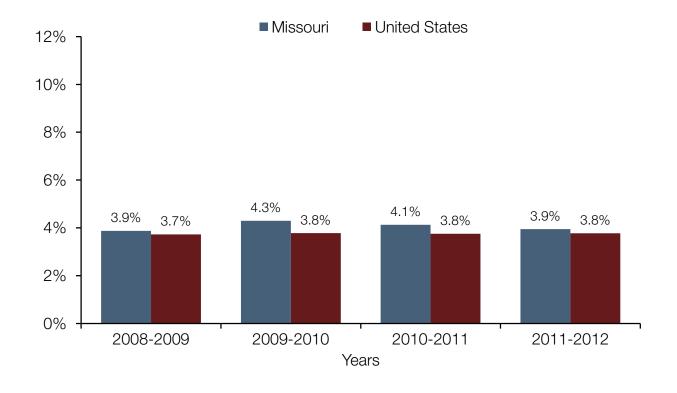
In Missouri, about 16,000 youths with MDE (39.3% of all youths with MDE) per year in 2008-2012 received treatment for their depression within the year prior to being surveyed.

## MENTAL HEALTH AND TREATMENT THOUGHTS OF SUICIDE



Past-Year Serious Thoughts of Suicide among Persons Aged 18 or Older in Missouri and the United States (2008-2012)<sup>1,4</sup>

Missouri's percentage of adults with suicidal thoughts was similar to the national percentage in 2011-2012.





In Missouri, about 197,000 adults (4.4% of all adults) in 2008-2012\* had serious thoughts of suicide within the year prior to being surveyed. The percentage did not change significantly over this period.

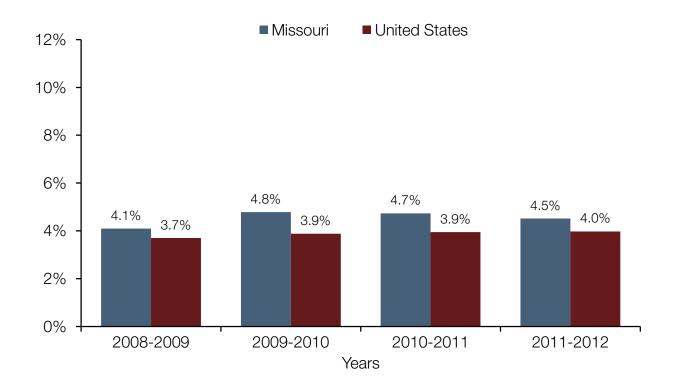
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

## MENTAL HEALTH AND TREATMENT SERIOUS MENTAL ILLNESS



Past-Year Serious Mental Illness (SMI) among Persons Aged 18 or Older in Missouri and the United States (2008-2012)<sup>1,2,5</sup>

Missouri's rate of SMI among adults was similar to the national rate in 2011-2012.





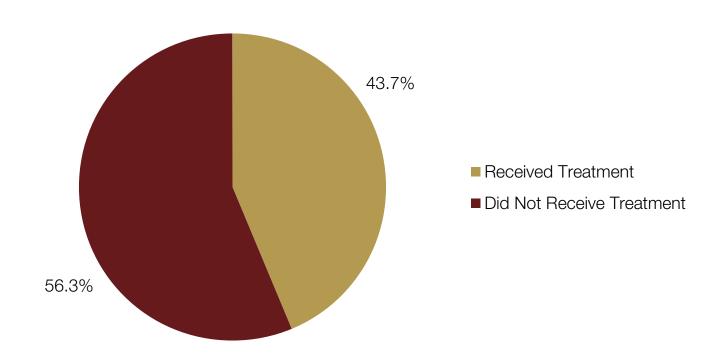
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

## MENTAL HEALTH AND TREATMENT TREATMENT FOR ANY MENTAL ILLNESS



Past-Year Mental Health Treatment/Counseling among Persons Aged 18 or Older with Any Mental Illness (AMI) in Missouri (2008-2012)<sup>2,5</sup>

Missouri's rate of mental health treatment among adults with AMI was similar to the national rate in 2008-2012\*.





In Missouri, about 371,000 adults with AMI (43.7% of all adults with AMI) per year in 2008-2012 received mental health treatment or counseling within the year prior to being surveyed.

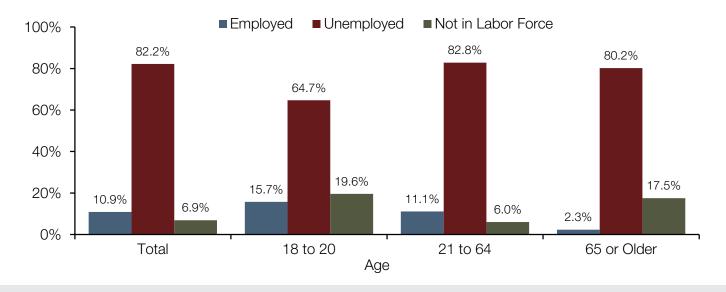
## MENTAL HEALTH AND TREATMENT MENTAL HEALTH CONSUMERS



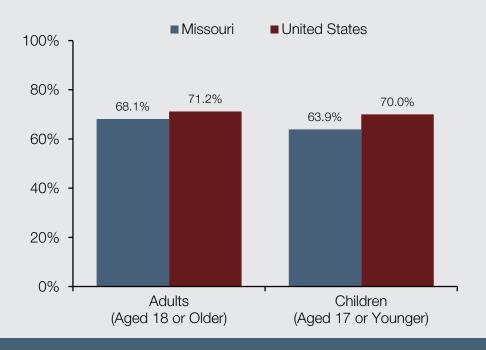
Adult Mental Health Consumers Served in the Public Mental Health System in Missouri, by Employment Status and Age (2012)<sup>6</sup>

Among adults served in Missouri's public mental health system in 2012, 19.6% of those aged 18-20, 6.0% of those aged 21-64, and 17.5% of those aged 65 or older were not in the labor force.

In 2012, 15,788 children and youths were served in Missouri's public mental health system.



Mental Health Consumers in Missouri and the United States Reporting Improved Functioning from Treatment Received in the Public Mental Health System (2012)<sup>6</sup>



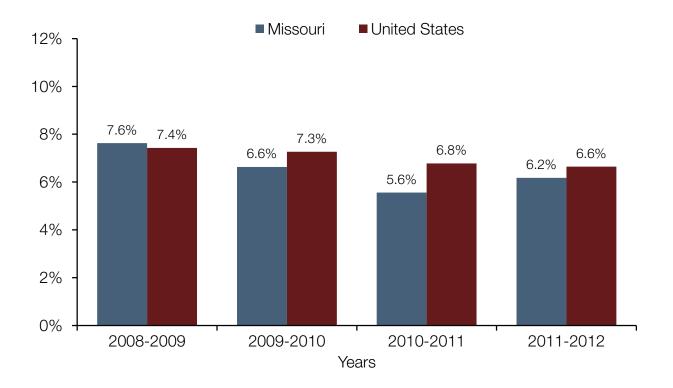
The percentage of youths reporting improved functioning from treatment received through the public mental health system was lower in Missouri than in the Nation as a whole.

### SUBSTANCE USE ALCOHOL DEPENDENCE OR ABUSE



Past-Year Alcohol Dependence or Abuse among Persons Aged 12 or Older in Missouri and the United States (2008-2012)<sup>1</sup>

Missouri's rate of alcohol dependence or abuse among persons aged 12 or older was similar to the national rate in 2011-2012.





In Missouri, about 321,000 persons aged 12 or older (6.5% of all persons in this age group) per year in 2008-2012\* were dependent on or abused alcohol within the year prior to being surveyed. The percentage decreased over this period.

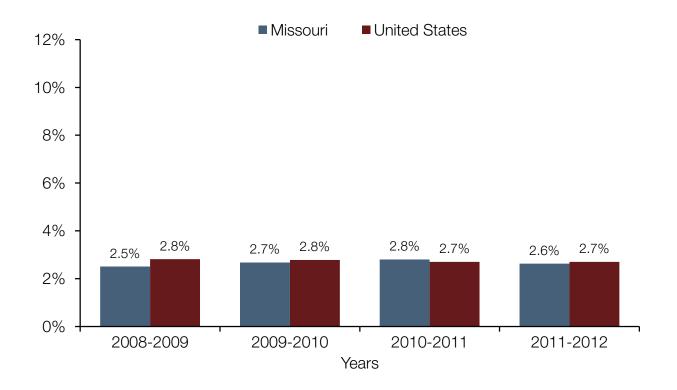
<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

### SUBSTANCE USE ILLICIT DRUG DEPENDENCE OR ABUSE



Past-Year Illicit Drug Dependence or Abuse among Persons Aged 12 or Older in Missouri and the United States (2008-2012)<sup>1</sup>

Missouri's rate of illicit drug dependence or abuse among persons aged 12 or older was similar to the national rate in 2011-2012.





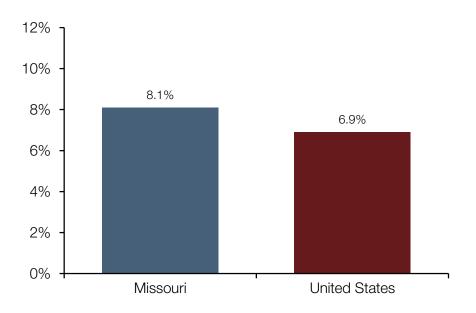
In Missouri, about 118,000 persons aged 12 or older (2.4% of all persons in this age group) per year in 2008-2012\* were dependent on or abused illicit drugs within the year prior to being surveyed. The percentage did not change significantly over this period.

<sup>\*</sup>These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the figure above are from an estimation procedure that uses two years of NSDUH data plus other information from the State. The estimates from these two methods may differ. For more information please see Figure Notes 1 and 2 on p. 18.

### SUBSTANCE USE HEAVY ALCOHOL USE

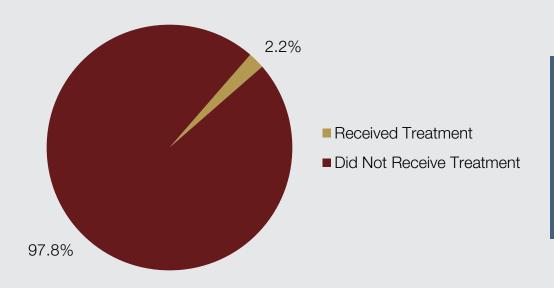


Past-Month Heavy Alcohol Use among Persons Aged 21 or Older in Missouri and the United States (2008-2012)<sup>2</sup>



Missouri's rate of heavy alcohol use among persons aged 21 or older was similar to the national rate in 2008-2012\*.

Past-Year Alcohol Use Treatment among Heavy Alcohol Users Aged 21 or Older in Missouri (2008-2012)<sup>2</sup>



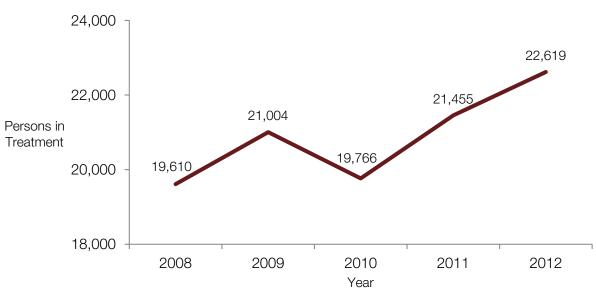
In Missouri, about 343,000 persons aged 21 or older (8.1% of all persons in this age group) per year in 2008-2012\* reported heavy alcohol use within the month prior to being surveyed. Of these, about 1 in 45 (2.2%) received treatment for alcohol use within the year prior to being surveyed.

### SUBSTANCE USE TREATMENT ENROLLMENT AND TREATMENT FOCUS

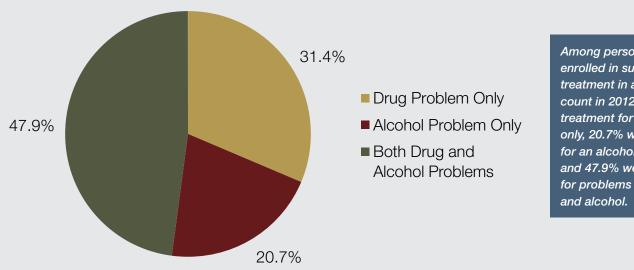


### Enrollment in Substance Use Treatment in Missouri: Single-Day Counts (2008-2012)<sup>7</sup>





### Substance Use Problems among Persons Enrolled in Substance Use Treatment in Missouri: Single-Day Count (2012)<sup>7</sup>



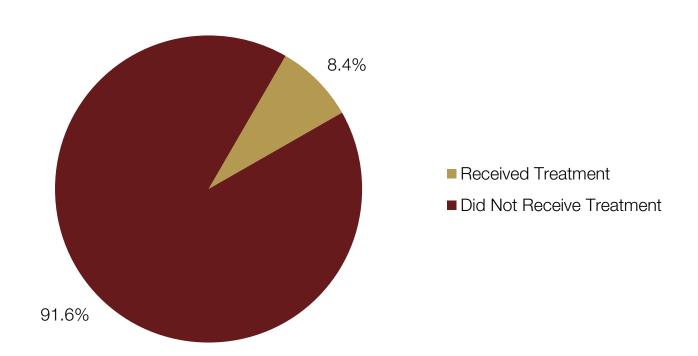
Among persons in Missouri enrolled in substance use treatment in a single-day count in 2012, 31.4% were in treatment for a drug problem only, 20.7% were in treatment for an alcohol problem only, and 47.9% were in treatment for problems with both drugs and alcohol.

## SUBSTANCE USE TREATMENT ALCOHOL



Past-Year Alcohol Use Treatment among Persons Aged 12 or Older with Alcohol Dependence or Abuse in Missouri (2008-2012)<sup>2</sup>

Missouri's rate of treatment for alcohol use among persons aged 12 or older with alcohol dependence or abuse was similar to the national rate in 2008-2012\*.





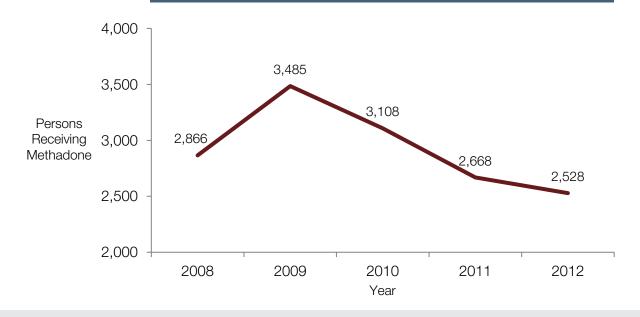
In Missouri, among persons aged 12 or older with alcohol dependence or abuse, about 27,000 persons (8.4%) per year in 2008-2012 received treatment for their alcohol use within the year prior to being surveyed.

## SUBSTANCE USE TREATMENT OPIOIDS (MEDICATION-ASSISTED THERAPY)

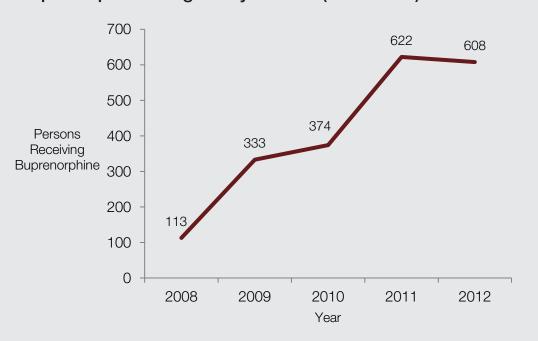


Persons Enrolled in Substance Use Treatment in Missouri Receiving Methadone: Single-Day Counts (2008-2012)<sup>7</sup>

The number of persons in Missouri who received methadone as part of their substance use treatment decreased from 2008 to 2012.



### Persons Enrolled in Substance Use Treatment in Missouri Receiving Buprenorphine: Single-Day Counts (2008-2012)<sup>7</sup>



The number of persons in Missouri who received buprenorphine as part of their substance use treatment increased from 2008 to 2012.

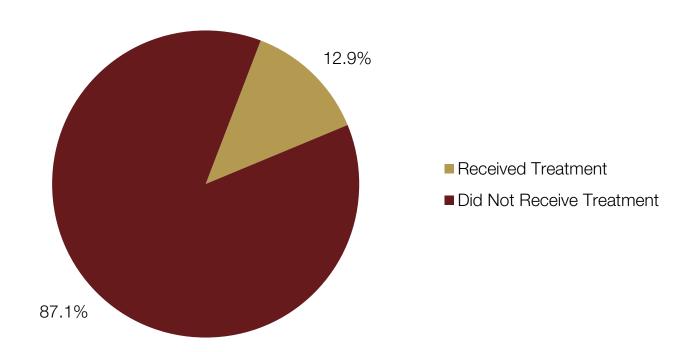
In a single-day count in 2012, 2,528 persons in Missouri were receiving methadone as part of their substance use treatment, and 608 were receiving buprenorphine.

## SUBSTANCE USE TREATMENT ILLICIT DRUGS



Past-Year Illicit Drug Use Treatment among Persons Aged 12 or Older with Illicit Drug Dependence or Abuse in Missouri (2008-2012)<sup>2</sup>

Missouri's rate of treatment for illicit drug use among persons aged 12 or older with drug dependence or abuse was similar to the national rate in 2008-2012\*.



In Missouri, among persons aged 12 or older with illicit drug dependence or abuse, about 15,000 persons (12.9%) per year in 2008-2012 received treatment for their illicit drug use within the year prior to being surveyed.

### FIGURE NOTES



- State estimates presented in this report have been developed using a small area estimation procedure in which State-level National Survey of Drug Use and Health (NSDUH) data from 2 survey years are combined with local-area county and census block group/tract-level data from the State. This model-based methodology provides more precise estimates of substance use at the State level than those based solely on the sample, particularly for smaller States. Caution is advised when examining differences between the 2008-2009 and 2011-2012 NSDUH State estimates. The 2008-2009 small area estimation (SAE) models (as well as the 2009-2010 and 2010-2011 models) used predictors and survey weights based on 2000 census data. The 2011-2012 SAE models used new predictors and survey weights based on 2010 census data. Although the underlying SAE methodology remained the same, the true change between the 2008-2009 and 2011-2012 State estimates could be confounded with changes resulting from using different predictors and census data to produce each set of estimates. For further information, see the forthcoming 2011-2012 National Surveys on Drug Use and Health: Impact of Using 2010 Census Data on 2010-2011 Small Area Estimates, which will be available on the SAMHSA Web site at http://www.samhsa.gov/data/NSDUH/2k12State/NSDUHsae2012/Index.aspx in February 2014.
- <sup>2</sup> Estimates of age of first use of substances, depression treatment, heavy alcohol use, alcohol use treatment, illicit drug use treatment, mental health treatment/counseling, and the number of persons with any mental illness (AMI) or serious mental illness (SMI) are annual averages based on combined 2008-2012 NSDUH data or combined 2004-2012, 2005-2012, or 2006-2012 NSDUH data where indicated.
- <sup>3</sup> Respondents with unknown past-year major depressive episode (MDE) data were excluded.
- <sup>4</sup> Estimates were based only on responses to suicide items in the NSDUH Mental Health module. Respondents with unknown suicide information were excluded.
- <sup>5</sup> Estimates of SMI and AMI presented in this publication may differ from estimates in other publications as a result of revisions made to the NSDUH mental illness estimation models in 2013. Other NSDUH mental illness measures presented were not affected. For further information, see the forthcoming NSDUH short report, *Revised Estimates of Mental Illness from the National Survey on Drug Use and Health*, which will be available on the SAMHSA Web site at <a href="http://samhsa.gov/data/default.aspx">http://samhsa.gov/data/default.aspx</a> in late 2013.
- <sup>6</sup> Data on mental health consumers are from the SAMHSA Center for Mental Health Services Uniform Reporting System.
- <sup>7</sup> Single-day counts reflect the number of persons who were enrolled in substance use treatment on March 31, 2008; March 31, 2009; March 31, 2010; March 31, 2011; and March 30, 2012.

### **DEFINITIONS**



Any mental illness (AMI) among adults aged 18 or older is defined as currently or at any time in the past year having had a diagnosable mental, behavioral, or emotional disorder (excluding developmental and substance use disorders) of sufficient duration to meet diagnostic criteria specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Adults who had a diagnosable mental, behavioral, or emotional disorder in the past year, regardless of their level of functional impairment, were defined as having any mental illness.

Dependence on or abuse of alcohol or illicit drugs is defined using DSM-IV criteria.

*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.

*Illicit drugs* include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically, based on data from original NSDUH questions, not including methamphetamine use items added in 2005 and 2006.

*Illicit drug use treatment* and *alcohol use treatment* refer to treatment received in order to reduce or stop illicit drug or alcohol use, or for medical problems associated with illicit drug or alcohol use. They include treatment received at any location, such as a hospital (inpatient), rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail.

*Major depressive episode (MDE)* is defined as in the 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.

*Mental health treatment/counseling* is defined as having received inpatient or outpatient care or having used prescription medication for problems with emotions, nerves, or mental health.

*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.

*Number of persons enrolled in substance use treatment* refers to the number of clients in treatment at alcohol and drug abuse facilities (both public and private) throughout the 50 States, the District of Columbia, and other U.S. jurisdictions.

**Serious mental illness (SMI)** is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met DSM-IV criteria and resulted in serious functional impairment.

*Treatment for depression* is defined as seeing or talking to a medical doctor or other professional or using prescription medication for depression in the past year.

### SOURCES



- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (DSM-IV) (4th ed.). Washington, DC.
- Center for Behavioral Health Statistics and Quality. (2011). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2010 data on substance abuse treatment facilities.* Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Center for Behavioral Health Statistics and Quality. (2012). *National Survey of Substance Use Treatment Services (N-SSATS): 2011 data on substance abuse treatment facilities.* Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Center for Behavioral Health Statistics and Quality. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of national findings.* (HHS Publication No. SMA 11-4658, NSDUH Series H-41). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Center for Behavioral Health Statistics and Quality. (2012). *Results from the 2011 National Survey on Drug Use and Health: Summary of national findings* (HHS Publication No. SMA 13-4713, NSDUH Series H-44). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Center for Behavioral 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, U.S. Department of Health and Human Services.
- Center for Mental Health Services. (2011). 2011 CMHS Uniform Reporting System Output Tables. Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from http://www.samhsa.gov/dataoutcomes/urs/urs2011.aspx
- Center for Mental Health Services. (2013). 2012 CMHS Uniform Reporting System Output Tables. Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from http://www.samhsa.gov/dataoutcomes/urs/urs2012.aspx
- Office of Applied Studies. (2009). *Results from the 2008 National Survey on Drug Use and Health: National findings.* (HHS Publication No. SMA 09-4434, NSDUH Series H-36). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Office of Applied Studies. (2010). Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of national findings. (HHS Publication No. SMA 104586Findings, NSDUH Series H-38A). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.
- Office of Applied Studies. (2010). Results from the 2009 National Survey on Drug Use and Health: Volume II. Summary of national findings. (HHS Publication No. SMA 104586Appendices, NSDUH Series H-38B). Rockville, MD: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.



HHS Publication No. SMA-13-4796MO 2013

U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Center for Behavioral Health Statistics and Quality
www.samhsa.gov