Acknowledgments
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# CONTENTS

**FOREWORD**

**YOUTH SUBSTANCE USE**

- Illicit Drug Use ................................................................................................................................. 1  
- Cigarette Use ................................................................................................................................. 2  
- Binge Alcohol Use .......................................................................................................................... 3  
- Substance Use Initiation and Risk Perceptions .............................................................................. 4

**YOUTH MENTAL HEALTH AND TREATMENT**

- Depression ........................................................................................................................................ 6  
- Treatment for Depression .............................................................................................................. 7

**MENTAL HEALTH AND TREATMENT**

- Thoughts of Suicide .......................................................................................................................... 8  
- Serious Mental Illness ....................................................................................................................... 9  
- Treatment for Any Mental Illness .................................................................................................... 10  
- Mental Health Consumers ............................................................................................................ 11

**SUBSTANCE USE**

- Alcohol Dependence or Abuse ........................................................................................................ 12  
- Illicit Drug Dependence or Abuse .................................................................................................. 13  
- Heavy Alcohol Use ........................................................................................................................ 14

**SUBSTANCE USE TREATMENT**

- Enrollment and Treatment Focus .................................................................................................... 15  
- Alcohol ........................................................................................................................................... 15  
- Opioids (Medication-Assisted Therapy) ........................................................................................ 17  
- Illicit Drugs ..................................................................................................................................... 18

**FIGURE NOTES** ............................................................................................................................. 19

**DEFINITIONS** ............................................................................................................................... 20

**SOURCES** ........................................................................................................................................ 21
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 second edition of the *Behavioral Health Barometer: Michigan*, 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 are published on a regular basis as part of SAMHSA’s larger behavioral health quality improvement approach.

Pamela S. Hyde, JD, Administrator
Substance Abuse and Mental Health Services Administration
Past-Month Illicit Drug Use among Adolescents Aged 12–17 in Michigan and the United States (2009–2013)\(^1\)

**Michigan’s percentage of illicit drug use among adolescents was higher than the national percentage in 2012–2013.**

In Michigan, about 92,000 adolescents (11.3% of all adolescents) per year in 2009–2013* reported using illicit drugs within the month prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.
Past-Month Cigarette Use among Adolescents Aged 12–17 in Michigan and the United States (2009–2013)¹

Michigan’s percentage of cigarette use among adolescents was higher than the national percentage in 2012–2013.

In Michigan, about 67,000 adolescents (8.2% of all adolescents) per year in 2009–2013* reported using cigarettes within the month prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.
Past-Month Binge Alcohol Use among People Aged 12–20 in Michigan and the United States (2009–2013)\(^1\)

**Michigan’s percentage of binge alcohol use among people aged 12–20 was higher than the national percentage in 2012–2013.**

In Michigan, about 209,000 people aged 12–20 (16.5% of all people in this age group) per year in 2009–2013\(^*\) reported binge alcohol use within the month prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
Past-Year Initiation of Substance Use Among Adolescents Aged 12–17 in Michigan, by Substance of Abuse (2009–2013)\textsuperscript{2}

Among adolescents in Michigan, 10.0\% initiated alcohol use (i.e., used it for the first time) within the year prior to being surveyed, and 5.6\% initiated marijuana use within the year prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Adolescents Aged 12–17 in Michigan and the United States Who Perceived No Great Risk from Smoking One or More Packs of Cigarettes a Day (2009–2013)\textsuperscript{1}

About 1 in 3 (35.9\%) adolescents in Michigan in 2012–2013 perceived no great risk from smoking one or more packs of cigarettes a day—a percentage similar to the national percentage.

The percentage of Michigan adolescents perceiving no great risk from daily cigarette use did not change significantly from 2009 to 2013.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
Adolescents Aged 12–17 in Michigan and the United States Who Perceived No Great Risk from Having Five or More Drinks Once or Twice a Week (2009–2013)\(^1\)

About 6 in 10 (62.4\%) adolescents in Michigan in 2012–2013 perceived no great risk from drinking five or more drinks once or twice a week—a percentage similar to the national percentage.

\[62.4\%\]

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Adolescents Aged 12–17 in Michigan and the United States Who Perceived No Great Risk from Smoking Marijuana Once a Month (2009–2013)\(^1\)

About 3 in 4 (77.1\%) adolescents in Michigan in 2012–2013 perceived no great risk from smoking marijuana once a month—a percentage higher than the national percentage.

\[77.1\%\]

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
Past-Year Major Depressive Episode (MDE) among Adolescents Aged 12–17 in Michigan and the United States (2009–2013)\textsuperscript{1,3}

**Michigan’s percentage of MDE among adolescents was similar to the national percentage in 2012–2013.**

In Michigan, about 77,000 adolescents (9.7\% of all adolescents) per year in 2009–2013* had at least one MDE within the year prior to being surveyed. The percentage increased over this period.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.

**Source:** SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
Past-Year Depression Treatment among Adolescents Aged 12–17 with Major Depressive Episode (MDE) in Michigan (2009–2013)\(^2,3\)

**Michigan’s percentage of treatment for depression among adolescents with MDE was higher than the national percentage in 2009–2013.**

![Pie chart showing the percentage of treatment for depression among adolescents with MDE in Michigan.](image)

- **44.2%** Received Treatment for Depression
- **55.8%** Did Not Receive Treatment for Depression

**In Michigan, about 34,000 adolescents with MDE (44.2% of all adolescents with MDE) per year in 2009–2013 received treatment for their depression within the year prior to being surveyed.**

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
Past-Year Serious Thoughts of Suicide among Adults Aged 18 or Older in Michigan and the United States (2009–2013)

Michigan’s percentage of adults with suicidal thoughts was higher than the national percentage in 2012–2013.

In Michigan, about 341,000 adults (4.6% of all adults) in 2009–2013* had serious thoughts of suicide within the year prior to being surveyed. The percentage did not change significantly over this period.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.
Past-Year Serious Mental Illness (SMI) among Adults Aged 18 or Older in Michigan and the United States (2009–2013)\textsuperscript{1,5}

Michigan’s percentage of SMI among adults was similar to the national percentage in 2012–2013.

<table>
<thead>
<tr>
<th>Years</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009–2010</td>
<td>4.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>2010–2011</td>
<td>4.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td>2011–2012</td>
<td>4.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2012–2013</td>
<td>4.7%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

In Michigan, about 333,000 adults (4.4% of all adults) per year in 2009–2013\textsuperscript{*} had SMI within the year prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

\textsuperscript{*}These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
Past-Year Mental Health Treatment/Counseling among Adults Aged 18 or Older with Any Mental Illness (AMI) in Michigan (2009–2013)

Michigan’s percentage of mental health treatment among adults with AMI was similar to the national percentage in 2009–2013.

In Michigan, about 648,000 adults with AMI (43.5% of all adults with AMI) per year in 2009–2013 received mental health treatment or counseling within the year prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
Adult Mental Health Consumers Served in the Public Mental Health System in Michigan, by Employment Status and Age (2013)\(^6\)

Among adults served in Michigan’s public mental health system in 2013, 70.9% of those aged 18–20, 59.2% of those aged 21–64, and 93.1% of those aged 65 or older were not in the labor force.

In 2013, 54,335 children and adolescents were served in Michigan’s public mental health system.

Mental Health Consumers in Michigan and the United States Reporting Improved Functioning from Treatment Received in the Public Mental Health System (2013)\(^6\)

The percentage of adolescents reporting improved functioning from treatment received through the public mental health system was lower in Michigan than in the nation as a whole.

Source: Center for Mental Health Services, Uniform Reporting System, 2013.
Past-Year Alcohol Dependence or Abuse among Individuals Aged 12 or Older in Michigan and the United States (2009–2013)\textsuperscript{1}

Michigan’s percentage of alcohol dependence or abuse among individuals aged 12 or older was similar to the national percentage in 2012–2013.

In Michigan, about 619,000 individuals aged 12 or older (7.4% of all individuals in this age group) per year in 2009–2013\textsuperscript{*} were dependent on or abused alcohol within the year prior to being surveyed. The percentage did not change significantly over this period.

\textbf{7.4%}

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
Past-Year Illicit Drug Dependence or Abuse among Individuals Aged 12 or Older in Michigan and the United States (2009–2013)¹

In Michigan, about 233,000 individuals aged 12 or older (2.8% of all individuals in this age group) per year in 2009–2013* were dependent on or abused illicit drugs within the year prior to being surveyed. The percentage did not change significantly over this period.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

*These estimates are based on combined data from multiple years of the National Survey of Drug Use and Health (NSDUH), whereas estimates in the accompanying figure are from an estimation procedure that uses 2 consecutive 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. 19.
Past-Month Heavy Alcohol Use among Adults Aged 21 or Older in Michigan and the United States (2009–2013)²

Michigan’s percentage of heavy alcohol use among adults aged 21 or older was higher than the national percentage in 2009–2013.

In Michigan, about 562,000 adults aged 21 or older (8.0% of all adults in this age group) per year in 2009–2013 reported heavy alcohol use within the month prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
Enrollment in Substance Use Treatment in Michigan: Single-Day Counts (2009–2013)\(^7\)

In a single-day count in 2013, 47,749 individuals in Michigan were enrolled in substance use treatment—an increase from 40,044 individuals in 2009.

Substance Use Problems among Individuals Enrolled in Substance Use Treatment in Michigan: Single-Day Count (2013)\(^7\)

Among individuals in Michigan enrolled in substance use treatment in a single-day count in 2013, 30.7\% were in treatment for drug use only, 22.9\% were in treatment for alcohol use only, and 46.4\% were in treatment for both drug and alcohol use.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey of Substance Abuse Treatment Services, 2009 to 2013.
Past-Year Alcohol Use Treatment among Individuals Aged 12 or Older with Alcohol Dependence or Abuse in Michigan (2009–2013)²

Michigan’s percentage of treatment for alcohol use among individuals aged 12 or older with alcohol dependence or abuse was similar to the national percentage in 2009–2013.

In Michigan, among individuals aged 12 or older with alcohol dependence or abuse, about 59,000 individuals (9.5%) per year in 2009–2013 received treatment for their alcohol use within the year prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
Individuals Enrolled in Opioid Treatment Programs (OTPs) in Michigan Receiving Methadone: Single-Day Counts (2009–2013)\(^7\)

The number of individuals in Michigan who received methadone in OTPs as part of their substance use treatment increased from 2009 to 2013.

![Graph showing the increase in the number of individuals receiving methadone from 2009 to 2013.]

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey of Substance Abuse Treatment Services, 2009 to 2013.

Individuals Enrolled in Substance Use Treatment in Michigan Receiving Buprenorphine: Single-Day Counts (2009–2013)\(^7,8\)

The number of individuals in Michigan who received buprenorphine as part of their substance use treatment increased from 2009 to 2013.

In a single-day count in 2013, 7,680 individuals in Michigan were receiving methadone as part of their substance use treatment, and 1,187 were receiving buprenorphine.

![Graph showing the increase in the number of individuals receiving buprenorphine from 2009 to 2013.]

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey of Substance Abuse Treatment Services, 2009 to 2013.
Past-Year Illicit Drug Use Treatment among Individuals Aged 12 or Older with Illicit Drug Dependence or Abuse in Michigan (2009–2013)

Michigan’s percentage of treatment for illicit drug use among individuals aged 12 or older with drug dependence or abuse was similar to the national percentage in 2009–2013.

In Michigan, among individuals aged 12 or older with illicit drug dependence or abuse, about 41,000 individuals (17.7%) per year in 2009–2013 received treatment for their illicit drug use within the year prior to being surveyed.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Statistical tests (t-tests) have been conducted for all statements appearing in the text on this page of the report that compare estimates between years or between the state and the nation as a whole. Unless explicitly stated that a difference is not statistically significant, all statements that describe differences are significant at the .05 level.
1 State estimates are based on a small area estimation procedure in which state-level National Survey of Drug Use and Health (NSDUH) data from 2 consecutive 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 states with smaller sample sizes.

2 Estimates are annual averages based on combined 2009–2013 NSDUH data or combined 2005–2013 or 2006–2013 NSDUH data where indicated. These estimates are based solely on the sample, unlike estimates based on the small area estimation procedure as stated above.

3 Respondents with unknown past-year major depressive episode (MDE) data were excluded.

4 Estimates were based only on responses to suicide items in the NSDUH Mental Health module. Respondents with unknown suicide information were excluded.

5 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 2012. Other NSDUH mental health measures presented were not affected. Please note that 2013 Barometer reports include the revised SMI and AMI estimates. For further information, see Revised Estimates of Mental Illness from the National Survey on Drug Use and Health, which is available on the SAMHSA Web site at http://www.samhsa.gov/data/sites/default/files/NSDUH148/NSDUH148/sr148-mental-illness-estimates.pdf.

6 Data on mental health consumers are from the SAMHSA Center for Mental Health Services Uniform Reporting System.

7 Single-day counts reflect the number of persons who were enrolled in substance use treatment on March 31, 2009; March 31, 2010; March 31, 2011; March 30, 2012; and March 29, 2013.

8 Physicians who obtain specialized training may prescribe buprenorphine. Some physicians are in private, office-based practices; others are affiliated with substance abuse treatment facilities or programs and may prescribe buprenorphine to clients at those facilities. Additionally, OTPs may also prescribe and/or dispense buprenorphine. The buprenorphine single-day counts include only those clients who received/were prescribed buprenorphine by physicians affiliated with substance abuse treatment facilities or OTPs; they do not include clients from private practice physicians.
**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 within the 4th edition of 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.

*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.

*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 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks in the past year 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 by SAMHSA as adults aged 18 or older who currently or at any time in the past year have had a diagnosable mental, behavioral, or emotional disorder (excluding developmental and substance use disorders) of sufficient duration to meet diagnostic criteria specified within the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) that has resulted in serious functional impairment, which substantially interferes with or limits one or more major life activities.

*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.


