Introduction and Highlights

On the following pages:

A-01. Report Cover

A-02. Title Page

A-03. Foreword

A-04. Acknowledgments

A-05 - A-16. Missouri Data Highlights

Mental Disorders

Depression

Suicide

Mental Health Emergencies

Specialized Treatment for Mental Health Disorders

Substance Use Disorders

Substance Use among Adolescents

Substance Use among Young Adults

Substance Use among Older Adults

Substance Use Emergencies

Specialized Treatment for Substance Use Disorders

Trends in Primary Drugs Identified in Substance Use Disorder Treatment

Deaths Resulting from Substance Use

Other Behavioral Impacts (in development)

STATUS REPORT ON MISSOURI'S SUBSTANCE USE AND MENTAL HEALTH

Twenty-fifth Edition -- 2019



MISSOURI DEPARTMENT OF MENTAL HEALTH
Division of Behavioral Health

STATUS REPORT ON MISSOURI'S SUBSTANCE USE AND MENTAL HEALTH

TWENTY-FIFTH EDITION — 2019

Randall Smith, M.P.A., M.Ed.

Kateryna Kalugina

Renee Rothermich, M.A.

Patricia Norton, M.P.H.

Mark Stringer Director, Missouri Department of Mental Health

Richard Gowdy, Ph.D. Director, Division of Behavioral Health

Rikki Wright Deputy Director, Division of Behavioral Health

Jason Jones Director of Research and Statistics

MISSOURI DEPARTMENT OF MENTAL HEALTH

Division of Behavioral Health 1706 East Elm Street; P.O. Box 687 Jefferson City, MO 65102 573-751-9499

Website: https://dmh.mo.gov





MARK STRINGER

DIRECTOR

RICHARD N. GOWDY, PH.D.
DIRECTOR
DIVISION OF
BEHAVIORAL HEALTH
(573) 751-9499
(573) 751-7814 FAX

STATE OF MISSOURI DEPARTMENT OF MENTAL HEALTH

1706 EAST ELM STREET
P.O. BOX 687
JEFFERSON CITY, MISSOURI 65102
(573) 751-4122
(573) 751-8224 FAX
www.dmh.mo.gov

FOREWORD

An estimated 925,000 Missouri adults over age 18 experienced some form of mental illness in the past year—one-fifth of our adult population. Among these are 226,000 with serious mental illnesses that substantially limit their major life activities. In addition, Missouri has 17,000 adolescents and 353,000 adults with harmful and disruptive substance use disorders.

An important part of our mission is to develop and manage effective treatment services for individuals with mental and substance use disorders, and to support community education and prevention programs that reduce the need for those services. Prior to the inception of the Status Report in 1994, the Missouri Advisory Council on Alcohol and Drug Abuse adopted an Operational Plan that included several prevention and treatment objectives. One priority project was the development of an annual and consistent data set to assist communities and stakeholders to address, monitor, and prevent substance use and related disorders. Now in its 25th year, the Status Report continues to assemble national, state, and county behavioral and mental health data and examine trends.

Data from previous Status Reports and other sources are available to query in the Missouri Behavioral Health Data archive. Visit https://seow.dmh.mo.gov/. Please direct inquiries and comments regarding these data products to the Division's Research and Statistics office at dmh.mo.gov.

Sincerely

Richard N. Gowdy Ph.D.

ACKNOWLEDGMENTS

The Missouri Department of Mental Health, Division of Behavioral Health would like to thank the following individuals and their agencies for providing data during the past year for this 2019 edition of the Status Report:

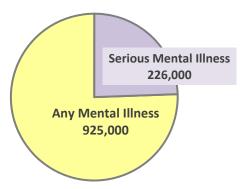
Carol Bontempo, Missouri Department of Health and Senior Services Avera Daniels, Missouri Department of Corrections Susan Depue, Missouri Institute of Mental Health Dong Ding, University of Missouri—Columbia Venkata Garikpaty, Missouri Department of Health and Senior Services TaNea Green, Missouri Office of State Courts Administrator Amanda Horvath, Missouri Office of State Courts Administrator Andrew Hunter, Missouri Department of Health and Senior Services Rebecca Lander, Missouri Department of Health and Senior Services Sara Linenfelser, Missouri Department of Social Services Katie Long, Missouri Department of Health and Senior Services Rick McElfresh, Missouri Office of State Courts Administrator Angela McKee, Missouri Department of Health and Senior Services Doug Middleton, Missouri Department of Public Safety Richard Morrisey, Missouri Office of State Courts Administrator Mary Mosley, Missouri Department of Health and Senior Services Patricia Norton, Missouri Department of Mental Health Mark Ritchey, Missouri Department of Public Safety Renee Rothermich, Missouri Department of Mental Health Susan Savage, Missouri Department of Social Services Julie Starr, Missouri Department of Social Services DeWayne Sprenger, Missouri Department of Public Safety Michael Traver, Missouri Department of Social Services Tanner Turley, Missouri Department of Health and Senior Services Margaret Tyler, Missouri Department of Health and Senior Services Rebecca Viet, Missouri Department of Social Services Shannon Vondras, Missouri Institute of Mental Health Blake Wenzel, Missouri Office of State Courts Administrator Shimin Zhuang, Missouri Department of Social Services

DATA HIGHLIGHTS

MENTAL DISORDERS

State-level estimates from the National Survey on Drug Use and Health (NSDUH) highlight Missouri adults with mental health disorders, based on a recent two-year reporting period. The NSDUH indicates that 20% of Missouri's adult population—925,000 residents—had a mental illness in the past year, compared to 18% in the previous study. Missouri's estimated rates of past-year mental illness were higher among young adults than for those over age 25, and rates for Missouri's adults older than 25 were higher than U.S. rates.

Figure 1: Estimated Number of Missouri Adults with Past-Year Mental Illness



Data Source: U.S. Substance Abuse and Mental Health Services Administration (SAMHSA): National Survey on Drug Use and Health, 2016-2017. Adolescents 12-17 years of age are not included in the survey questions assessing mental illness.

An estimated 226,000—nearly 5% of Missouri adults—had serious mental illness during the past year. Serious mental illness (SMI) pertains to adults who have a diagnosable mental, behavioral, or emotional disorder with serious impairment that substantially interferes with important life activities. Major depression, bipolar mood, and schizophrenia comprise most of the SMI disorders. According to the NSDUH, during the past eight years the percentage of young adults with SMI has increased alarmingly nationwide. The latest survey indicates nearly 7% of Missouri adults 18-25 years of age had a past-year serious mental illness.

Figure 2: Trend in Rates of Serious Mental Illness among Missouri Adults



Data Source: SAMHSA: National Survey on Drug Use and Health.

DEPRESSION

Major depression accounts for some of the increase in serious mental illness. The NSDUH indicates that 367,000 Missouri adults and 68,000 adolescents had a major depressive episode (MDE) in the past year. The adolescent rate of MDE has increased each of the past five years, reaching 14.5% and surpassing the national rate of 13%.



Figure 3: Trend in Rates of Past-year Major Depressive Episodes among Missouri Residents

Data Source: SAMHSA: National Survey on Drug Use and Health.

According to NSDUH estimates, rates of past-year major depression among Missouri residents have generally been higher than U.S. rates. Similarly, the Behavioral Risk Factor Surveillance System (BRFSS) indicates that Missouri's rates for lifetime depressive disorder have consistently been higher than the national median. The Missouri rates are considerably higher for females than for males.

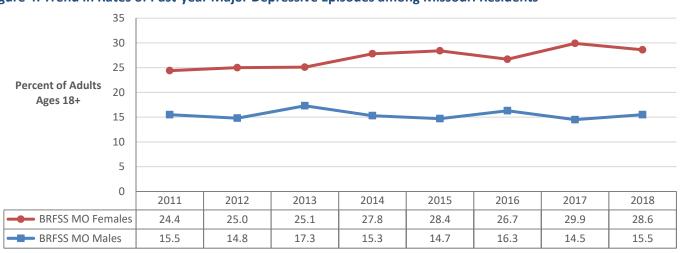


Figure 4: Trend in Rates of Past-year Major Depressive Episodes among Missouri Residents

Data Source: Centers for Disease Control and Prevention: Behavior Risk Factor Surveillance System.

More than 31% of students completing the Missouri Assessment for College Health Behaviors (MACHB) survey experienced past-year major depression, compared to 13% a decade earlier. Two-thirds of these students sought assistance for their depression.

60 50 40 **Percent of Studens** Surveyed in 30 Missouri Assessment of 20 **College Health Behaviors** 10 0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 MO College: Anxiety 35.8 32.7 34.9 34.4 39.4 44.1 45.0 47.3 49.0 57.4 52.1 MO College: Major Depression 12.9 12.1 12.5 12.5 17.6 18.5 21.4 22.9 24.6 26.8 31.4 MO College: Panic Attack 12.3 11.6 12.5 11.7 13.4 15.4 17.2 19.2 21.5 24.5 27.6 MO College: Suicidal Thoughts 13.1 13.4 13.6 13.6 15.0 15.0 17.4 17.6 20.4 23.1 MO College: Sleep Disorder 16.6 15.6 16.8 15.0 18.1 18.8 18.2 18.5 17.1 18.8 20.0 MO College: Bipolar Disorder 2.7 2.3 2.3 2.1 2.3 2.6 2.8 2.8 2.5 2.3 3.4

Figure 5: Trend in Rates of Past-year Mental Disorders among Missouri College Students

Source: Partners in Prevention Statewide Coalition, University of Missouri: Missouri Assessment of College Health Behaviors.

SUICIDE

An estimated 186,000 Missouri adults had serious suicidal thoughts in the past year. While rates of suicide ideation among older adults have remained below 4% during the past several years, rates for adults 18-25 years of age have increased to nearly 10% in the most recent survey.



Figure 6: Trend in Rates of Past-year Serious Thoughts of Suicide among Missouri Adults

Data Source: SAMHSA: National Survey on Drug Use and Health.

In the 2018 Missouri Student Survey, 14% of youth in grades 6-12 reported they seriously considered suicide in the past year, 11% made a plan, and 6% actually made a suicide attempt. Among college students surveyed in the 2019 MACHB, 23% reported past-year suicidal thoughts and 1.8% attempted suicide.

During the past 10 years, the rate of Missouri deaths due to suicide increased from 13.1 per 100,000 population in 2008 to 20.1 per 100,000 in 2018. During that same period, the homicide rate increased from 8.2 to 10.7 per 100,000 population.

1,400 1,200 1,000 800 **Deaths** 600 400 200 0 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 775 857 850 921 MO Suicide 901 958 1,004 1.043 1.132 1.151 1.230 MO Homicide 486 440 438 416 429 390 440 539 570 654 657

Figure 7: Trend in Deaths among Missouri Residents Due to Suicide and Homicide

Data Source: Missouri Department of Health and Senior Services.

MENTAL HEALTH EMERGENCIES

In 2017, more than 66,000 Missouri residents who entered hospital emergency rooms had a mental disorder <u>primary</u> diagnosis according to medical coding. Among these were approximately 43,000 with a disorder classifiable as serious mental illness (SMI). Additionally, more than 284,000 individuals who received emergency room services in 2017 had a mental disorder <u>secondary</u> diagnosis.

SPECIALIZED TREATMENT FOR MENTAL HEALTH DISORDERS

In state fiscal year 2019, mental health centers funded by the Division of Behavioral Health (DBH) provided mental illness treatment services to more than 83,000 Missouri residents—approximately 43,000 females and 40,000 males. They included more than 20,000 children and adolescents and nearly 63,000 adults.

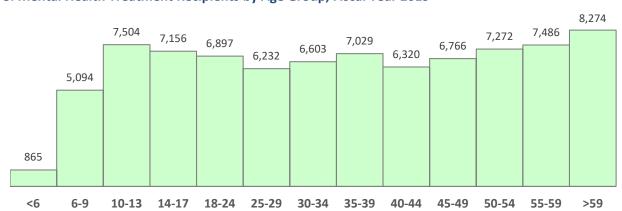


Figure 8: Mental Health Treatment Recipients by Age Group, Fiscal Year 2019

Data Source: Missouri Department of Mental Health: Customer Information Management, Outcomes & Reporting system.

The 83,000 individuals who received services in FY2019 had more than 142,000 diagnosed mental disorders. Mood disorders accounted for over one-third of the diagnoses.

Other & Unknown 5% **Anxiety and Fear 14%** Trauma & Stress 13% Sexual 0.5% **Bipolar Mood 12%** Schizophrenia/Psychotic 11% Personality 5% **Impulse Control & Depressive Mood 25%** Conduct 5% **Developmental 9%**

Figure 9: Diagnosis Categories of Individuals Treated for Mental Illness in DBH-Funded Programs in FY2019

Data Source: Missouri Department of Mental Health: Customer Information Management, Outcomes & Reporting system.

The number of individuals treated for anxiety and fear disorders increased 50% between state fiscal years 2012 and 2019. Other notable increases were the numbers treated for trauma and stress, impulse control and conduct, and depressive mood disorders.

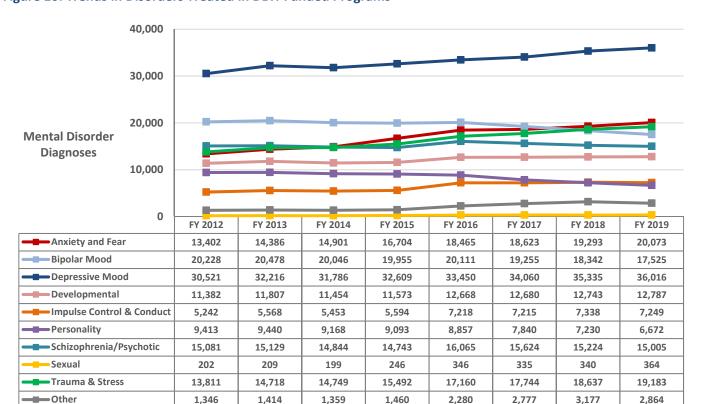


Figure 10: Trends in Disorders Treated in DBH-Funded Programs

Data Source: Missouri Department of Mental Health: Customer Information Management, Outcomes & Reporting system.

1,460

1,359

1,414

1,346

2,864

3,177

SUBSTANCE USE DISORDERS

Estimates from the NSDUH indicate more than 7% of Missouri's population 12 years of age and older—371,000—had a past-year substance use disorder (SUD). As with mental disorders, substance use disorders negatively affect important life functions, responsibilities, safety, or health. Estimates are available for three categories of substance use disorders: alcohol, illicit drugs, and pain relievers. Alcohol use disorders are the chief substance disorder. The NSDUH estimates 271,000 residents had alcohol use disorders in the past year. Additionally, 129,000 Missouri residents had illicit drug use disorders and 35,000 had disorders resulting from pain reliever use. The three categories total more than the overall SUD estimate because some individuals have disorders involving more than one type of substance.

371,000 Missouri Residents with Substance Use Disorders Illicit Drug Use Disorder 129,000 Pain Reliever Use Disorder 35,000 Alcohol Use Disorder 271,000

Figure 11: Estimated Number of Missouri Residents with Past-year Substance Use Disorders

Data Source: SAMHSA: National Survey on Drug Use and Health, 2016-2017.

The estimated number of Missouri residents with a substance use disorder has gradually declined from the peak estimate of 499,000 in 2004. Most of this decline has been in the adolescent and young adult populations. The SUD estimate for adolescents decreased from 10.5% in the 2003-2004 NSDUH to 3.7% in 2016-2017. During that period, the rate for young adults dropped from 24% to about 13%. Among adults older than age 25, the SUD rate has hovered around 7% for longer than a decade.

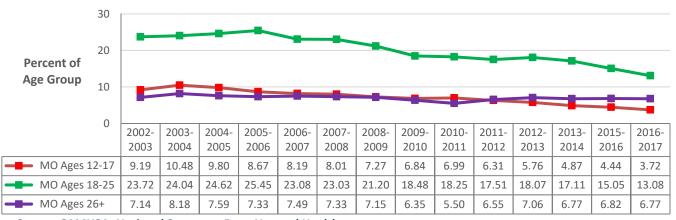


Figure 12: Trend in Rates of Substance Use Disorders among Missouri Residents

Data Source: SAMHSA: National Survey on Drug Use and Health.

2019 Status Report on Missouri's Substance Use and Mental Health

SUBSTANCE USE AMONG ADOLESCENTS

Over the past decade, the decrease in Missouri adolescent substance use disorders has included decreases in both alcohol and illicit drug use disorders, and use rates for most substances have continued to decline. Past-month alcohol use appears to increase slightly in the 2016-2017 NSDUH and the 2018 Missouri Student Survey, while continuing to decline in the 2017 Youth Risk Behavior Survey.

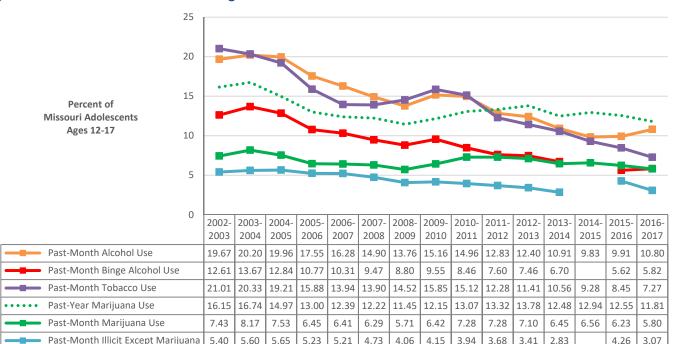
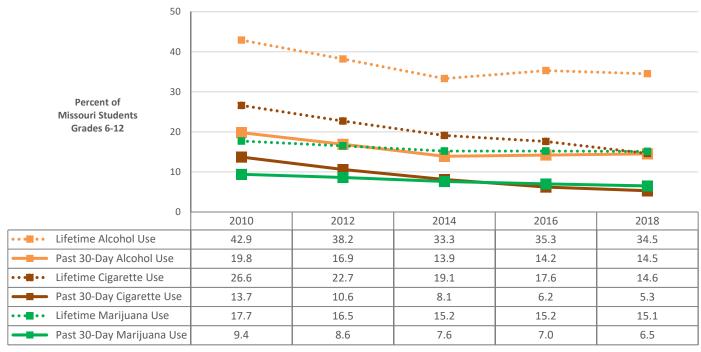


Figure 13: Trend in Substance Use among Missouri Adolescents

Data Source: SAMHSA: National Survey on Drug Use and Health.

Figure 14: Trend in Substance Use among Missouri Secondary School Students



Data Source: Missouri Institute of Mental Health: Missouri Student Survey.

SUBSTANCE USE AMONG YOUNG ADULTS

Among Missouri adults 18-25 years, reductions in alcohol use disorders have been the chief factor in the decline in SUD rates. Alcohol use disorders in this young adult group have dropped from nearly 20% in 2003 to 9.5% in 2017. Alcohol use and binge drinking are trending downward. In contrast, illicit drug use disorders have only declined from 8.5% to 6.2% during the same period. While marijuana use in this age group has increased in recent years, pastmonth use of other illicit drugs has dipped to under 6% after reaching 9% a decade ago.

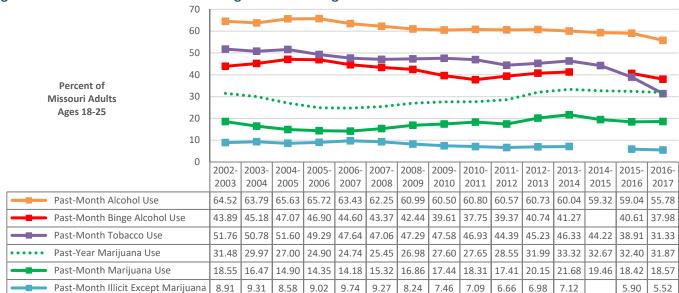


Figure 15: Trend in Substance Use among Missouri Young Adults

Data Source: SAMHSA: National Survey on Drug Use and Health.

Nearly 61% of students who completed the 2019 Missouri Assessment of College Health Behaviors survey reported past-month alcohol use—a reduction of six percentage points from the 67% a decade earlier. Although cigarette use continues to decline, overall tobacco use took an upturn in 2019. About 30% of Missouri college students have used marijuana during the past year, which is similar to the 32% NSDUH estimate for young adults ages 18-25. More than 5% of college students have used illicit stimulants in the past year, and 4% have used cocaine.



Figure 16: Trend in Substance Use among Missouri Young Adults

Data Source: Partners in Prevention Statewide Coalition, University of Missouri, Columbia, MO. Missouri Assessment of College Health Behaviors.

SUBSTANCE USE AMONG OLDER ADULTS

Seven percent of Missouri adults older than age 25 have substance use disorders. This rate has shown little fluctuation during the past 14 years. About 5% of these older adults have alcohol use disorders and 2% have illicit drug use disorders. In the most recent NSDUH surveys, 55% of Missouri's older adults were past-month alcohol users including 25% who were past-month binge drinkers. The estimated rates of binge drinking for this age group have been increasing since 2010. Past-month illicit drug use is also increasing, reaching 9% of adults older than 25. Marijuana use—at 7%—accounts for most of this increase. Past-year marijuana use among older adults has increased to 11%, compared to 7% ten years ago. Approximately 1% of the over-25 age group are past-year users of cocaine and methamphetamine, and about one-third of a percent are using heroin. Tobacco use has declined to 29% in this age group, and cigarette smoking to 23%. Missouri adult males have considerably higher rates of past-month binge drinking than adult females, according to the Behavioral Risk Factor Survey.

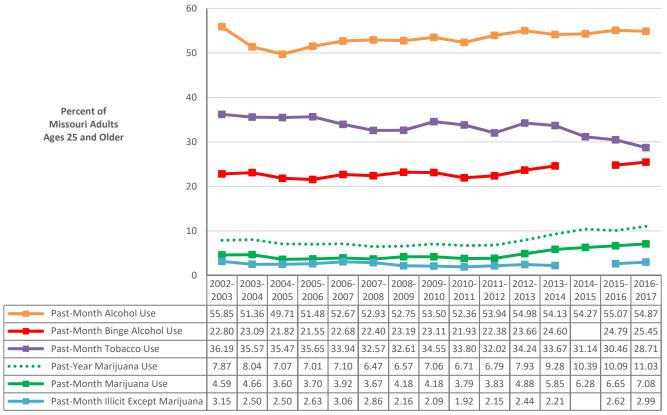


Figure 17: Trend in Substance Use among Missouri's Older Adults

Data Source: SAMHSA: National Survey on Drug Use and Health.

SUBSTANCE USE EMERGENCIES

In 2017, more than 42,000 Missouri residents entered hospital emergency rooms with a substance use disorder <u>primary</u> diagnosis. They included 24,000 with an alcohol use disorder and 18,000 with a drug use disorder. Emergency rooms discharged more than 33,000 after providing emergency services but admitted 9,000 to hospitals for further medical treatment. Emergency rooms also treated 50,000 Missouri residents with secondary alcohol disorders and 64,000 with secondary drug disorders.

SPECIALIZED TREATMENT FOR SUBSTANCE USE DISORDERS

In state fiscal year 2018, behavioral health treatment centers funded by the Division of Behavioral Health admitted more than 50,000 Missouri residents for substance disorder services. Admissions included more than 33,000 for substance disorder treatment and 17,000 for substance-related traffic offender assessments and services. Among those admitted for treatment were 21,000 males and nearly 13,000 females.

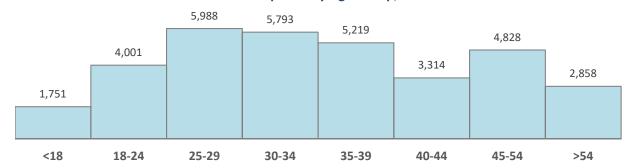


Figure 18: Substance Use Disorder Treatment Recipients by Age Group, Fiscal Year 2018

Data Source: Missouri Department of Mental Health: Customer Information Management, Outcomes & Reporting system.

Alcohol use was the primary concern in nearly 10,000 of the substance treatment admissions. Stimulant use—mainly methamphetamines—accounted for more than 8,000 admissions. Nearly 8,000 treatment admissions involved heroin and other pain reliever use. Marijuana—with over 6,000 admissions—and cocaine with 1,000 accounted for most of the remainder.

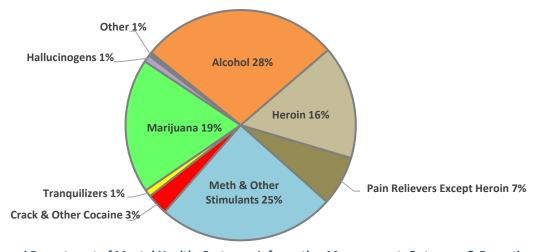


Figure 19: Primary Drug Problem among Individuals Admitted for Substance Use Treatment, FY2018

 ${\it Data Source: Missouri\ Department\ of\ Mental\ Health:\ Customer\ Information\ Management,\ Outcomes\ \&\ Reporting\ system.}$

TRENDS IN TREATMENT OF SUBSTANCE USE DISORDERS

Considerable changes have occurred during the past decade in the substances identified in treatment admissions. In FY2009, two-thirds of the treatment admissions were for alcohol or marijuana. Heroin and other pain relievers, methamphetamine and other stimulants, and crack and other cocaine each accounted for about one-tenth of the admissions. Since then, there have been increases in treatment admissions for meth and heroin use and declines in admissions for alcohol, marijuana, and cocaine.

18,000 16,000 14,000 12,000 10.000 8,000 6,000 4,000 2,000 FΥ FΥ FY FY FY Alcohol Marijuana Meth & Other Stimulants Heroin Pain Relievers Except Heroin Crack & Other Cocaine

Figure 20: Trend in Primary Drug Problem among Individuals Admitted for Substance Use Treatment

Data Source: Missouri Department of Mental Health: Customer Information Management, Outcomes & Reporting system.

DEATHS RESULTING FROM SUBSTANCE USE

All Other Substances

While deaths attributable to cigarette smoking are slowly declining after reaching a peak of 10,300 in 2015, deaths with an underlying cause of alcohol and drug use continue to climb. Opioids account for most of the drug-induced deaths in Missouri. In 2018, heroin and other opioid overdose deaths reached 1,132.



Figure 21: Trend in Missouri Substance Induced Deaths

Data Source: Missouri Department of Health and Senior Services.

OTHER BEHAVIORAL IMPACTS

(This section is in development and will be available in March 2020).	