

**STATUS REPORT ON MISSOURI'S
SUBSTANCE ABUSE AND
MENTAL HEALTH PROBLEMS**

Twentieth Edition -- 2014



**MISSOURI DEPARTMENT OF MENTAL HEALTH
Division of Behavioral Health**

STATUS REPORT ON MISSOURI'S SUBSTANCE ABUSE AND MENTAL HEALTH PROBLEMS

TWENTIETH EDITION — 2014

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PREFACE

Now in its 20th year, the *Status Report on Missouri's Substance Abuse and Mental Health Problems* provides consistent year-to-year counts of reported incidents and conditions resulting from substance use disorders and other mental and behavioral disorders. Several state agencies provide data for the report, and the Department of Mental Health is grateful for this long-standing collaboration. *Status Report* data sets include county-level detail, when available, to encourage local and regional problem analysis.

Public surveys continue to track important behavioral issues. The *Status Report* provides comparative national, statewide Missouri, and regional Missouri estimates of substance use and mental health disorders and beliefs derived from national and state surveys. Charts illustrate multi-year trends measured by the National Survey on Drug Use and Health, the Missouri Student Survey, and other sources.

The Missouri Division of Behavioral Health annually arranges treatment for more than 100,000 Missouri residents with substance use and mental health disorders. These services are provided through contracts with an array of community-based programs. The *Status Report* state and county profiles summarize these services and the populations served.

Recent editions of the *Status Report* are available at <http://dmh.mo.gov/ada/rpts/status.htm>, and a data archive at <http://dmh.mo.gov/seow/default.aspx> provides access to most of the published data. Inquiries and comments should be directed to the Division of Behavioral Health, Research and Statistics office at dbhmail@dmh.mo.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Stringer", written over a white background.

Mark Stringer

ACKNOWLEDGMENTS

The Status Report contains information from many sources. Aside from data and assistance provided by Missouri Department of Mental Health (DMH) staff, the following individuals and non-DMH agencies provided specialized Missouri data for this 20th edition. The Department of Mental Health would like to recognize and thank them for their cooperation and generous provision of time, consultation, and data processing.

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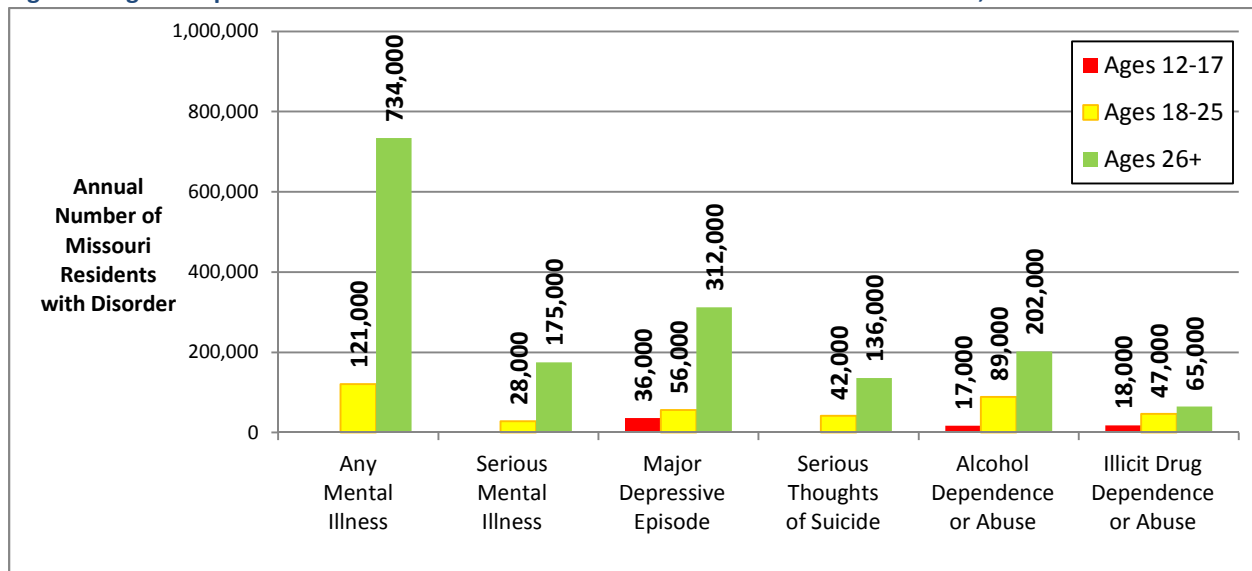
THE BIG PICTURE

Nearly one in five Missouri adults suffers from mental illness and one in 13 suffers from substance use disorders. Missouri data for years 2011 and 2012 from the National Survey on Drug Use and Health (NSDUH) indicate that an estimated 19% of Missouri adults (ages 18 and older) numbering 855,000 have had any past-year mental illness and 8% of adults or 367,000 have had a past-year substance use disorder. Among adults with any mental illness, 203,000 have past-year *serious* mental illness. NSDUH 2012 national data indicate that nearly 20% of adults with any mental illness have a co-occurring substance disorder and over 40 percent of adults with a substance disorder have co-occurring mental illness. These findings suggest that a projected 150,000 to 160,000 Missouri adults might have co-occurring disorders. Components of mental illness include mood disorders such as depression and thoughts of suicide, anxiety disorders, psychotic disorders, impulse control disorders, and adjustment disorders. More than 7% of Missouri adults or 324,000 experienced a major depressive episode in the past year and 4% or 180,000 had serious thoughts of suicide. The adults with substance use disorders include approximately 254,000 with primarily alcohol dependence or abuse, 77,000 with primarily illicit drug dependence or abuse, and 36,000 with both alcohol and illicit drug dependence or abuse.

Young Missouri adults have substantially higher rates of substance use disorders than older adults or adolescents. Over 17% of adults 18-25 years of age have had a past-year substance use disorder, compared to less than 7% of adults over age 25 and 6% of adolescents under age 18. They also have higher rates of past-year major depression than older adults.

Nearly 8% of Missouri adolescents 12-17 years of age have had at least one major depressive episode in the past year. In addition to these 36,000 adolescents, an estimated 6% of Missouri adolescents numbering 30,000 have a past-year substance use disorder. They include approximately 12,000 primarily with alcohol dependence or abuse, 13,000 with illicit drug dependence or abuse, and 5,000 with both alcohol and illicit drug dependence or abuse.

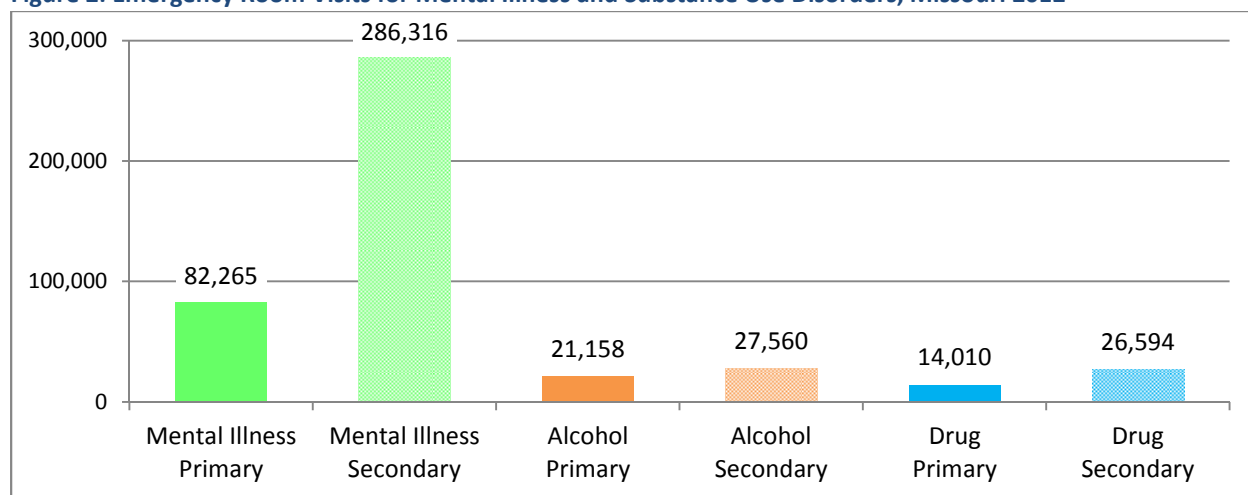
Figure 1: Age Group Estimates for Past-Year Mental Illness and Substance Use Disorders, Missouri 2011-2012



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages. Some individuals are in more than one disorder category. Estimates are not available for ages 12-17 for Any Mental Illness, Serious Mental Illness, and Serious Thoughts of Suicide.

Mental illness accounts for more emergency room visits than alcohol and drug abuse. In 2012, mental disorders were the principal diagnosis among more than 82,000 Missouri emergency room episodes. Over 21,000 E.R. visits were attributed primarily to alcohol and 14,000 to drugs. Approximately 35% of the individuals treated in the emergency room primarily for mental disorders were admitted to the hospital for additional services. Among individuals treated primarily for alcohol or drug disorders, 25% were admitted to the hospital. Additionally, large numbers of individuals entered emergency departments with secondary diagnoses of mental, alcohol, and/or drug disorders.

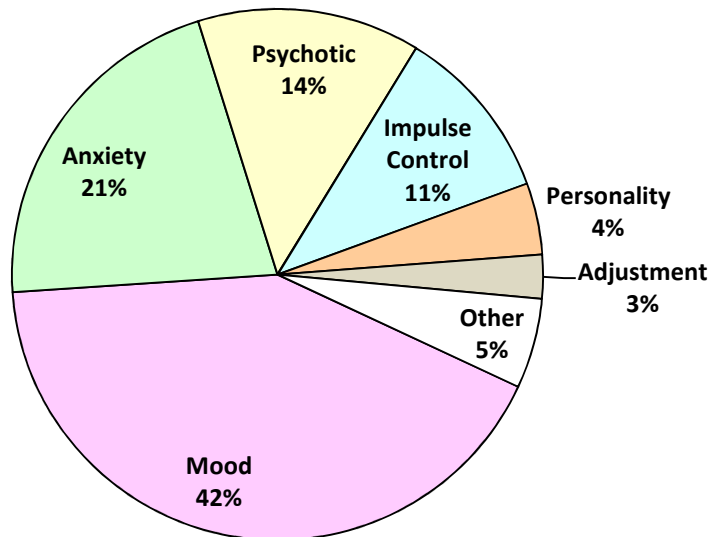
Figure 2: Emergency Room Visits for Mental Illness and Substance Use Disorders, Missouri 2012



Source: Missouri Department of Health and Senior Services. Data are based on ICD-9 code categories developed by the Healthcare Cost and Utilization Project (HCUP). Some individuals may be in more than one secondary diagnosis category.

Among individuals receiving Division of Behavioral Health (DBH) psychiatric services during the past year, 42% were treated for mood disorders. Another 21% were diagnosed with anxiety disorders, 14% with psychotic disorders, and 11% with impulse control disorders. Smaller numbers were treated for personality, adjustment, developmental, sexual and other disorders and impairments including dementia.

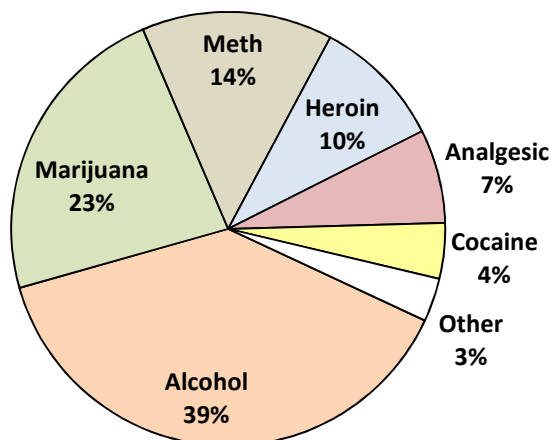
Figure 3: Mental Illness Disorders Treated in Missouri Division of Behavioral Health Programs, Fiscal Year 2013



Source: Missouri Department of Mental Health, Customer Information Management, Outcomes & Reporting (CIMOR) System.

Nearly 39% of individuals receiving DBH services for substance abuse were treated for alcohol use as their primary substance disorder. Nearly 23% were treated for marijuana use, 14% for methamphetamine, 10% for heroin, 7% for non-heroin analgesics, and 4% for cocaine. Other drug mentions for primary drug problem included tranquilizers, hallucinogens, non-meth stimulants, sedatives, and inhalants. Many individuals were also treated for a secondary drug of abuse or for alcohol-in-combination with drugs.

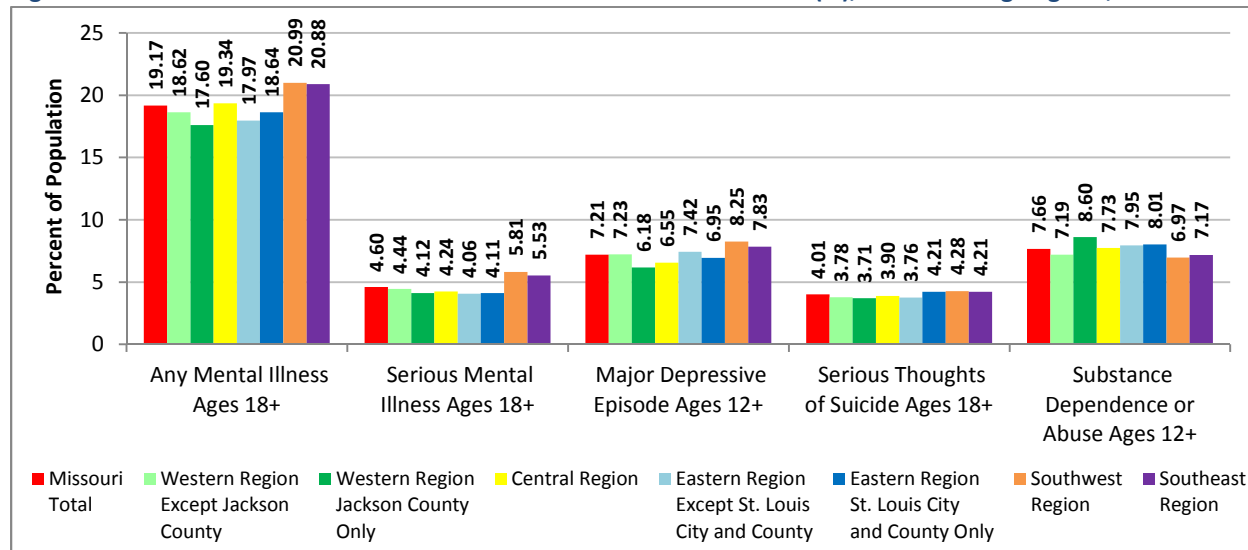
Figure 4: Substance Use Disorders Treated in Missouri Division of Behavioral Health Programs, Fiscal Year 2013



Source: Missouri Department of Mental Health, Customer Information Management, Outcomes & Reporting (CIMOR) System.

Adult mental illness rates tend to be higher in rural areas of Missouri, while adolescent and adult substance use disorder rates are higher in urban areas. Prevalence estimates for mental illness, depression, and suicidal thoughts are highest in the Division of Behavioral Health Southwest and Southeast planning regions and lowest in the Kansas City (Jackson County) and Saint Louis areas. Conversely, substance dependence and abuse rates are highest in the two metro regions. The rates are based on three years of Missouri data from the National Survey on Drug Use and Health (NSDUH). Most of the apparent rate differences are not statistically significant due to small regional survey samples.

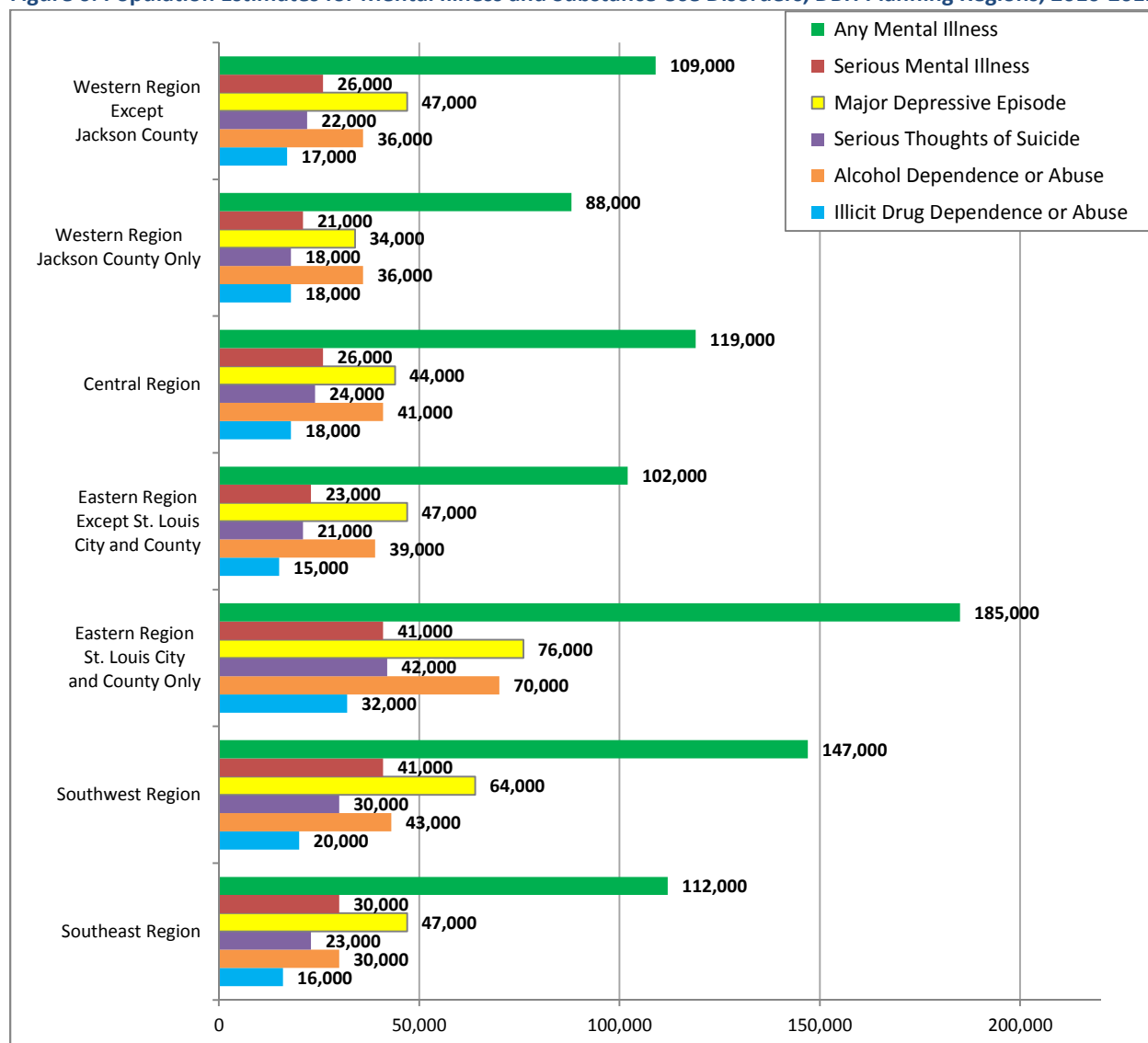
Figure 5: Past-Year Mental Illness and Substance Use Disorder Estimates (%), DBH Planning Regions, 2010-2012



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2010-2012. Some individuals are in more than one disorder category. Estimates are 3-year average rates for the Missouri population 18 years and older for Any Mental Illness, Serious Mental Illness, and Serious Thoughts of Suicide. Rates for Major Depressive Episode and Substance Dependence or Abuse are for ages 12 and older.

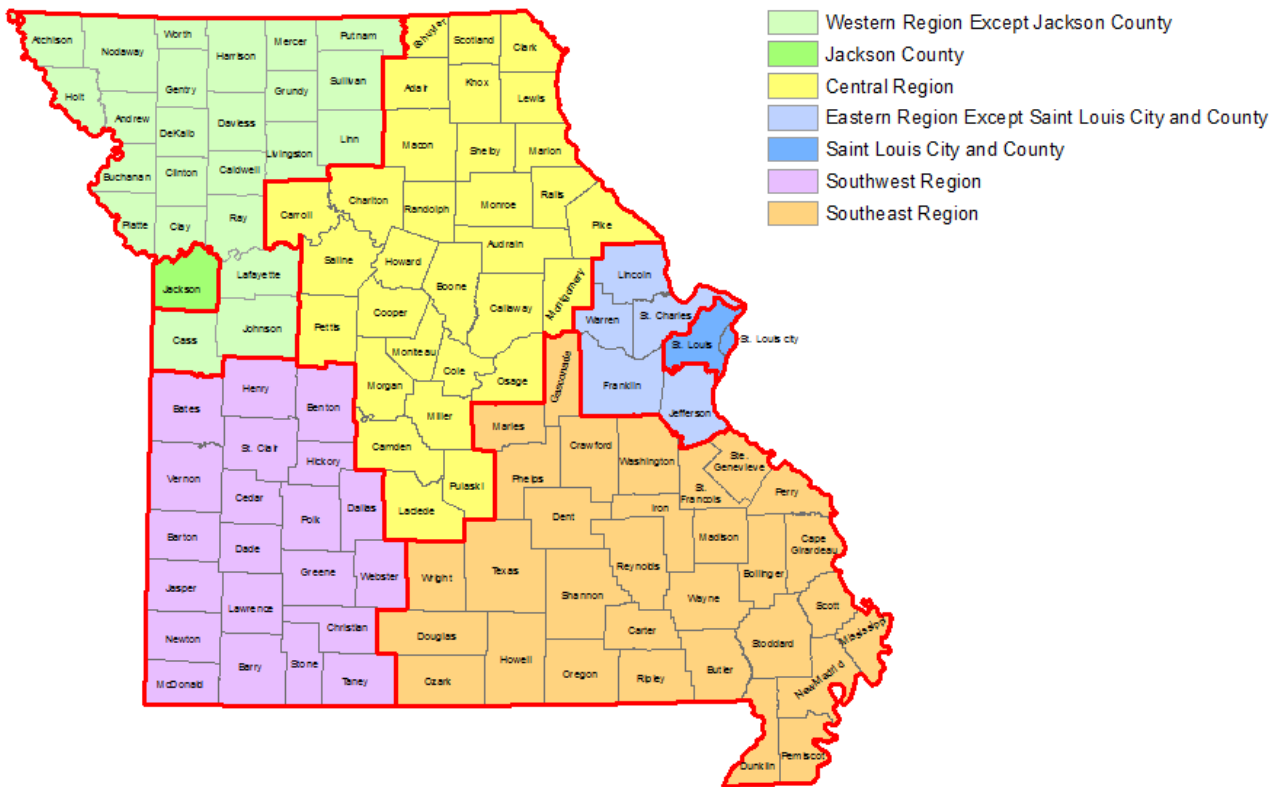
One-third of the Missouri population, and one-third of individuals with mental health and substance use disorders, reside in Saint Louis County, Saint Louis City, and Jackson County. Based on the 2010-2012 NSDUH rate estimates, the prevalence of mental illness and substance abuse in these largest urban areas is in proportion to their populations. Overall, the Saint Louis area and the remainder of the Division of Behavioral Health (DBH) Eastern planning region has approximately 287,000 adults with mental illness and 138,000 adolescents and adults with substance use disorders. Jackson County and the remainder of the Kansas City area and Western planning region have 197,000 with mental illness and 94,000 with substance disorders. Central region has 119,000 with mental illness and 52,000 with substance disorders; Southwest region has 147,000 with mental illness and 54,000 with substance disorders; and Southeast region has 112,000 with mental illness and 43,000 with substance disorders. Separate population estimates are provided for the urban and non-urban portions of Western and Eastern regions, and for alcohol and drug dependence or abuse.

Figure 6: Population Estimates for Mental Illness and Substance Use Disorders, DBH Planning Regions, 2010-2012



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2010-2012. Some individuals are in more than one disorder category. Estimates are 3-year averages for the Missouri population 18 years and older for Any Mental Illness, Serious Mental Illness, and Serious Thoughts of Suicide, and for the population 12 years and older for Major Depressive Episode, Alcohol Dependence or Abuse, and Illicit Drug Dependence or Abuse.

Figure 7: Missouri Division of Behavioral Health Planning Regions and Sub-regions Containing NSDUH Estimates

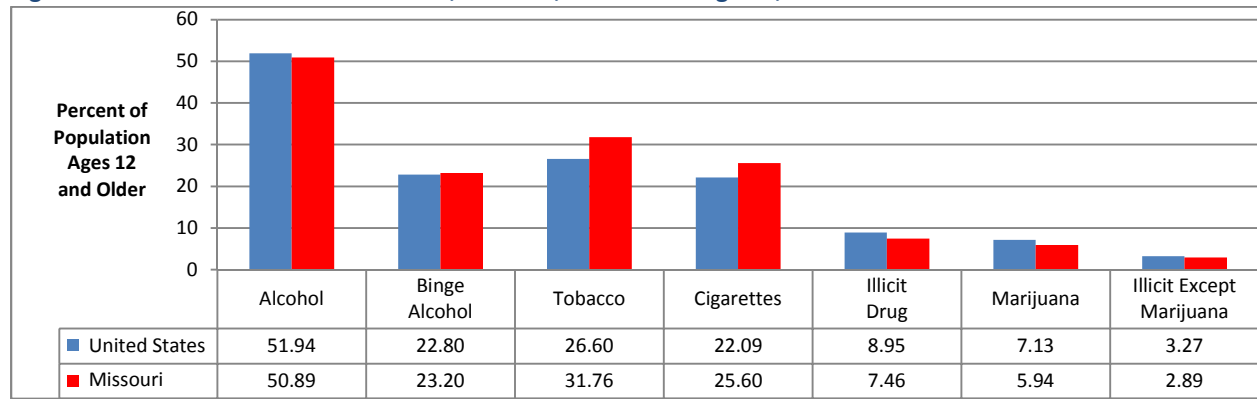


Source: Missouri Department of Mental Health, Division of Behavioral Health.

One-half of Missouri’s population drinks alcohol, and one-fourth smokes cigarettes. Based on three years of NSDUH data, an estimated 51% of the population ages 12 and older consumed alcohol at least once in the month prior to the survey, and 23% consumed five or more drinks on one occasion, generally referred to as “binge drinking”. Missouri’s drinking and binge drinking rates for the overall population are statistically identical to the national rates. Drinking rates are approximately 8 percentage points higher in the Eastern and Western regions than in the Southeast and Southwest regions, but these differences are not statistically significant. An estimated 14% of Missouri adolescents 12-17 years of age drink alcohol—about the same as adolescents nationwide. Among young adults 18-25 years of age, 60% are past-month drinkers—again the same as the U.S. rate for that age group. Missouri’s cigarette smoking rate of 26% remains four percentage points higher than the national rate of 22% for the population ages 12 and older. Smoking rates are highest in the Southeast region at 30% and lowest in the Eastern region at 23%. Among Missouri adolescents, 11% are current smokers compared to 7.5% nationwide. Missouri young adults have higher smoking rates than adolescents or older adults and, at 37%, a rate 4 percentage points higher than the U.S. rate for the 18-25 age group.

Illicit drug use in Missouri is slightly lower than the national average. An estimated 7.5% of the Missouri population ages 12 and older used an illicit drug in the past month. About 6% used marijuana in the past month and 10% used it in the past year. Nationwide, past-month marijuana use is 7% and past-year use is nearly 12%. Usage rates are highest in the Eastern region—particularly in the Saint Louis area at over 7%—and lowest in the Southeast region at 4%. Marijuana is used by approximately 14% of Missouri adolescents 12-17 years of age, 28% of young adults, and 7% of adults over age 25. Nationwide rates are also 14% for adolescents, but are 31% for young adults and 8% for older adults.

Figure 8: Estimated Past-Month Alcohol, Tobacco, and Illicit Drug Use, U.S. and Missouri: 2011-2012

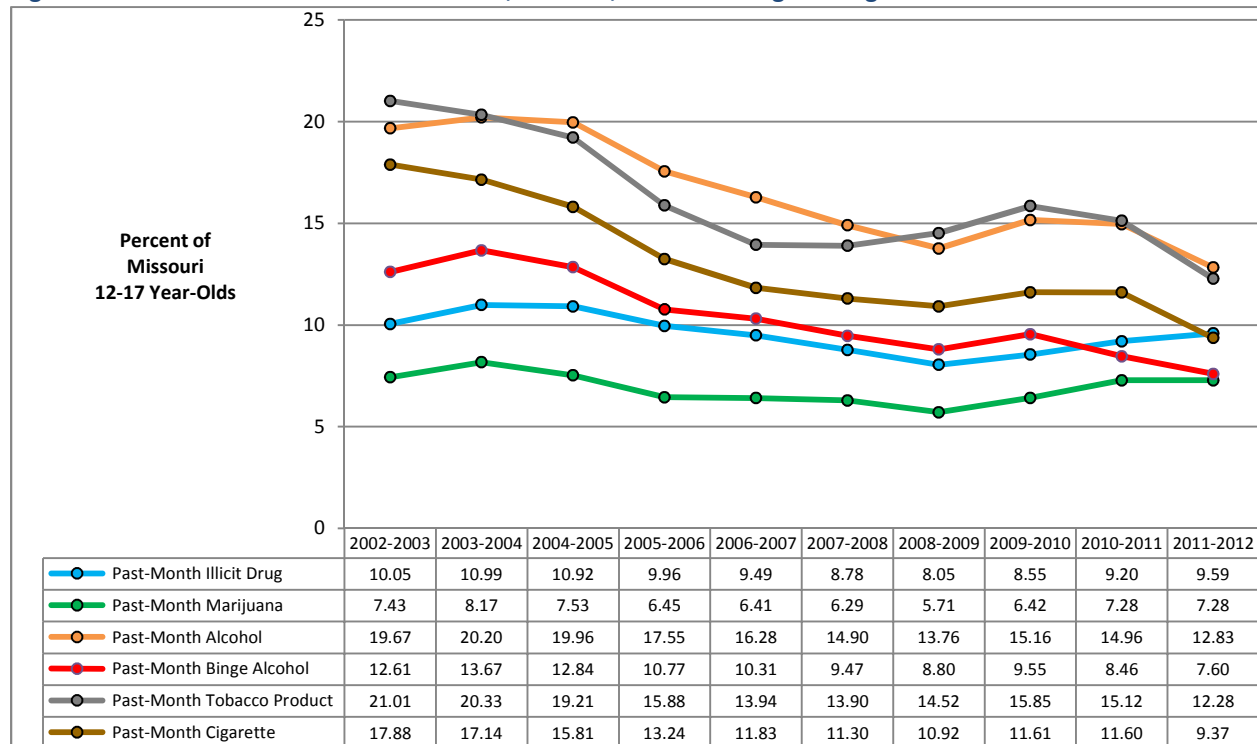


Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year average rates for the United States and Missouri populations ages 12 years and older.

TRENDS

Adolescent alcohol and tobacco use continues to decline. Among Missouri’s 12-17 year-olds, alcohol use reached its lowest level in 2011-2012 since the National Survey on Drug Use and Health (NSDUH) began measuring state rates in 1999. Binge drinking in this age group has also declined. Although adolescent tobacco use in Missouri is higher than the national rate, it has declined considerably from an estimated 21% in 2002-2003 to less than 13% in 2011-2012. Cigarette use has led that trend, decreasing from nearly 18% to less than 10% during that 9-year period. Adolescent marijuana use in Missouri has shown no change in the latest NSDUH estimates, while overall illicit drug use is trending upward. Slight year-to-year increases in estimates of past-month illicit drug use are not statistically significant, but suggest that drug use might be slowly increasing in the 12-17 age-group.

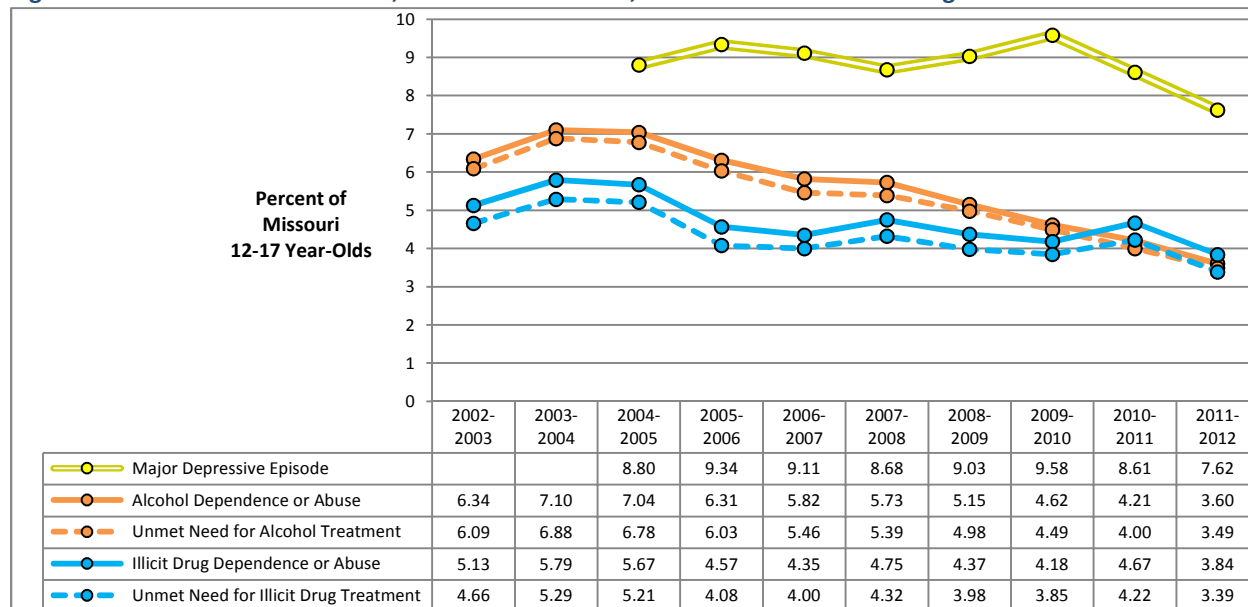
Figure 9: Trend in Past-Month Use of Alcohol, Tobacco, and Illicit Drugs among Missouri Adolescents



Data Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages.

Adolescent rates for past year major depressive episode and substance dependence are stable or trending downward. Data from the 2011 and 2012 NSDUH indicate that, among Missouri adolescents 12-17 years of age, the estimated percentage with alcohol dependence or abuse has been reduced from about 7% to less than 4% since 2003-2004. Illicit drug dependence/abuse rates for that age group have hovered around 4% for the last several years.

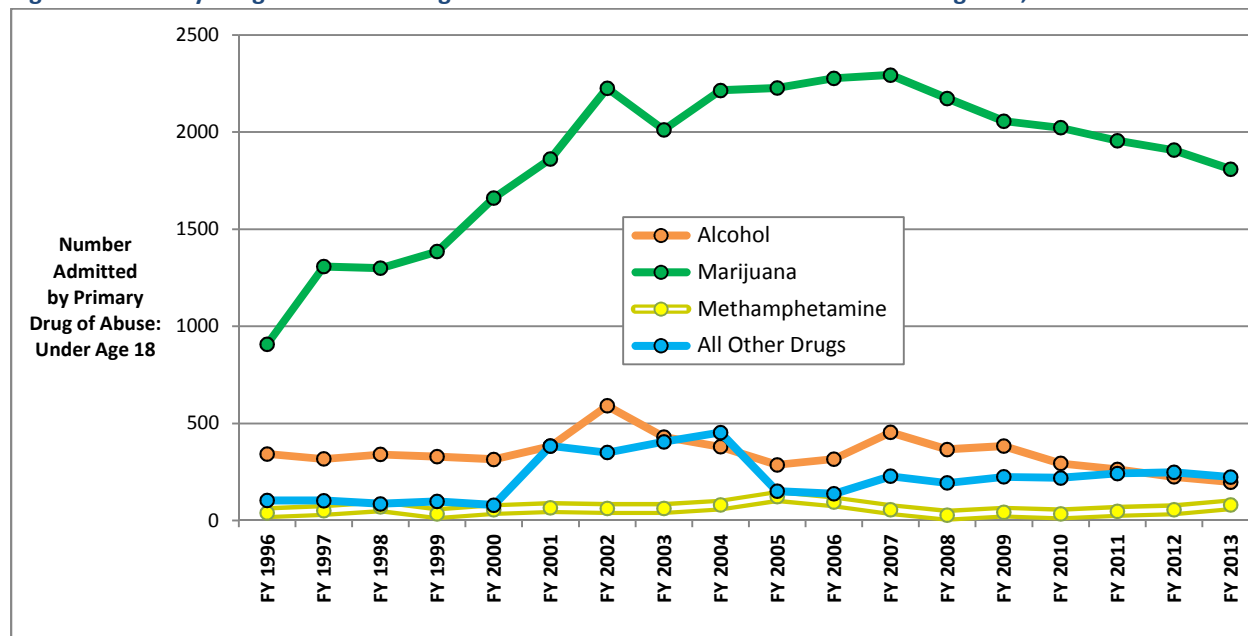
Figure 10: Past-Year Mental Illness, Substance Disorders, and Treatment Need among Missouri Adolescents



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages. Some individuals are in more than one category.

Estimates of Unmet Need indicate most of these adolescents did not receive specialized treatment for substance disorders or received an inadequate amount of treatment. Among those who accessed addiction services supported by the Division of Behavioral Health (DBH) in recent years, the majority identified marijuana as their primary drug problem.

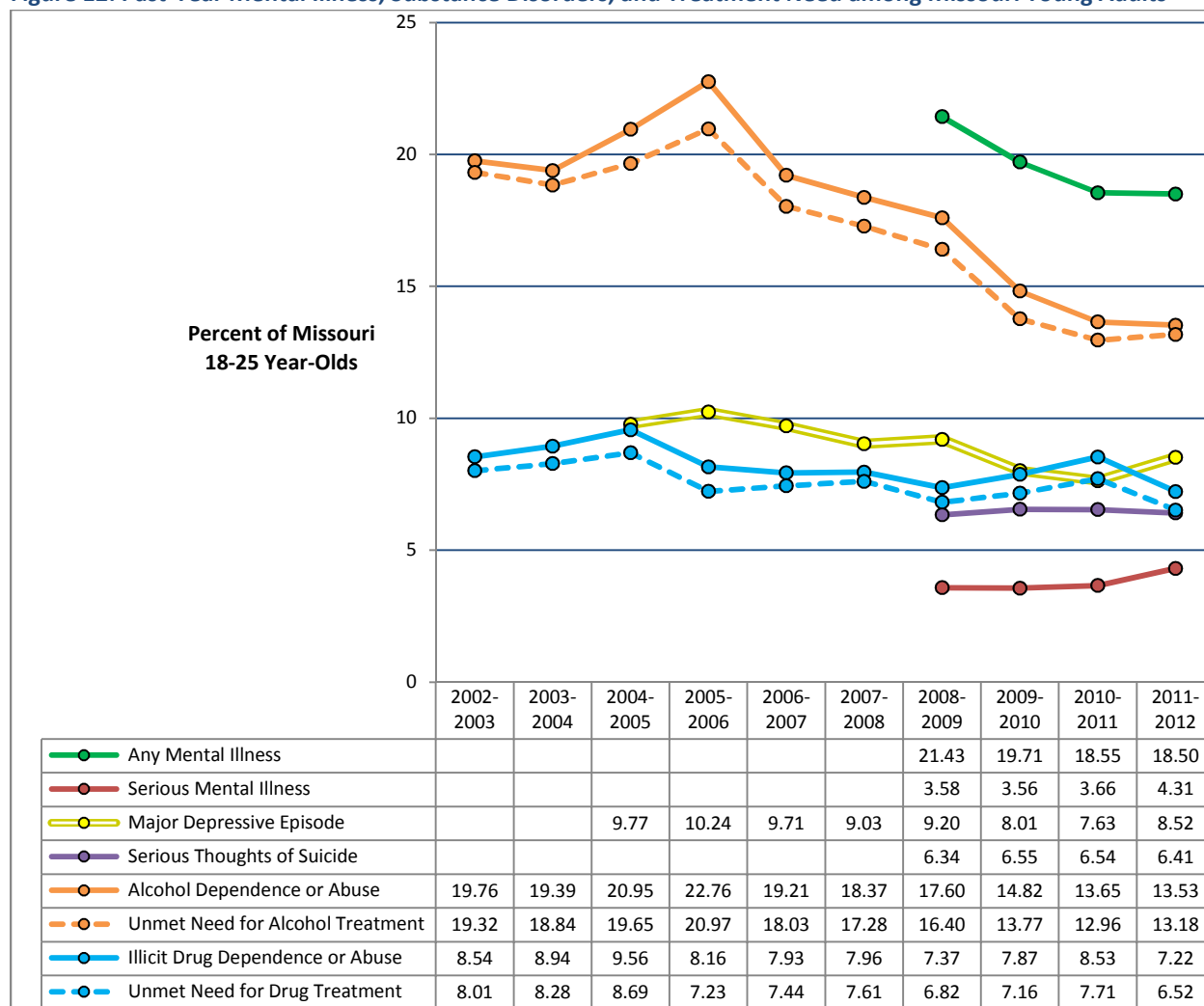
Figure 11 Primary Drug of Abuse among Adolescents Admitted to DBH Treatment Programs, FY 1996-FY 2013



Source: Missouri Department of Mental Health, Customer Information Management, Outcomes & Reporting (CIMOR) System.

Young adults have the state’s overall highest rates of behavioral health problems. Over 18% of Missouri adults 18-25 years of age had some type of past-year mental illness and over 17% had an alcohol or drug disorder, according to estimates from the 2011 and 2012 National Survey on Drug Use and Health. Among approximately 121,000 young adults with mental illness, over 26,000 had serious mental illness, 42,000 had serious thoughts of suicide, and 56,000 had at least one past-year major depressive episode. An estimated 115,000 had a substance use disorder including 68,000 with alcohol dependence or abuse, 26,000 with illicit drug dependence or abuse, and 21,000 with both alcohol and drug dependence or abuse. Rates for the mental illness measures and drug dependence or abuse have fluctuated little in this age group in recent years. Alcohol dependence and abuse disorders have declined by several percentage points, accompanied by a corresponding reduction in treatment need.

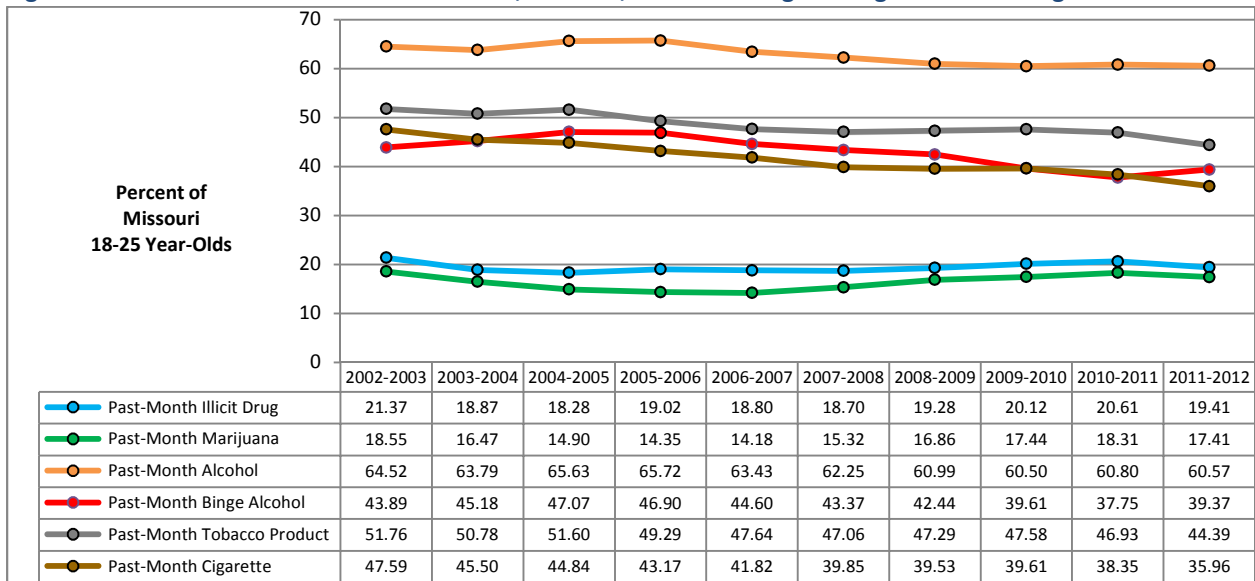
Figure 12: Past-Year Mental Illness, Substance Disorders, and Treatment Need among Missouri Young Adults



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages. Some individuals are in more than one category.

Tobacco use among young adults is steadily declining. Cigarette use among Missouri adults 18-25 years of age has dropped by about 10 percentage points in the past 10 years. Past-month illicit drug use in this age group has remained at about 20%, with marijuana accounting for most of this use. Alcohol use and binge drinking rates have declined modestly during this period. An estimated 60% of Missouri’s young adults currently drink, and 40% binge-drink.

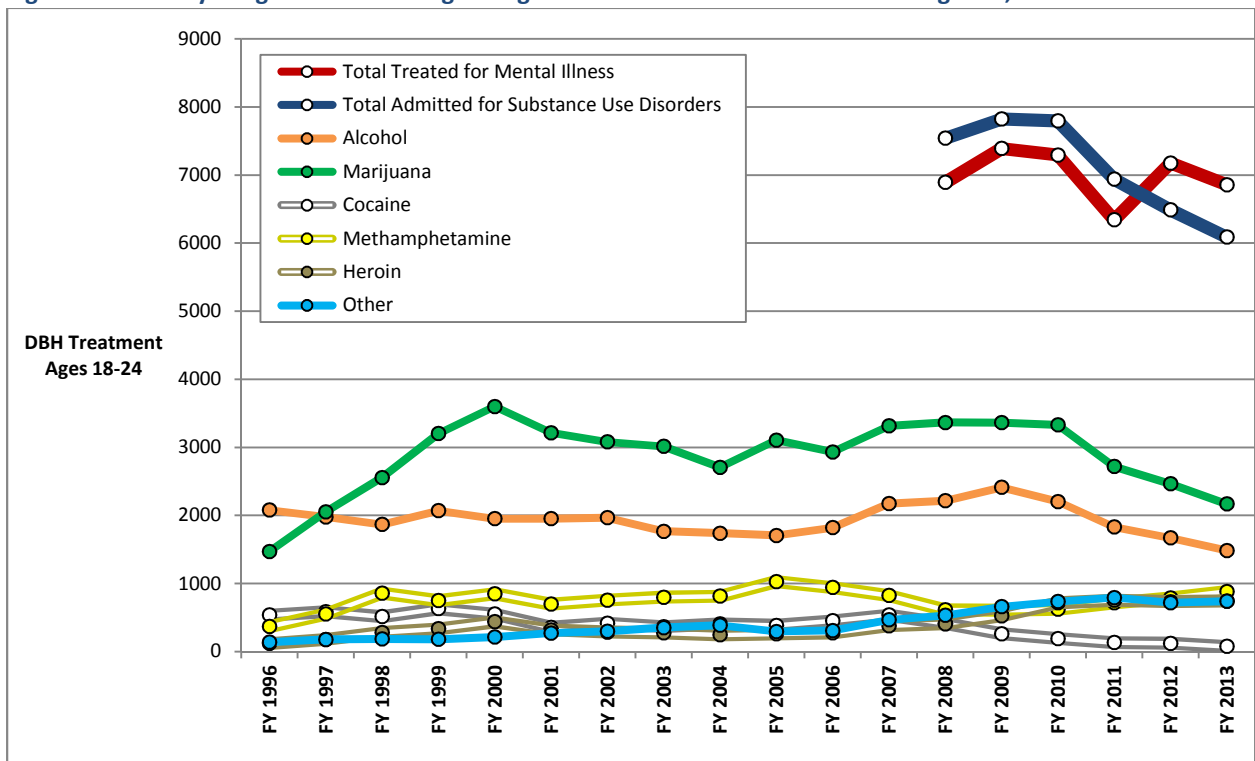
Figure 13: Trend in Past-Month Use of Alcohol, Tobacco, and Illicit Drugs among Missouri Young Adults



Data Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages.

Young adult treatment admissions for marijuana, alcohol, and cocaine are declining while admissions for heroin and methamphetamine are increasing. Only one-fourth of young adults admitted to Missouri Division of Behavioral Health treatment programs identify alcohol as their primary drug of abuse. Marijuana now accounts for 36% of the admissions, somewhat lower than a decade ago. Young adults are developing disorders with a more diverse variety of substances. Consistent with prevalence estimates, almost equal numbers of young adults have sought treatment for serious mental illness and substance use disorders in recent years.

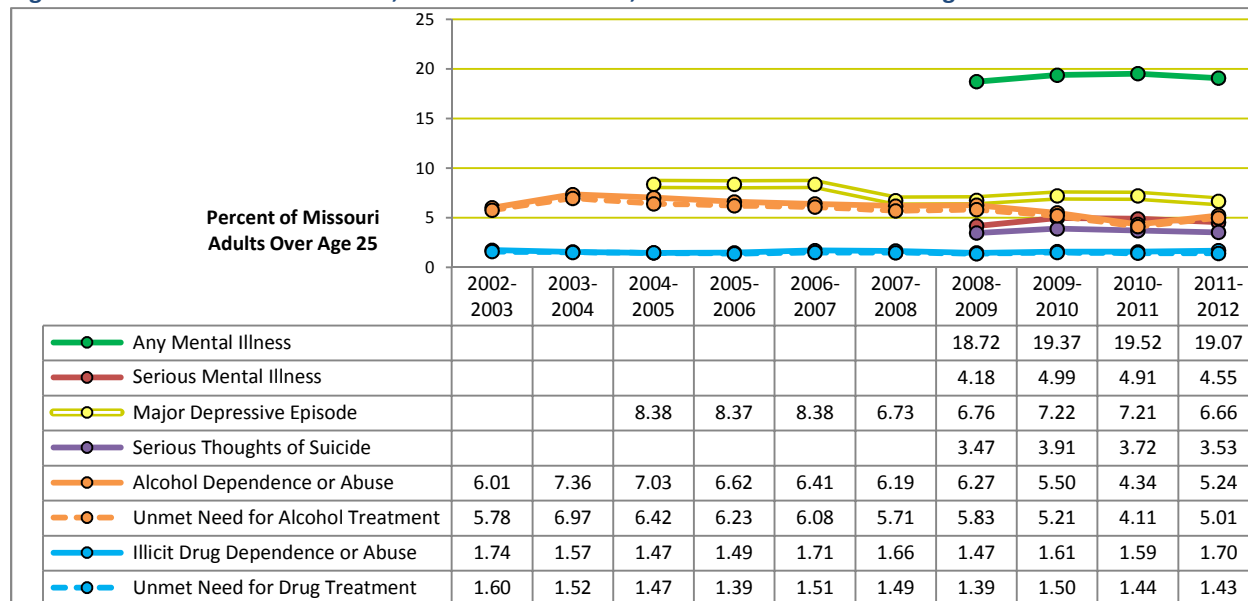
Figure 14: Primary Drug of Abuse among Young Adults Served in DBH Treatment Programs, FY 1996-FY 2013



Source: Missouri Department of Mental Health, Customer Information Management, Outcomes & Reporting (CIMOR) System.

Older adults have higher rates of mental illness than substance use disorders. An estimated 19% of Missouri adults over age 25—approximately 734,000—have a past-year mental illness, and nearly 5% or 175,000 have serious mental illness. Less than 7% or about 252,000 have a substance use disorder. Of these, about 202,000 have an alcohol dependence/abuse or co-occurring alcohol and illicit drug dependence/abuse disorder.

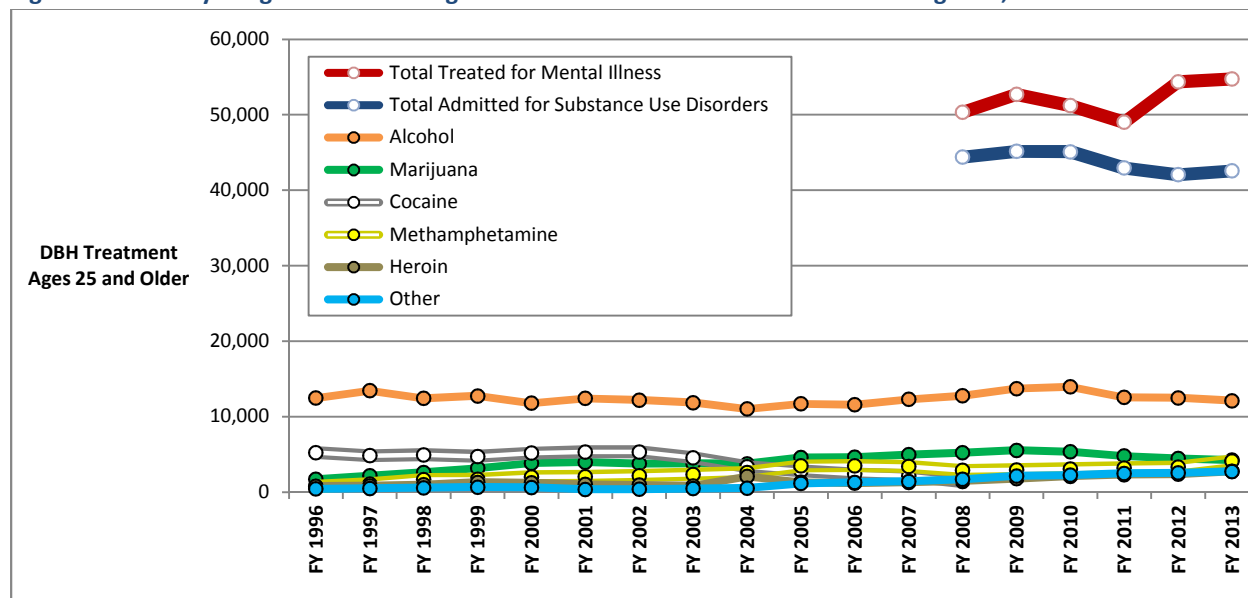
Figure 15: Past-Year Mental Illness, Substance Disorders, and Treatment Need among Missouri Older Adults



Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2011-2012. Estimates are 2-year averages. Some individuals are in more than one category.

Consistent with these prevalence estimates, considerably more adults age 25 and older sought treatment for mental illness than substance abuse in Division of Behavioral Health programs in FY 2013. Among those admitted for substance use disorders, nearly one-half identified alcohol as their primary drug of abuse.

Figure 16: Primary Drug of Abuse among Older Adults Served in DBH Treatment Programs, FY 1996-FY 2013

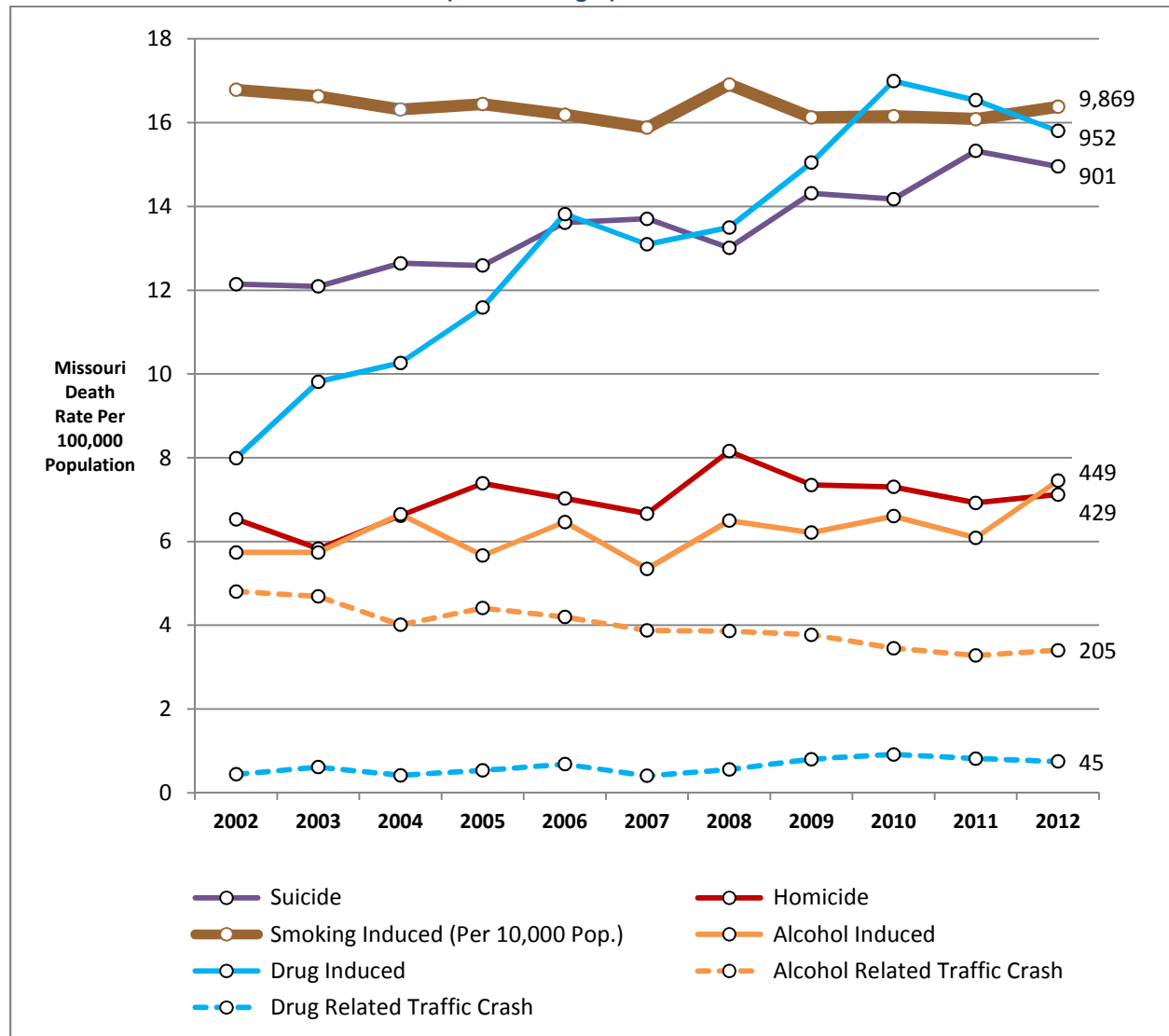


Source: Missouri Department of Mental Health, Customer Information Management, Outcomes & Reporting (CIMOR) System.

IMPACTS

More deaths result from drug overdoses and chronic drug use than from suicide. Although cigarette smoking is still one of the leading causes of death in Missouri with nearly 10,000 smoking deaths estimated each year, drug abuse now exceeds suicide as a cause of death. Suicide deaths have increased from 12.4 per 100,000 population in 2000 to 15.0 in 2012; drug induced deaths have more than doubled from 5.9 per 100,000 in 2000 to 15.8 in 2012. During that period, smoking deaths have remained at about 16 *per 10,000* (164 per 100,000 in 2012). Alcohol-induced deaths reached 449 for the first time—a rate of 7.5 per 100,000 population.

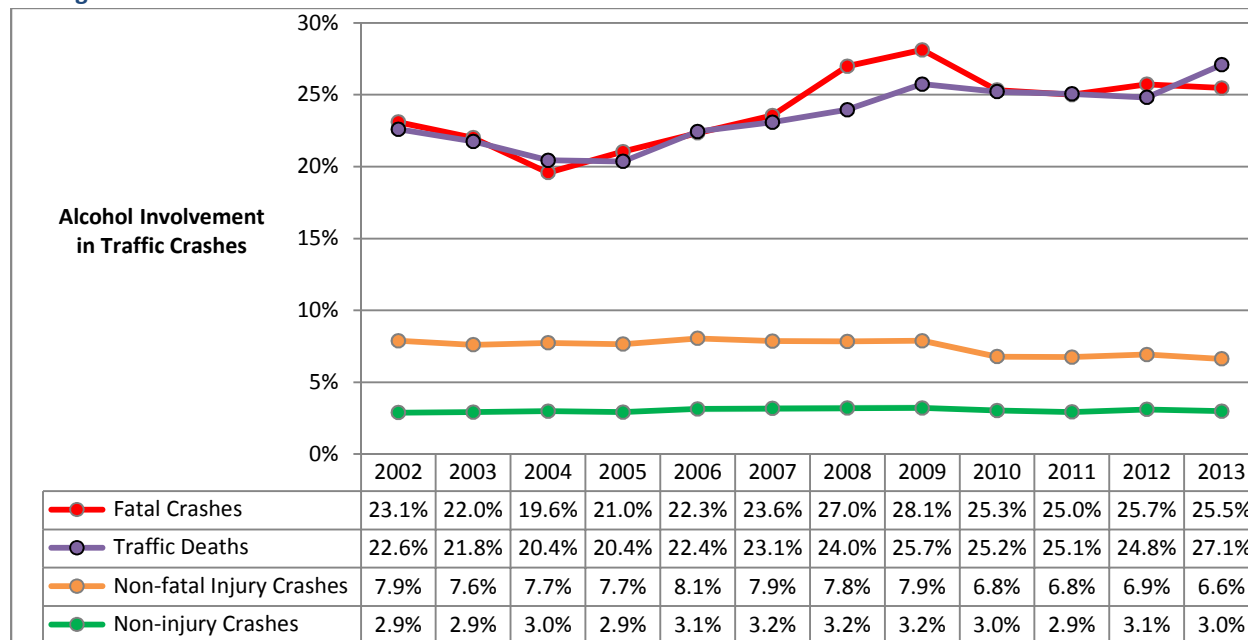
Figure 17: Death Rate per 100,000 Population for Alcohol and Drug Related Events (and per 10,000 for Smoking) and Attributed Number of Deaths in 2012 (labeled at right)



Sources: Missouri Department of Health and Senior Services; Missouri Department of Public Safety, State Highway Patrol.

The portion of traffic crash deaths that are alcohol related is increasing. In 2013, intoxicated driving was involved in 27% of Missouri’s traffic deaths—the highest percentage of the past decade. Alcohol-involved crashes have greater injury severity than non-alcohol crashes. Although only 4% of traffic crashes in 2013 were alcohol-involved, over 25% of the fatal crashes and nearly 7% of the non-fatal injury crashes were attributed to alcohol. Only 0.5% of all traffic crashes in 2013 involved fatalities, yet over 3% of the alcohol-involved crashes were fatal.

Figure 18: Alcohol Involvement in Missouri Traffic Deaths and in Fatal, Non-fatal Injury, and Non-injury Property Damage Crashes

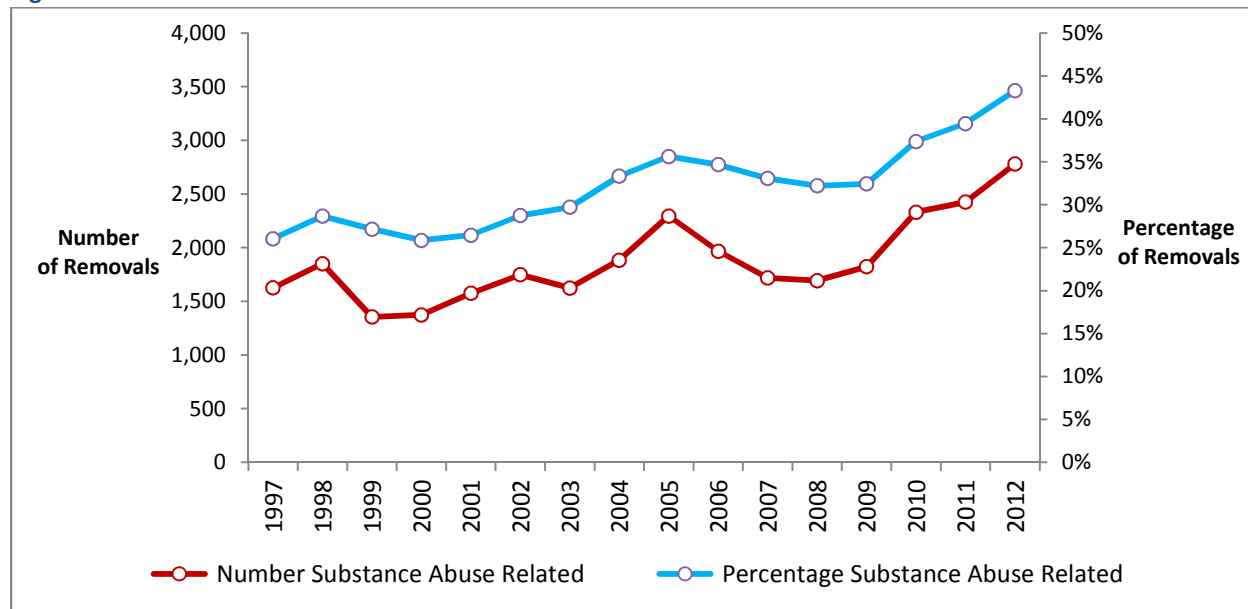


Source: Missouri Department of Public Safety, State Highway Patrol.

Substance abuse accounts for over 40% of court-ordered out-of-home placements of children.

In 2012, 2,780 Missouri children were removed from their homes by juvenile courts due to parental alcohol and/or drug abuse and 3,642 for all other reasons. The number and percentage of substance related removals exceeds those of all previous years.

Figure 19: Missouri Out-of-Home Placements of Children Due to Parental Substance Abuse



Source: Missouri Department of Social Services.

Drug related crime accounts for 40% of prison and probation admissions. In fiscal year 2013 6,906 individuals were incarcerated in Missouri prisons and 10,280 were placed on probation for substance related convictions including driving while intoxicated. During the past several years, 38% of prison admissions and 41% of probation case openings have consistently been substance related.