MADISON COUNTY, MONTANA DEMOGRAPHIC AND MENTAL HEALTH DATA SUMMARY

April 2016
Compiled by the Madison County Mental Health Local Advisory Council

Introduction
Madison County is a large, predominantly rural county in Southwest Montana. Madison County is a federally designated Health Professional Shortage Area for primary medical care, dental care, and mental health care.[1]

In 2011, the Madison County Public Health Department conducted a Health Needs Assessment, and a Community Health Improvement Plan was developed based on this Needs Assessment.[2] Demographic information for Madison County can be found in the 2011 needs assessment document; however, a set of more current data is provided below. Limited information on behavioral health (mental health and substance abuse) can also be found in the 2011 needs assessment document; additional and updated data in this regard are offered below.

The 2011 Madison County Health Needs Assessment noted that there were no mental health professionals based in Madison County; a countywide need for local mental health professionals was identified.[3] The 2011 Community Health Improvement Plan listed three goals relevant to behavioral health (mental health and substance abuse):

- Work towards an overall cultural shift to decrease the stigma associated with accessing mental health services.
- Increase the number of providers of mental health services.
- Support role of primary care providers in prescribing for mental health patients.

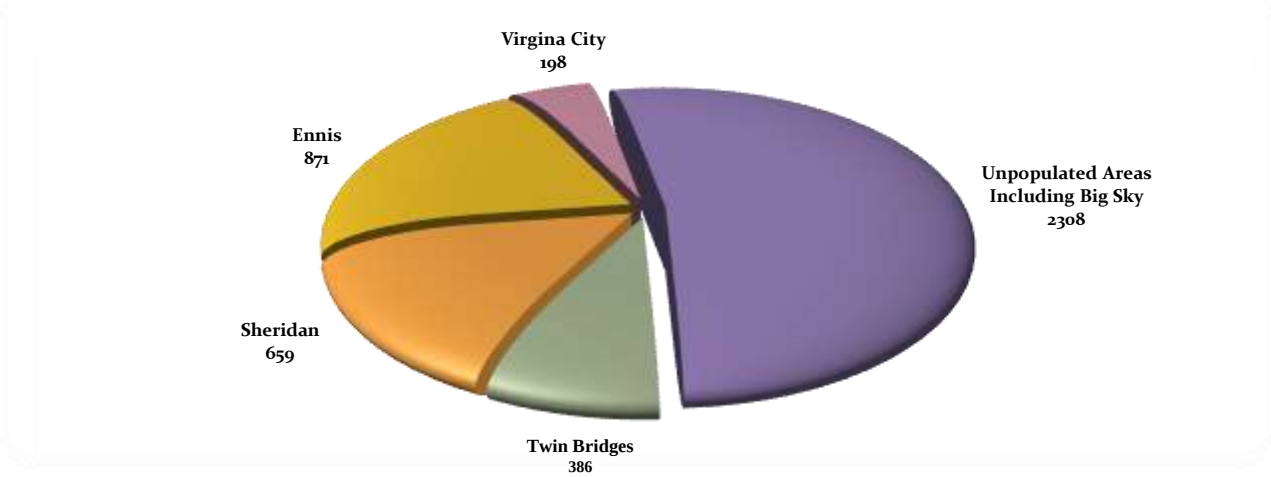
Purpose
The purpose of this data summary is to offer a more thorough profile of behavioral health in Madison County. The discussion below, in combination with the results of a 2015 Countywide Mental Health Needs Assessment conducted by the Madison County Mental Health Local Advisory Council with the assistance of the Center for Health Policy at Boise

[1] Health Resources and Services Administration (HRSA). Data Warehouse for Madison County, Montana. Data printed out 1/16/2016.
[2] Madison County Public Health Department. 2011 Madison County Health Needs Assessment and Community Health Improvement Plan.
[3] As of April 2016, there are three mental health counselors and one substance abuse counselor known to be practicing in Madison County. All are part-time.

State University[4], provides a more current and comprehensive picture of the mental health and substance abuse status and needs of Madison County residents.

Demographics -- Madison County[5]

The population of Madison County is 7,820. Residents are scattered across 3,587 square miles of land, for an average population density of 2.2 people per square mile. Nearly three-quarters of the population live in unincorporated areas. Cities and towns include: Ennis (871), Virginia City (198), Sheridan (659), and Twin Bridges (386). Although an estimated 2,308 people live in the unincorporated community of Big Sky, its population is split between Gallatin County and Madison County; the majority of Big Sky residents are located in Gallatin County.



Madison County's population is 53% male and 47% female. Residents are 4% children under the age of five (~300), 12% between the ages of five and 17 (~930), 58% between the ages of 18 and 64 (~4,525), and 26% over the age of 64 (~2,050).

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[4] Dotti Kishbaugh, Jennifer VanCour, Theodore W. McDonald, Sandina Begic. Center for Health Policy, Boise State University. Madison County, Montana Community Mental Health Needs Assessment: Results and Analysis. Prepared for the Madison County Mental Health Local Advisory Council. March 2016.

[5] Five data sources:

(1) U.S. Census Bureau. QuickFacts for Madison County, Montana. Table presents counts for 2010, and estimates for 2013 and 2014.

(2) U.S. Census Bureau. 5-Year American Community Survey data for Madison County, Montana. Data cover 2009-2013.

(3) Economic and Statistics Administration, U.S. Census Bureau. Small Area Health Insurance Estimate (for Madison County, Montana population under 65). 2013.

(4) U.S. Census Bureau. Population Estimates, Montana Incorporated Places by County. Data cover 1990-2014. Estimates were compiled 5/29/2015 by the Census and Economic Information Center, Montana Department of Commerce.

Note that the U.S. Census population "counts" for Madison County include only those residents who claim Madison County as their primary residence; seasonal residents are not included.

(5) Dr. Jaye Swoboda, Veterans (Health) Administration, Department of Veterans Affairs. Email to Doris Fischer. 11/17/2015.

95% of County residents have graduated from high school, with over 29% having a bachelor's degree or higher. 97% are White, and 3% are Hispanic or Latino. There are an estimated 785 veterans. Madison County has 3,389 households, for an average household size of 2.2 persons. 13% of households with children or grandchildren are single-parent households. Nearly 9% of the population lives below the poverty level; eleven percent of children under 18 live below the poverty level; nearly 7% of people 65 and over live below the poverty level.

In 2013, an estimated 21-25% of Madison County residents lacked health insurance coverage. 286 Madison County veterans are presently enrolled in the Veterans (Health) Administration system in Montana; 166 of these receive their primary care in Bozeman.

Mental Health and Substance Abuse Data -- National[6]

"Mental illnesses are chronic disruptions in the neural circuits of the brain. The disrupted neural circuits affect the functioning of the brain – how a person thinks, feels, and acts. Disrupted neural circuits can dramatically affect a person's moods and interpretation of life events…Disruptions of neural circuits of the brain are caused by biological factors, environmental factors, or a combination of the two…Disrupted neural circuits can be helped by…psychiatric treatment, effective therapy, peer support, family support, sleep, diet, and exercise."

Mental illnesses include, but are not limited to, the following: Anxiety Disorders, Attention Deficit Hyperactivity Disorder (ADHD, ADD), Autism Spectrum Disorders (ASD), Bipolar Disorder (Manic-Depressive Illness), Borderline Personality Disorder, Depression, Eating Disorders, Obsessive-Compulsive Disorder (OCD), Panic Disorder, Post-Traumatic Stress Disorder (PTSD), Schizophrenia, and Social Phobia (Social Anxiety Disorder). Mental illness and addiction disorders (e.g., alcohol and drug abuse) often co-occur.

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[6]Eight data sources:

(1) Dr. Thomas Insel, Director, National Institute of Mental Health. First paragraph quotation was excerpted from video posted on You Tube https://youtu.be/YeFl3l74QZA. April 25, 2013.

(2) National Alliance on Mental Illness (NAMI). NAMI -- Mental health by the numbers. 2015.

(3) National Institute on Mental Health (NIMH). NIMH website -- Statistics for mental illness prevalence. 2010-2014.

(4) Center for Behavioral Health Statistics and Quality. *Behavioral health trends in the United States. Results from the 2014 National Survey on Drug Use and Health* (HHS Publication No. SMA 15-4927, NSDUH Series H-50). 2015. Retrieved from Substance Abuse and Mental Health Services Administration (SAMHSA) website. Note that survey results may understate the prevalence of serious mental illness, as nearly 29% of the selected survey sample did not complete the interview. Persons with severe mental illness may disproportionately fall into the non-response categories.

(5) Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report Supplement, Mental Health Surveillance among Children—United States, 2005-2011. May 17, 2013. Childhood quotation excerpted from Introduction.

(6) Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. March 11, 2016.

(7) National Center for Injury Prevention and Control, Division of Violence Prevention, Centers for Disease Control and Prevention. Suicide Facts at a Glance. 2015.

(8) Bruce Bower. *Over The Edge*. SCIENCE NEWS. January 9, 2016. Suicide statistics drawn from the U.S. Centers for Disease Control and Prevention and the U.S. Department of Defense.

Mental illness statistics – Adults in the U.S.:

- Nearly one in five adults (20%) experiences a mental illness in a given year.
- Over 4% of adults live with a serious mental illness.
- Nearly 60% of adults living with a mental illness did not receive treatment in the previous year.

Mental illness and addiction disorders (e.g., alcohol and drug abuse) often co-occur.

Mental health disorders occurring in children (ages 3-17) are described as "serious deviations from expected cognitive, social and emotional development". These disorders represent some of the most costly and disabling conditions affecting children. They are relatively common, early in onset, often lead to hospitalization, and frequently persist into adulthood.

Mental illness statistics – Children in the U.S.:

- 13-20% of children experience a mental disorder in a given year.
- Over 14% of children ages 2-8 have a parent-reported diagnosis of mental, behavioral, or developmental disorder; these children are less likely than others to have comprehensive, family-centered medical care.
- One-half of all lifetime cases of mental illness begins by the age of 14; three-quarters, by the age of 24.
- Nearly half of children ages 8-18 with a mental illness did not receive treatment in the previous year.
- The average delay between onset of symptoms and intervention is eight to ten years.
- About half of students age 14 and older with a mental illness drop out of high school.

A summary of the prevalence of childhood mental disorders is provided in Table 1.

Table 1. Estimated prevalence of mental disorders in youth

Disorder	Age Range	Prevalence (by percentage)
Attention deficit/hyperactivity	3-17	6.8%
Behavioral or conduct disorders	3-17	3.5%
Anxiety disorders	3-17	3.0%
Depression	3-17	2.1%
Autism spectrum disorders	3-17	1.1%
Tourette's syndrome	6-17	0.2%
Illicit drug use disorder	12-17	4.7%
Alcohol abuse disorder	12-17	4.2%

Data Source: Centers for Disease Control and Prevention.

Suicides in the U.S., 2013:

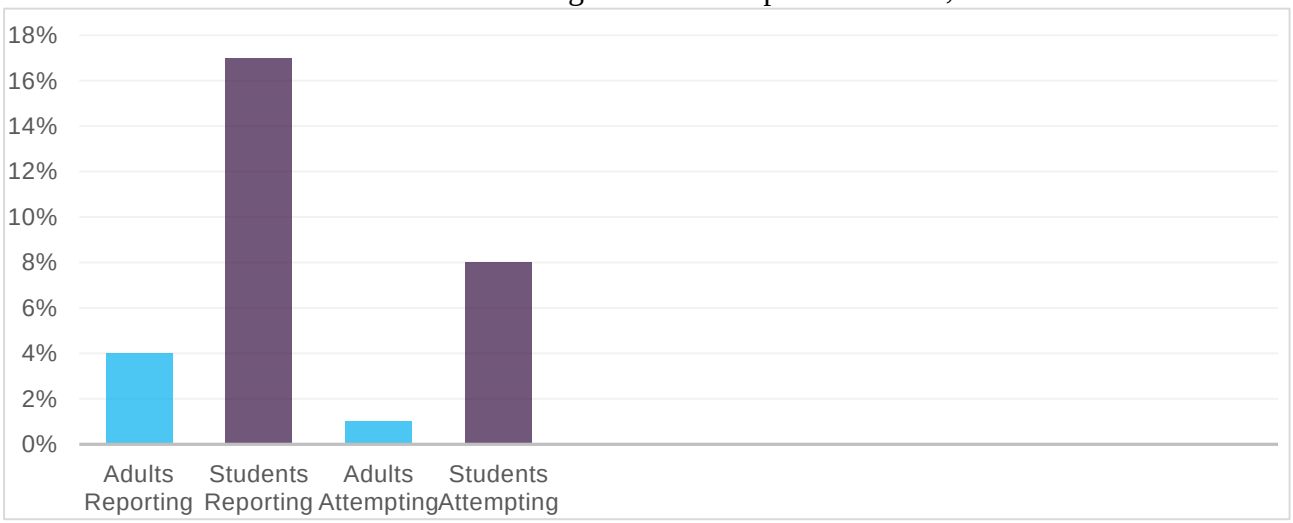
- Across all age groups, the national suicide rate in 2013 was 12.6 persons per 100,000. This equates to 113 suicides each day, or one every 13 minutes.
- 90% of all persons who die by suicide have an underlying mental illness.
- It is not uncommon for persons who die by suicide to test positive for alcohol, antidepressants, and/or opiates including heroin and prescription pain killers.
- Suicide is the tenth leading cause of death overall, but the second leading cause of death in youth ages 10-24.
- Males represent 78% of all suicides, although females are more likely to have suicidal thoughts.
- Over half of the nation's suicides occurred by firearm.
- The suicide rate among active military was 18.7 per 100,000 in 2013.

Suicide is the second leading cause of death in young people ages 10-24.

Nonfatal suicidal thoughts and behavior in the U.S., 2013:

- Just under 4% of U.S. adults reported having suicidal thoughts in the past year, compared to 17% of U.S. students in grades 9-12.
- Less than 1% of U.S. adults attempted suicide in the past year, compared to 8% of U.S. students in grades 9-12.

Nonfatal Suicidal Thoughts and Attempts in the U.S., 2013



Data Source: Centers for Disease Control and Prevention

Mental Health and Substance Abuse Data -- Montana[7]

ONE IN FIVE MONTANA FAMILIES IS AFFECTED BY MENTAL ILLNESS.

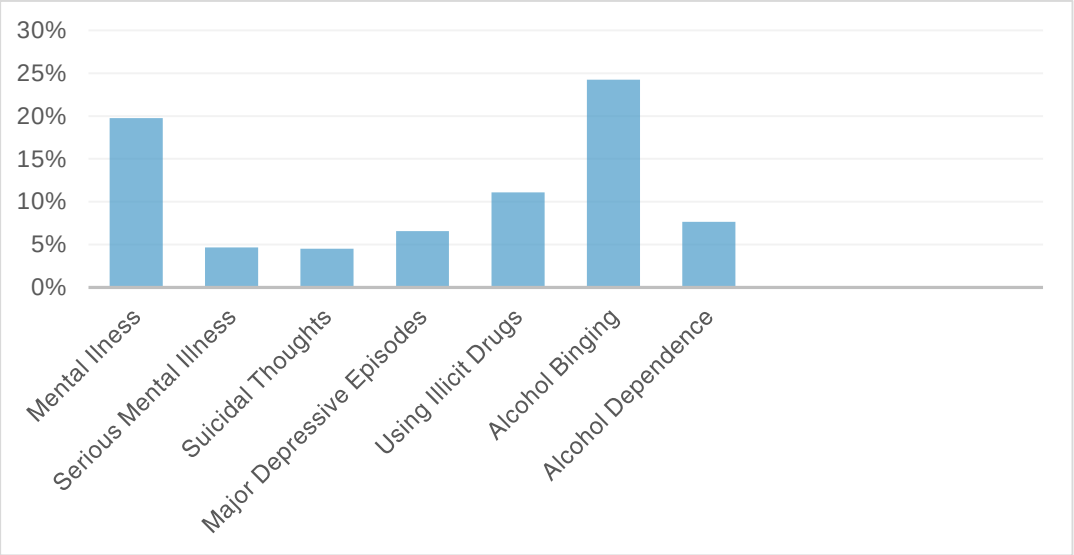
[7] Seven data sources:

Adults

During the year 2013-2014:

- 19.76% of all Montana adults reported having a mental illness.
- 4.65% reported having a serious mental illness.
- 4.56% reported having suicidal thoughts.
- 6.57% reported having a major depressive episode.
- 11.09% reported using one or more illicit drugs.
- 24.26% reported binging on alcohol.
- 7.65% reported alcohol dependence or abuse.

Problems Reported by Montana Adults, 2013-2014



Data Source: Centers for Behavioral Health Statistics and Quality

Veterans

During the years 2012 and 2013:

- 21% reported being diagnosed with Post Traumatic Stress Disorder (PTSD).
- 20% reported being diagnosed with depression.

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(1) National Alliance on Mental Illness (NAMI)-Montana. NAMI Montana homepage. 2015.

(2) Center for Behavioral Health Statistics and Quality. *Behavioral health trends in the United States. Results from the 2014 National Survey on Drug Use and Health* (HHS Publication No. SMA 15-4927, NSDUH Series H-50). 2015. Retrieved from Substance Abuse and Mental Health Services Administration (SAMHSA) website. Note that survey results may understate the prevalence of serious mental illness, as nearly 29% of the selected survey sample did not complete the interview. Persons with severe mental illness may disproportionately fall into the non-response categories.

(3) Bobbi J. Renner, Ph.D. Montana Military Veterans' responses to the 2012 and 2013 Behavioral Risk Factor Surveillance System Survey. Montana Department of Public Health & Human Services. October, 2014.

(4) Sue O'Connell. Staff Report prepared for the Children, Families, Health, and Human Services Interim Committee of the Montana Legislature. HB 422: Children's Mental Health Outcomes. Mid-Study Review. January 2016.

(5) Centers for Disease Control and Prevention. Table 3, National Survey of Children's Health-United States. 2011-2012.

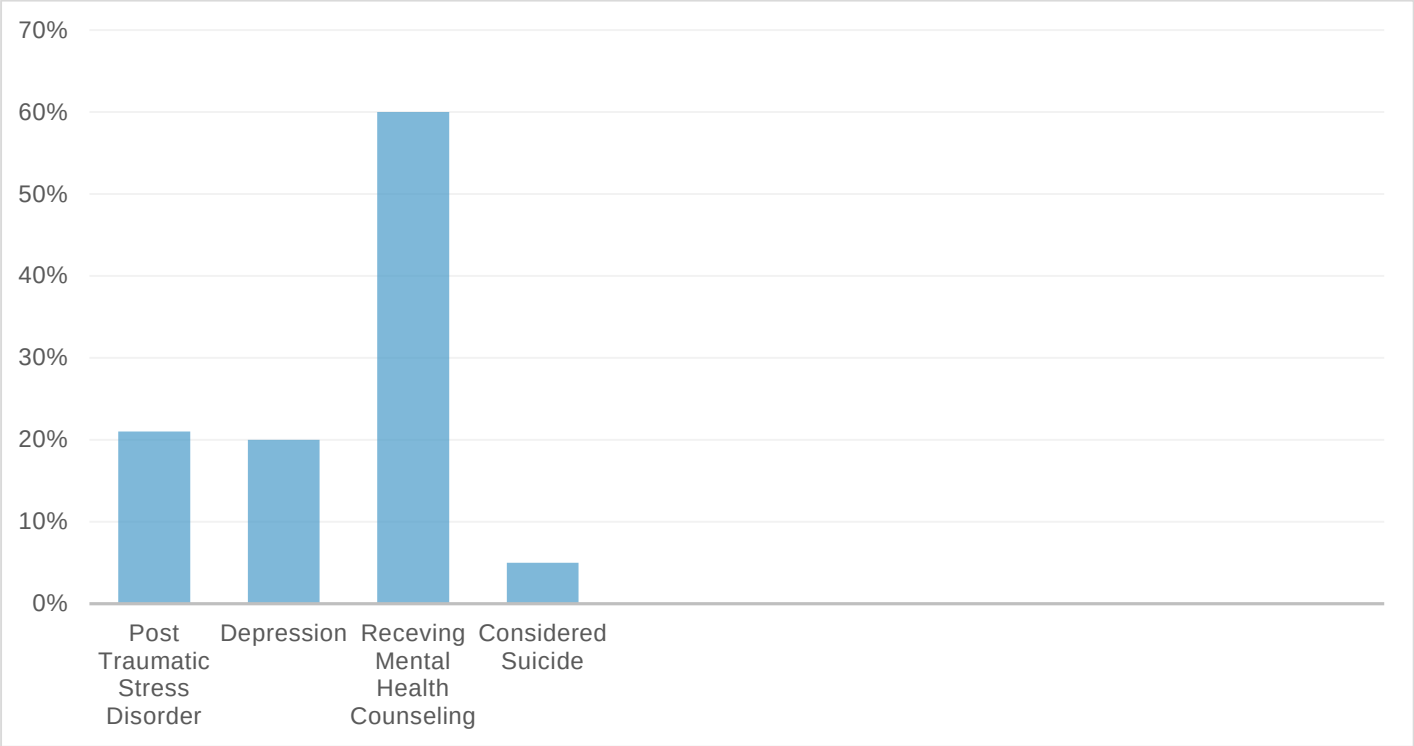
(6) Centers for Disease Control and Prevention. Youth Risk Behavior Survey (YRBS) data for Montana, 2013.

(7) Montana Department of Public Health & Human Services. Karl Rosston, Suicide Prevention Coordinator. Suicide Prevention in Montana. Montana Strategic Suicide Prevention Plan. 2015.

- 60% reported receiving mental health counseling.
- 5% reported considering suicide.

Between 2013 and 2014, 566 Montana veterans completed suicide, for an estimated rate of 54 per 100,000.

Montana Veterans, 2012 &2013



Data Source: Montana Department of Public Health & Human Services

<u>Children</u>

In fiscal year 2014:

- Over 19,500 Montana children received publicly funded mental health services, mostly through Medicaid and the Children's Health Insurance Program (CHIP, which covers children with family incomes up to 261% of the poverty level).
- School-based treatment across the state covered nearly 5,000 children.

During the year 2011-2012:

- 18.1% of children ages 2-8 had a parent-reported diagnosis of mental, behavioral, or developmental disorder; 45% of these children lived in a neighborhood lacking amenities such as sidewalks, playgrounds, and recreation centers.

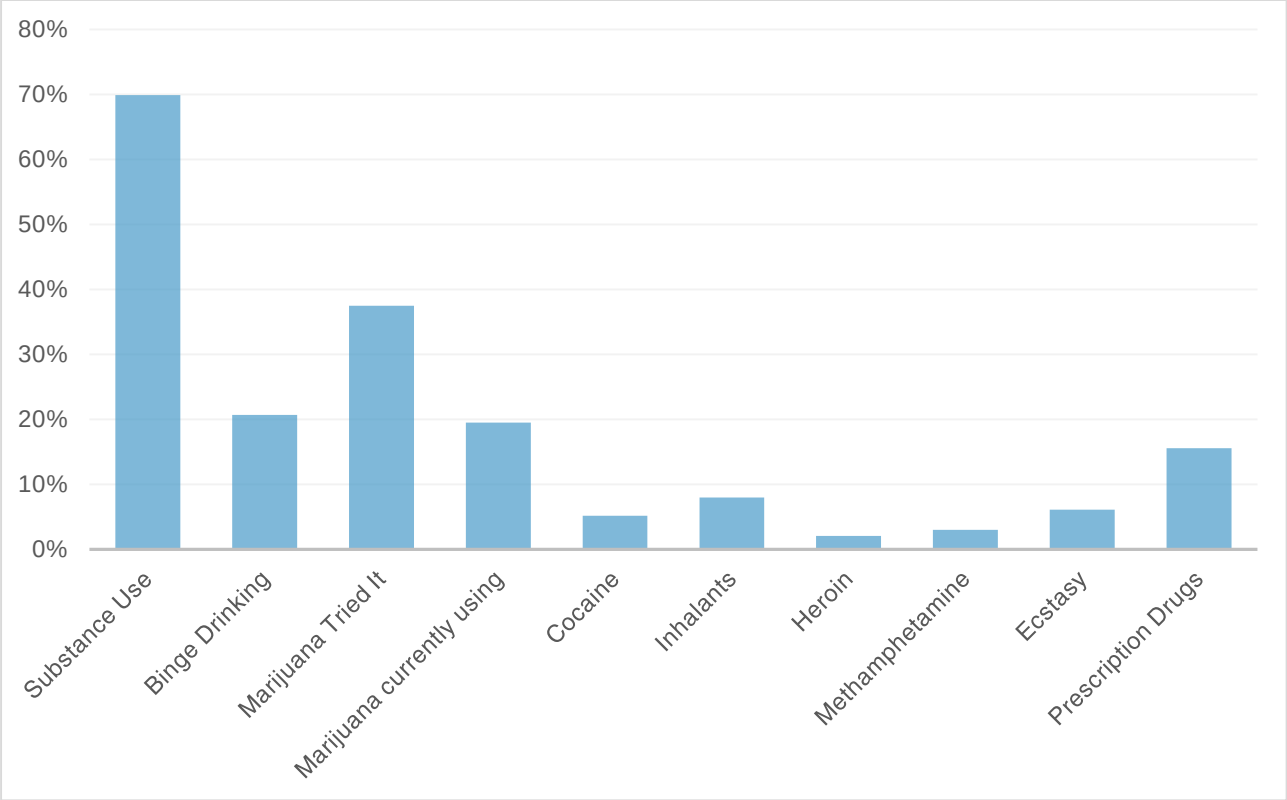
Of high school students in Montana during the year 2013:

- 69.9% reported substance use, especially drinking alcohol (Use on a regular basis was much less common).
    - Alcohol: 20.7% reported binge drinking. The average age of the first drink was between 13 and 16 years.

    - Marijuana: 37.5% reported having tried it. 19.5% reported currently using it.
    - Use of other substances: 5.2% cocaine, 8% inhalants, 2.1% heroin, 3% methamphetamine, 6.1% ecstasy, and 15.6% prescription drugs for non-therapeutic reasons (e.g., opiods, painkillers).
- Nearly 30% reported being so sad and hopeless for two weeks or more, that they stopped some of their usual activities.
- 18.8% felt seriously suicidal.
- 15.5% had a plan for how they would complete suicide.
- 8.9% attempted suicide one or more times.

Contributing factors to Montana's high rate of suicide among children include access to firearms, alcohol, a sense of being a burden, social isolation, underlying mental illness, and a social stigma against depression.

Substance Use by Montana High School Students, 2013



Data Source: Centers for Disease Control and Prevention

For 40 years, Montana has ranked at or near the top in the nation for overall suicide rate. In 2011, Montana was tied for the highest rate of suicide (23.3 suicides per 100,000 population). Firearms were used in 63% of these deaths. Over the last two years, 75% of youth suicides were completed by firearms. For the past ten years, suicide has been the number one cause of death for Montanans ages 10-44.

Montana has an estimated 1,400 new suicide survivors each year. A survivor of suicide is three times more likely to complete suicide.

For 40 years, Montana has ranked at or near the top in the nation for overall suicide rate. For the past ten years, suicide has been the number one cause of death for Montanans ages 10-44.

Mental Health and Substance Abuse Data -- Madison County[8]

There is no countywide reporting of the prevalence of mental illness in Madison County. However, a few estimates can be made by extrapolating from the above national and state figures:

	Percent	Number
Adults		
A mental illness	19.76%	1,545
A serious mental illness	4.65%	364
Veterans		
A mental illness	20%	157
Children		
A mental illness	13-20%	160-246

These estimates should perhaps be viewed as minimum rates, given the fact that Madison County has multiple known risk factors for mental illness and substance use disorders: rural area, lack of social supports, poverty, a high prevalence of single-family households, and an older population.

[8] Four data sources:

(1) University of Wisconsin Population Health Institute. County Health Rankings 2015.

(2) Mary Dalton, Medicaid State Director for Montana. Memo to Behavioral Health Severe Disabling Mental Illness (SDMI) Home and Community-Based Services (HCBS) Waiver members, providers, and stakeholders. Montana Department of Public Health & Human Services. 2/18/2015.

(3) Montana Department of Public Health & Human Services. Karl Rosston, Suicide Prevention Coordinator. Suicide Prevention in Montana. Montana Strategic Suicide Prevention Plan. 2015.

(4) Montana Department of Labor. Ranking of Counties by Severity of Targeted Health Behaviors. Table prepared by the Montana Department of Public Health & Human Services. 2012.

In addition to the above estimates, Madison County data show:

- Residents experience an average 2.8 mentally unhealthy days in the previous 30 days.
- 20% of residents drink excessively.
- 40% of all driving deaths involve alcohol.
- Madison County has one of the top ten highest rates of suicide among Montana counties, at 25.9 per 100,000 population.
- Madison County is in the "High Risk" category among all Montana counties and reservations for the combination of six risk factors: suicide rate, prescription drug deaths, drug arrests, DUIs, liquor law violations, and car crashes involving alcohol.
- One mental health professional is available to serve every 3,856 residents.

Madison County has one of the Top Ten highest rates of suicide among Montana counties.

The Madison County Mental Health Local Advisory Council now knows of three mental health professionals living in the County and (on a part-time basis) serving individual adults and families with children. Largely but not exclusively through Altacare (a Comprehensive School and Community Treatment Program), one or more mental health counselors are based in each local school district to provide some level of in-school mental health services. A chemical dependency counselor comes three times a month to the Ennis community to see clients. Other mental health professionals work in surrounding areas such as Dillon, Butte, Bozeman, Helena, and Idaho Falls. These professionals serve Madison County residents who have the financial and transportation means to reach their offices. These out-of-county professionals have their own private practice, and/or they work as part of a larger organization (e.g., Western Montana Mental Health Centers, Southwest Chemical Dependency Centers, Veterans Administration clinics, community health centers, hospitals, and residential treatment facilities).

Currently, Madison County adults with severe disabling mental illnesses (SDMI) are not eligible to receive Medicaid reimbursement from the State of Montana for home and community-based services. This financial assistance offers long-term care to individuals living at home, in an assisted living setting, or in group homes as an alternative to nursing homes. Madison County's program ineligibility is due in part to the lack of agencies with personal care attendants who have specialized training.

It is difficult to estimate what percentage of Madison County residents challenged by mental illness or chemical dependency are diagnosed and receive treatment. Besides the out-of-county mental health services, local primary care providers do offer some support in this regard. In addition, twelve-step Alcoholics Anonymous programs in local communities offer peer support for those living with alcoholism.

Mental Health and Substance Abuse Data -- Madison Valley Medical Center Service Area[9]

A mail survey of residents served by the Madison Valley Medical Center generated the following pertinent information:

- When asked to name the three most serious health concerns in the community, 63% of survey respondents cited alcohol and substance abuse; 14.5% cited anxiety and depression.
- 2.4% of respondents had utilized local counseling and mental health services.
- Educational programs of interest included mental health at 7.9% and alcohol/substance abuse at 2.4%.
- 9.1% indicated they would use counseling services if available.
- 3.2% reported seeing a mental health counselor in the prior three years; 0.8% a psychiatrist; 0% a psychologist; and 0% a substance abuse counselor.
- 13.2% reported experiencing periods of depression (more than three months in length) in the past three years; 36.8% of these individuals sought appropriate services, and 15.8% indicated they did not know where services were available.
- When asked to identify the three most important components of a healthy community, 63.6% respondents answered access to health care and other services.

Over two-thirds of the Madison Valley Medical Center survey respondents were women; nearly 80% of survey respondents were 56 years of age or older.

Mental Health and Substance Abuse Data -- Ruby Valley Hospital Service Area[10]

A mail survey of residents served by the Ruby Valley Hospital generated the following pertinent information:

- When asked to name the three most serious health concerns in the community, 49% of survey respondents cited alcohol and substance abuse; 10.2% cited mental health issues; and 1.9% cited suicide.
- Educational programs of interest included mental health services at 9.8%.
- 9.8% reported they would use mental health services if available.
- 10% reported seeing a mental health counselor in the prior three years; 2.9% a psychologist; 2.4% a psychiatrist; and 0.5% a substance abuse counselor.
- When asked to identify the three most important components of a healthy community, 61.5% answered access to health care and other services.

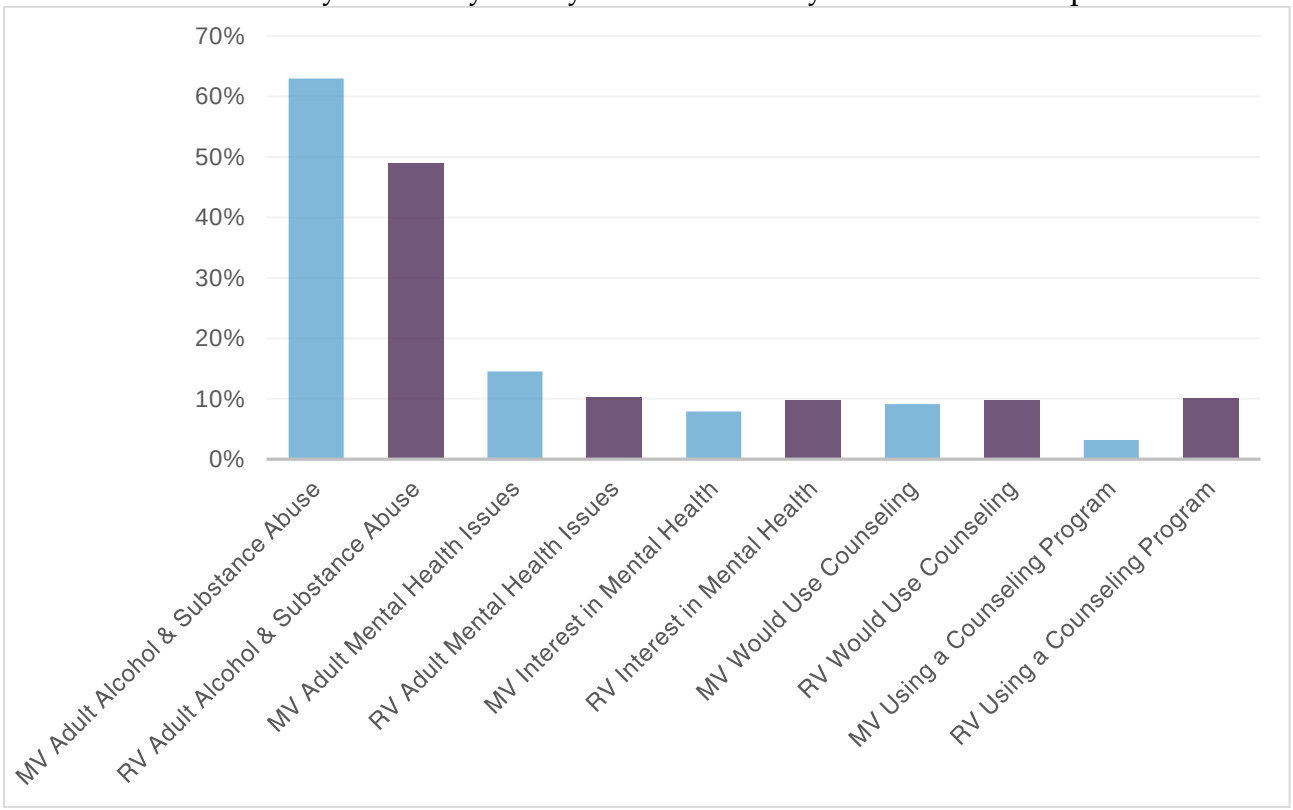
[9] Madison Valley Medical Center, Montana State University Office of Rural Health, and National Rural Health Resource Center. Madison County, Montana Community Health Services Development-Community Health Needs Assessment Report. September 2014.

[10] Ruby Valley Hospital, Montana Office of Rural Health, and National Rural Health Resource Center. RVH Hospital District-Madison County, Montana Community Health Services Development Survey Report. February 2012.

Nearly 58% of the Ruby Valley Hospital survey respondents were women; 70% of survey respondents were 56 years of age or older.

It should be noted that 30.6% of survey respondents indicated they had used the Community Health Clinic (in Sheridan) in the last three years. Services included mental health. The Clinic has since closed.

Madison Valley and Ruby Valley Resident Survey Results – A Comparison



Data Sources: Community Health Needs Assessment Reports from the Madison Valley Medical Center and the Ruby Valley Hospital

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For questions or more information, contact…

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