

# Summary of Alcohol Use in Montana

### Background

### National Alcohol Use

Alcohol is the most widely used drug within the United States. In 2020, over half of all people aged 12 years and older (138.5 million people) reported drinking alcohol in the past month.<sup>1</sup> Excessive alcohol consumption increases the risk of injuries and alcohol poisoning, as well as violence and other risky behaviors. Between 2015 and 2019, alcohol use led to over 140,000 deaths each year (380 per day) in the United States.<sup>2</sup>

There are significant public health concerns regarding adolescents and young adults who engage in dangerous drinking behaviors. Excessive alcohol consumption can be especially detrimental to youth, creating issues such as the disruption of normal growth and sexual development, memory problems, changes in brain development, and alcohol poisoning. Underage drinking also increases youths' risk of engaging in other dangerous behaviors, such as violence, risky sexual activity, and misusing other substances.<sup>3</sup> Between 2015 and 2019, excessive alcohol use was responsible for nearly 4,000 deaths among people under age 21 each year.<sup>4</sup>

#### Purpose

This report aims to describe what is known about alcohol use in Montana across demographic sectors, given the available data, and can serve as a reference to public health workers as well as the public.

### Glossary

For this report, the following definitions are used:

- **US standard drink size** is a 12 oz can or bottle of beer or wine cooler, 8 oz of malt liquor, a 5 oz glass of wine, or a shot (1.5 oz) of distilled spirits like gin, rum, vodka, or whiskey.
- **Binge alcohol use** is consuming five or more drinks during a single occasion for men or four or more drinks during a single occasion for women.
- Heavy alcohol use is consuming 15 or more drinks per week for men or eight or more drinks per week for women.
- **Current alcohol use** is defined as consuming at least one drink in the last 30 days.

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# Alcohol Use in Montana

### Adult Use

The percent of adults 18 years and older who report current alcohol use (at least one drink in the last 30 days) has remained steady for the past decade. Sixty-three percent of Montana adults were current drinkers in 2019-2020, compared to 55% of all US adults; this difference was statistically significant (data not shown). Montanans were also significantly more likely to report a recent binge drinking event compared to the rest of the nation with nearly a third of adults binging in the last month (Figure 1).<sup>5</sup>

**Figure 1.** Self-Reported Binge Alcohol Use\* and Percent Meeting Definition of Alcohol Use Disorder\*\* Among Adults Aged 18+, **Montana** and the **United States**, 2019-2020



#### National Survey on Drug Use and Health, 2019-2020

\*Binge alcohol use is defined as consuming five or more drinks during a single occasion for men or four or more drinks during a single occasion for women

\*\*Alcohol Use Disorder is defined based on criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition (DSM-5). Symptoms include being unable to limit the amount of alcohol consumed, wanting to cut down on alcohol use but being unable to do so, and giving up or reducing social and work activities to use alcohol.







Youth Use

Alcohol consumption by youth has decreased in both Montana and the United States over the last few decades. In 2011, 39% of Montana high school students reported drinking alcohol within the past 30 days. A decade later in 2021, youth alcohol consumption in the state declined by 20% (Figure 2). However, a higher percentage of Montana high schoolers report recent alcohol consumption compared to their peers nationwide.<sup>6</sup>

Figure 2. Self-Reported Use of Alcohol in the Past Month Among High School Students, Montana and the United States, 2011-2021\*



Youth Risk Behavior Surveillance Survey, 2011-2021

\*National YRBSS data for 2021 not released at time of writing this report

A greater percentage of white youth report current drinking and binge drinking within the past month compared to American Indian/Alaska Native (AI/AN) youth. AI/AN youth were more likely to have started drinking before the age of 13 (Figure 3). Among AI/AN youth, those living on a reservation had a lower percentage reporting alcohol use compared to those who were not on a reservation (data not shown).<sup>7</sup>







**Figure 3.** Percentage of High School Students Who Report Current Alcohol Use\* and Binge Drinking\*\*, by Race, Montana, 2021



#### Youth Risk Behavior Surveillance Survey, 2021

\*Current Alcohol Use is defined as consuming at least one drink in the last 30 days

\*\*Current Binge Drinking is defined as consuming five or more drinks during a single occasion for men or four or more drinks during a single occasion for women in the last 30 days

A potential factor contributing to excessive alcohol consumption among youth may be a lack of awareness of the dangers of this behavior. Only 33% of Montana youth aged 12-17 perceived binge drinking as risky behavior, which was the lowest percent of any state in the country in 2020.<sup>5</sup>

Youth alcohol consumption is also heavily influenced by perceived parental acceptability. Forty-five percent of students who indicated that their parents felt it was "very wrong" for them to regularly use alcohol reported lifetime alcohol use and 20% reported alcohol use in the past 30 days (Table 1). In contrast, students who indicated that their parents felt it was "not wrong at all" to regularly use alcohol reported 84% lifetime alcohol use and 62% alcohol use in the past 30 days. In 2020 almost 90% of Montana high school students reported that their parents felt it was "very wrong" for them to consume alcohol on a regular basis.<sup>8</sup>

Table 1. Parental Attitudes and Alcohol Use Among Montana High School Students, 2020

	How wrong do your parents feel it would be for you to drink beer, wine, or hard liquor regularly?			
	Very Wrong	Wrong	A little bit wrong	Not wrong at all
Lifetime alcohol use among students	45%	74%	86%	84%
30 day alcohol use among students	20%	41%	57%	62%

Montana Prevention Needs Assessment, 2020

#### Young Adult Use

Alcohol use is highest among young adults aged 18-25 years, despite alcohol being illegal for those under 21 years. In 2019 and 2020, 67% of young adults reported drinking alcohol in the past month in Montana (Figure 4). This was an increase from previous years, while the rest of the nation has seen a decrease in self-reported alcohol use among this population.<sup>5</sup> Young adults in Montana are statistically significantly more likely to report consuming alcohol in the past month compared to the rest of the country.

Figure 4. Self-Reported Use of Alcohol in the Past Month Among Adults Aged 18-25 Years, Montana and the United States, 2011-2020



National Survey on Drug Use and Health, 2011-2020 \*Due to changes in methodology, data from 2019-2020 on cannot be directly compared to data from previous years.

Alcohol is popular on college campuses. According to the National College Health Assessment, over 80% of Montana college students consumed alcoholic beverages in 2021. Most college students (58%) reported drinking alcohol within the last two weeks, and 8% of students drank either daily or almost daily. When college students drink, they are likely to consume an excessive amount of alcohol. During the last time they drank in a social setting, more than half of Montana college students reported having 3 or more drinks and nearly one-third reported getting drunk. Almost 50% of students reported binge drinking within the past two weeks. High levels of excessive drinking may lead to negative consequences for students. Eleven percent of students blacked out within the past year due to alcohol consumption and 19% of students reported that alcohol had caused them to do something they later regretted.<sup>9</sup>





# Hospitalizations and Emergency Department Visits

Excessive alcohol consumption is dangerous and can lead to severe consequences. In 2020, there were 12,435 emergency department visits and another 1,966 inpatient visits that were associated with alcohol consumption in Montana (Figure 5). Alcohol-related inpatient visits and emergency department visits have been on the rise over the past five years, and in 2020 alone over 200 million dollars were spent on inpatient admissions and emergency departments visits due to alcohol consumption.<sup>10</sup>



Figure 5. Alcohol-Related Emergency Department Visits and Hospitalizations, 2016-2020

# Mortality

Excessive alcohol consumption is a leading cause of preventable death in the United States.<sup>11</sup> The number of Montanans who have died from alcohol-related diseases and poisonings has increased over the past two decades. In 2020, 102 Montana residents died due to alcoholism (Figure 6) compared to 29 in 2000 (Data not shown). In the five-year period from 2015-2019, the age-adjusted alcohol induced death rate among Montana residents aged 25 years and older was 27 per 100,000, nearly double the US rate of 15 per 100,000.<sup>12</sup>

American Indian and Alaska Native (AI/AN) communities are disproportionately impacted by alcohol-related deaths. Despite comprising only 6% of Montana's population, AI/AN individuals represented over one-third of alcoholic liver disease deaths in 2020.<sup>13</sup>



Montana Hospital Discharge Data System, 2016-2020







Figure 6. Montana Resident Deaths Attributed to Alcoholism and Alcoholic Liver Disease, 2016-2020

# Other Impacts of Alcohol Use in Montana

### Driving Under the Influence

Driving under the influence of alcohol negatively impacts a driver's concentration and reaction time, which endangers themselves and others on the road. Automobile crashes involving an impaired driver are responsible for 29 deaths every day in the United States and cost the nation over \$44 billion annually.<sup>14</sup>

Between 2011 and 2020, 1,227 people were killed in crashes involving an impaired driver in Montana, and another 2,997 people were seriously injured.<sup>15</sup> In 2020, nearly two-thirds of crash fatalities in Montana involved an impaired driver. Forty-six percent of fatal crashes involved an alcohol-impaired driver (with a blood alcohol concentration 0.08 or more) in Montana in 2020; 29% of fatal crashes involved an alcohol-impaired driver driver nationwide.<sup>15</sup>

Driving under the influence of alcohol can be especially dangerous for youth, who have less driving experience than adults. In 2021, 7% of Montana high school students and 22% of Montana college students reported driving after drinking alcohol.<sup>7,9</sup>



Source: Montana Vital Statistics, 2016-2020





## Treatment

In 2019-2020, 11% of Montanans aged 12 years and older had an alcohol use disorder (AUD) and only 3% received treatment at a specialty facility for alcohol that year.<sup>5</sup> Alcohol was the primary substance used by the majority (56%) of those receiving treatment for substance use disorders in Montana, and the secondary or tertiary substance used by an additional 20% of those in treatment.<sup>16</sup>

There are a variety of treatments for AUD available. The US Food and Drug Administration (FDA) has approved three medications for the treatment of alcohol use disorder: acamprosate, naltrexone, and disulfiram. Gabapentin and topiramate are other evidence-based pharmacological treatment options used to reduce the negative effects of alcohol withdrawal.<sup>17</sup> These medications show the best evidence for reducing alcohol consumption as well as reducing the likelihood of returning to drinking.<sup>18</sup>

As well as pharmacological treatments, psychological treatments may be leveraged alongside medication or as its own treatment. Common treatment methods used for AUD include motivational interviewing (MI), which helps patients recognize their problems and take actions towards resolving them; motivational enhancement therapy (MET), which is adapted from MI principles and helps patients develop motivation to reduce or abstain from alcohol; and cognitive behavioral therapy (CBT) which may be used individually or in groups to focus on how thoughts, feelings, and behaviors influence each other to manage triggers for alcohol use.<sup>16</sup> Underlying mental health issues may also be addressed through these methods.

Many people with AUD participate in support groups individually or with family members. Organizations such as Alcoholics Anonymous and other 12-step programs that provide peer support for people quitting or cutting back on drinking are the most common form of help sought by individuals with current AUD as well as those living in recovery.<sup>19</sup>

Approximately one out of three people who are treated for alcohol problems display no further symptoms one year later, while many others substantially reduce their drinking and report fewer alcohol-related problems.<sup>20</sup>

# Conclusions

## Summary of Data Findings

Montana has higher rates of alcohol consumption and binge drinking behaviors than the national average for both adults and youth. However, youth consumption of alcohol has declined significantly from 2011 to 2021. Current alcohol use among Montanans has increased among young adults (age 18-25 years) in Montana since 2018, in contrast to a downward national trend among this same age group.





Many Montanans die or suffer serious injuries from alcohol-related incidents, whether it be due to alcoholic liver disease, alcoholism, or motor vehicle crashes involving impaired drivers. The number of Montanans seeking emergency medical care or hospitalizations due to alcohol-related causes has increased in recent years along with the rising number of deaths.

### Data Gaps

Self-reported alcohol consumption in US public health surveys covers only 30%-60% of per capita alcohol sales, based on tax and shipment data.<sup>21</sup> Regardless of how common alcohol is, excessive alcohol use can lead to unsafe and stigmatizing behaviors, which may cause it to be underreported. Survey respondents also tend to underestimate alcohol serving sizes, particularly when consumed in containers that vary from accepted standard drink sizes. Drinking patterns also vary throughout the year around holidays or other events, so survey data that rely on use in the past month may be affected by when the survey was filled out.

Outside of traffic fatalities, postmortem alcohol testing is not nearly as complete for other types of injury deaths, which makes it difficult to assess the burden alcohol has on injury-related death.

Data show that a large proportion of those who have a substance use disorder are not receiving treatment. The reasons for this are unclear; this could be due to a lack of interest in treatment, individuals not recognizing that there is a problem or a feeling of shame in admitting a problem, feeling like they should be able to handle their addiction on their own, and barriers to care, such as lack of access to treatment or basic health care, among others. Hospitalizations, emergency department visits, and treatment data also tend to capture those with the most severe alcohol problems, leaving out the population who may have mild or moderate issues with alcohol consumption.

### Next Steps

Deaths due to alcohol consumption are preventable. To reduce the negative consequences of alcohol consumption, it is important that Montana residents are made aware of the dangers of excessive drinking. In 2019-2020, only 36% of Montana residents thought that binge drinking once or twice a week was risky.<sup>5</sup> Educating the public about the potential dangers of excessive alcohol consumption may help change their perception of risk and reduce dangerous drinking behaviors. In time, such education could help decrease alcohol-related accidents and prevent serious injuries and deaths.

It is also crucial that parents are made aware of the influence they have on their children. Encouraging smarter drinking habits among adults will have long lasting impacts that can change youth's perception of alcohol and reduce underage drinking. Research has shown that a 5% increase in binge drinking among adults within a community is associated with a 12% increase in underage drinking.<sup>21</sup>



To aid Montanans in reducing dangerous behaviors regarding alcohol, the Montana Department of Public Health and Human Services has received funding from SAMHSA through the Partnership for Success (PFS) grant and the Substance Abuse Prevention and Treatment Block Grant (SABG). The PFS grant focuses on preventing substance misuse in youth, strengthening prevention capacity at the state, tribal, and county level, and adopting a comprehensive prevention approach through evidence-based policies. The SABG focuses on preventing the onset and reducing the progression of substance misuse.

With these combined grants, the Behavioral Health and Disabilities Division (BHDD) of DPHHS has outlined steps to empower Montanans to make healthy decisions. The social media campaigns Let's Face It and ParentingMontana.org provide parents and guardians with the tools to address underage substance use. BHDD also continues to support existing prevention education such as the PAX Good Behavior Game and Communities That Care; these evidence-based interventions are proven to have significant effects on youth health and behavior problems, lower criminal justice system involvement, and reduce health care costs. Youth that engage in these programs are less likely to engage in crime or risky behaviors such as binge drinking and are more likely to graduate high school and attend college.<sup>22</sup>









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