

# Alcohol Use among Youth in Minnesota

DECLINES IN OVERALL YOUTH DRINKING MASK HEALTH DISPARITIES.

Research shows that youth who start drinking alcohol before age 15 are more likely to develop alcohol dependence or abuse later in life compared to those who begin drinking at or after age 21 years.<sup>1</sup> Alcohol use among youth has been declining in Minnesota over the past 20 years,<sup>2</sup> however these declines have not been observed equally within all groups of youth.

This data brief reports on alcohol use among youth as measured by the 2019 Minnesota Student Survey (MSS). The MSS is a survey of 5th, 8th, 9th, and 11th grade students in all participating school districts in the state (81% of public school districts participated in 2019). Participation was voluntary and surveys were anonymous. Overall participation was 64% of all students enrolled.

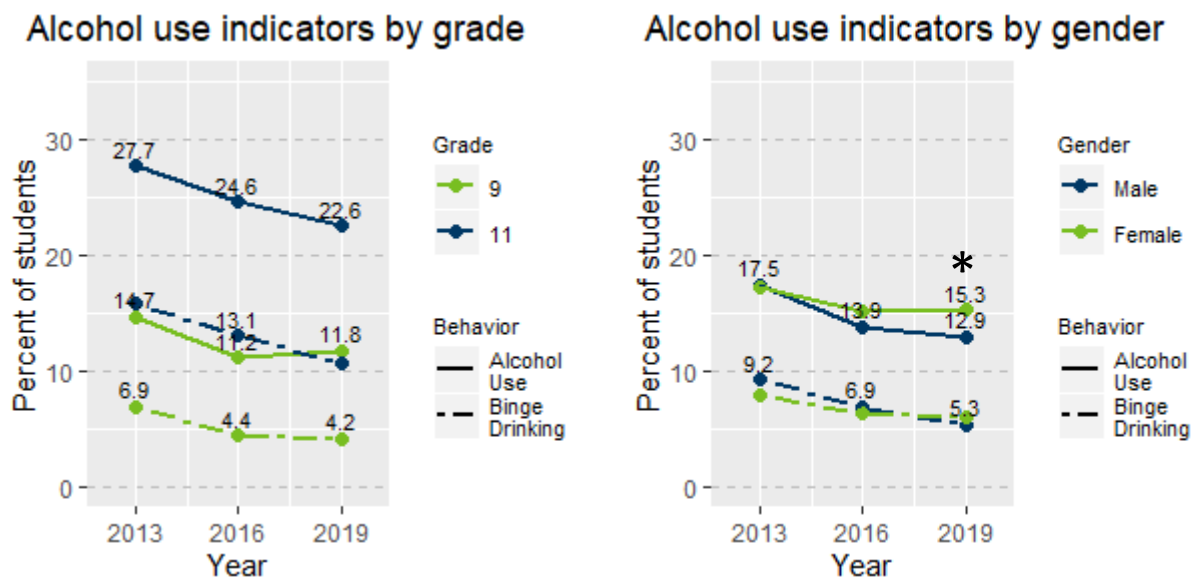


Figure 1: Percent of students who reported alcohol use indicators, by grade (left) and by gender (right), 2013-2019. \* Note: the definition of binge drinking among females was amended in 2019, going from 5+ drinks to 4+ drinks in a two hour time span.

## Alcohol Consumption among Youth in Minnesota has Declined

- Current alcohol use (consuming one or more drinks in the past 30 days) was reported by 16.5% of 9<sup>th</sup> and 11<sup>th</sup> grade students, down slightly from 17% in 2016, and 21% in 2013. In 2019, 7% of 9<sup>th</sup> and 11<sup>th</sup> grade students reported binge drinking (consuming five or more alcoholic drinks on one occasion for males, four or more drinks on one occasion for females), down from 8% in 2016 and 11% in 2013. 8<sup>th</sup> grade drinking has remained relatively unchanged in the last 6 years (2.9%, 2.3%, and 2.3% in 2016, 2016, and 2019, respectively).
- Figure 1** shows the prevalence of students who reported any drinking and binge drinking, by grade and gender. While binge drinking is relatively low among 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students, students who drink tend to binge drink. Among 11<sup>th</sup> grade students who reported any alcohol consumption in the past 30 days, 48% reported binge drinking during the same period.

## Disparities in Youth Alcohol Consumption

Young people who reported two adverse childhood experiences (ACE), such as physical abuse, parental incarceration, or witnessing domestic violence, were two times more likely to report binge drinking than students who reported no ACEs (**Figure 2**).

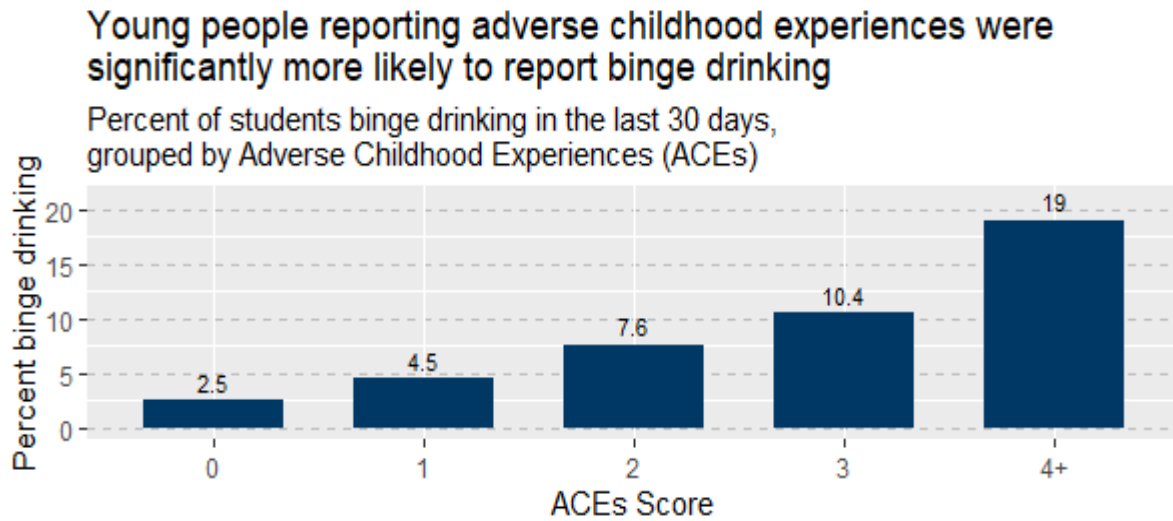


Figure 2: Percent of students binge drinking in the last 30 days, grouped by ACEs. ACEs included verbal abuse, physical abuse, sexual abuse, witnessing domestic violence, parental incarceration, and household drug/alcohol abuse. Read more about [Adverse Childhood Experiences \(ACEs\)](https://www.cdc.gov/violenceprevention/acestudy/index.html) (<https://www.cdc.gov/violenceprevention/acestudy/index.html>)

Significant disparities in reported drinking patterns exist by racial/ethnic groups, gender and other subgroups. For example, American Indian female students were more likely to report current alcohol use than any other racial/ethnic and gender group (**Figure 3**). Results were similar for males.

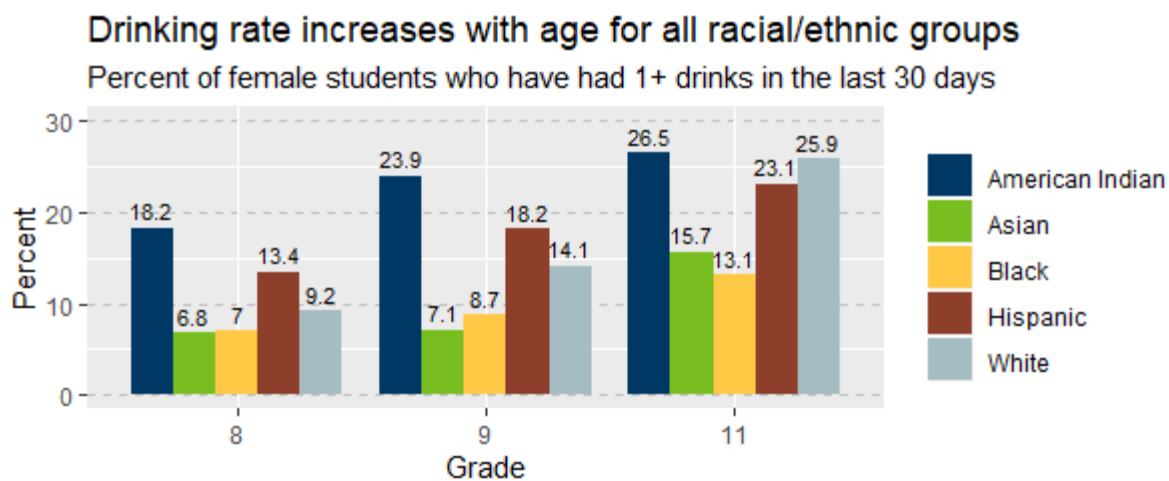
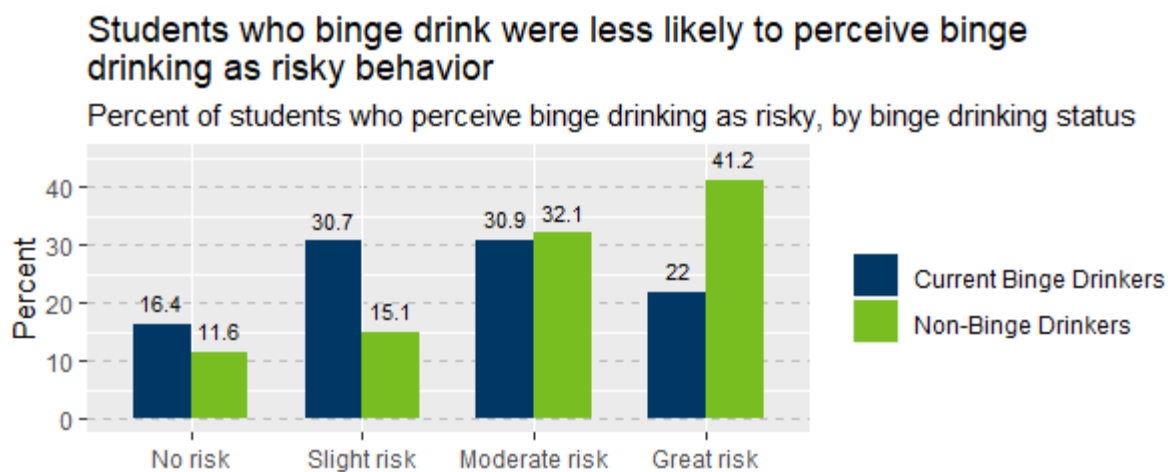


Figure 3: Percent of female students who had 1+ drink in the past 30 days

## Binge Drinking among Youth

Research estimates that youth consume 90% of their alcohol through binge drinking.<sup>3</sup> Binge drinking is defined in this survey as consuming five or more alcoholic drinks during one occasion for males, and four or more drinks for females.<sup>4</sup> Rates of binge drinking increase during high school. Nationally, the proportion of students reporting binge drinking went from 7.3% of 9th grade students to 15.4% of 11th grade students in 2017.<sup>4</sup> In Minnesota, the proportion of students reporting binge drinking went from 4.2% of 9th grade students to 10.6% of 11th grade students in 2019.

Another study found that among students who reported binge drinking, it was more common to report binge drinking two or more times during the past two weeks than to report binge drinking only once.<sup>5</sup> In that study, about 62% of 10<sup>th</sup> grade students who engaged in binge drinking during the past two weeks did so on multiple occasions. Further, while a majority of students feel that binge drinking is a moderate or great risk physically or in other ways (26% and 38%, respectively), Minnesota students who reported binge drinking were significantly less likely to view it as a risk to their health or safety (**Figure 4**).



**Figure 4:** Percent of students who perceive binge drinking as risky, grouped by binge drinking status. In 2019, 5.26% of 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> graders reported binge drinking.

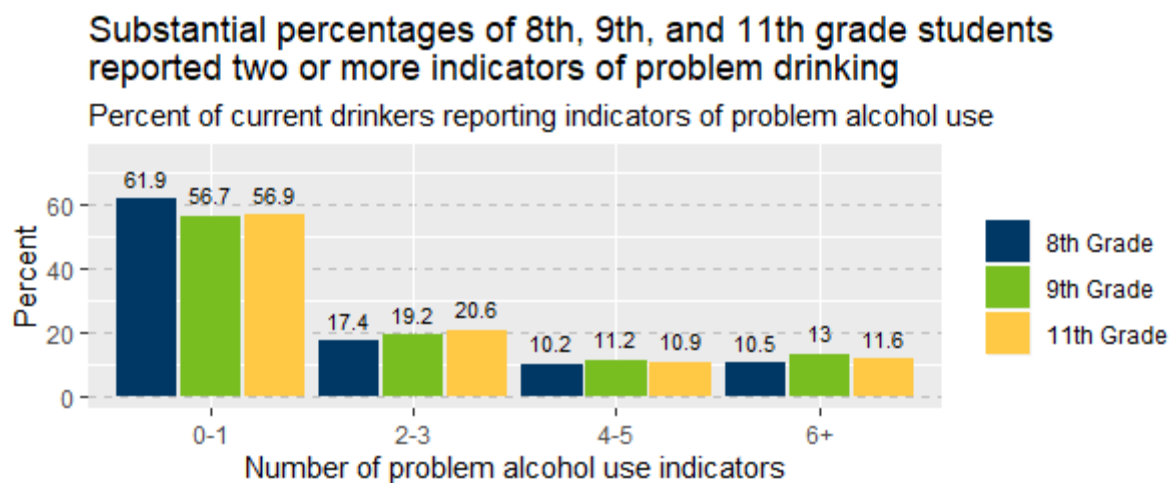
## Youth Alcohol Consumption has Consequences

Early alcohol use, especially binge drinking, is associated with poorer social and educational outcomes during high school,<sup>6</sup> as well as problems later in life. Excessive alcohol consumption can lead to death due to alcohol poisoning, alcohol-related car crashes, and other unintentional injuries.<sup>7</sup> Youth who drink are also at higher risk for suicide and homicide, as well as physical and sexual assault.<sup>6, 8</sup> Alcohol consumption at young ages can also create changes in brain development that could lead to dependency, memory problems and other long-term effects that may cause difficulty in school and beyond.<sup>8</sup>

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- Compared to students who did not report any problem drinking behaviors, students who reported binge drinking or 2 or more indicators of problem alcohol use were all less likely to report sleeping eight hours or more each night (16.7% vs. 22.5%, respectively), or to report their health as being very good or excellent (45.5% vs. 54.6%).
- These same students were also less likely to report getting mostly A's and B's at school when compared to students without any problem drinking behaviors (63.6% vs. 76.7%, respectively).

Excessive alcohol consumption among youth is associated with poor mental health, social, and educational outcomes.



*Figure 5: Percent of 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students who reported indicators of problem alcohol abuse. Using 10 of the 11 Indicators of Alcohol Use Disorder (AUD) in the DSM-VI, 0-1 indicators is associated with no AUD, 2-3 indicators is mild AUD, 4-5 indicators is moderate AUD, and 6 or more indicators is severe AUD.*

- Table 1** reports the associations between drinking alcohol and several mental health issues. Students who reported binge drinking were more likely to report self-injurious behavior (39% of binge drinkers compared to 15% of those who did not binge drink in the past 30 days). More than half (53%) of students who reported 2 or more indicators of problem drinking said they had ever considered suicide, and 28% of those students had attempted suicide at least once in their lifetime.

## Students who reported problem-drinking behaviors were also more likely to report mental health issues.

**Table 1:** Percent of students reporting indicators of mental health issues, based on reported drinking behaviors

Additional mental health issue reported	Drank, past 30 days	Did not drink, past 30 days	Binge drank, past 30 days	Did not binge, past 30 days	Reported >2 indicators of problem drinking	Reported ≤1 indicators of problem drinking
Treated for mental, emotional, or behavioral problem, ever	35%	20%	39%	21%	44%	20%
Self-injurious behavior, in past year	37%	13%	39%	15%	45%	14%
Ever considered suicide	43%	16%	47%	18%	53%	17%
Ever attempted suicide	20%	5%	26%	6%	28%	5%

## Building on Community & Student Strengths to Reduce Problem Drinking

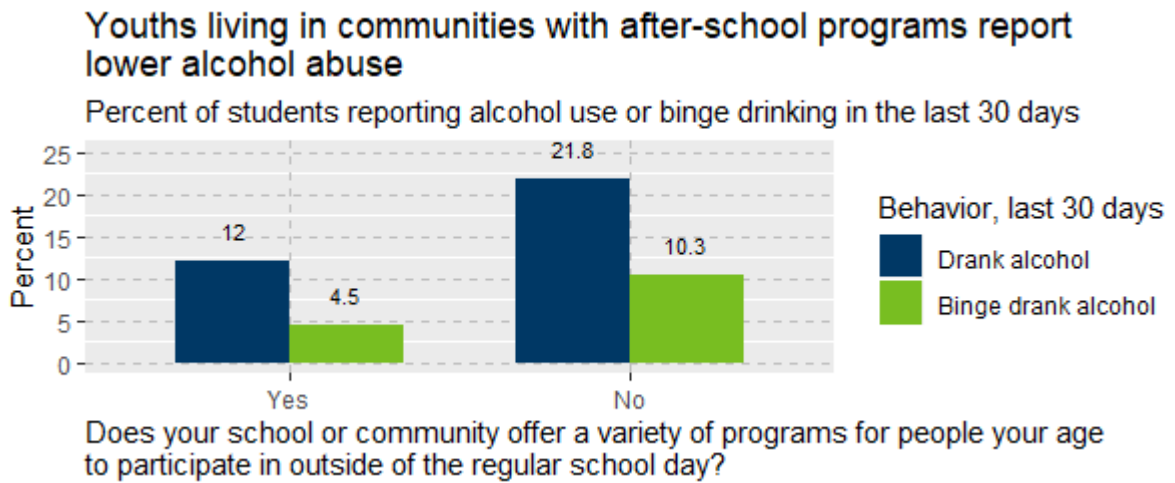
While alcohol consumption is a serious problem among some students, the majority of middle and high school students do not drink alcohol. Preventing underage alcohol use should be a multifaceted and comprehensive approach that includes community and school-level policy change and enforcement, as well as promoting alcohol-related knowledge and skills. Helping students understand the physical, mental, and social consequences of drinking alcohol at an early age, and building their self-management, social, and resistance skills gives students the knowledge and competence they need to make healthier choices.

Further, building on the positive relationships and opportunities in a young person’s life can help prevent risky behaviors. In 2019, Minnesota students who reported various protective factors were **significantly less likely** to report problem drinking. For example,

- Students who reported living in communities that offer a variety of programs for people their age to participate in outside of school reported less binge drinking in the last 30 days (4.5%) than those whose communities don’t offer programs outside of school (10.3%) (**Figure 6**)
- Fewer students who reported that they feel their parents care for them “quite a bit” or more reported binge drinking in the past 30 days (4.2%) than those who reported that their parents care less about them (12.5%).
- Among students who reported that their parents don’t care for them “quite a bit”, having both teachers and adults in the community that cared for them more than their parents deceased binge drinking (8.8%). Students who reported being bullied in the last month

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were more likely to reporting binge drinking than those students who had not been bullied (7.1% vs. 3.5% respectively).

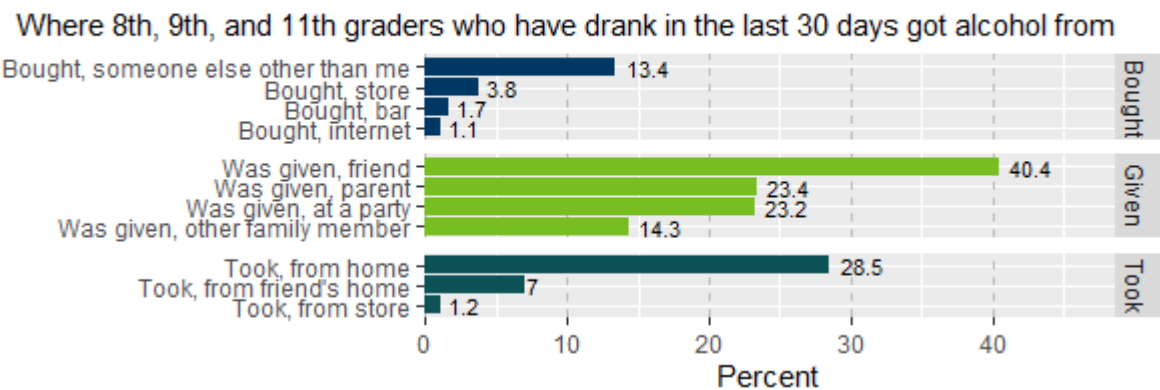


**Figure 6:** Percent of students reporting alcohol use or binge drinking in the last 30 days, by school or community offering of after school programs. Note: 24.7% of students responded “I don’t know” when asked if their school or community offered a variety of after school programs.

## Identifying Sources of Alcohol for Underage Students

To curb drinking in the student population of Minnesota, it may prove useful to understand where students are obtaining alcohol. **Figure 7** shows where students who have drank alcohol in the last 30 days obtained it. Unsurprisingly, it was difficult for students to purchase alcohol, with the exception of having someone else buy it for them. Most alcohol was given to students by friends, parents and other family members, or at a party. Additionally, a large portion of students reported taking alcohol from their own home.

### Most alcohol consumed by Minnesota students comes from the home, friends, and family



**Figure 7:** Where students who currently drink obtained alcohol from in the last 30 days.

## Excessive Alcohol Use is Preventable

The [Community Guide](#)<sup>9</sup> includes several evidence-based recommendations to reduce the likelihood of excessive drinking, including drinking underage and binge drinking, and the related harms:

- Enhanced enforcement of laws prohibiting alcohol sales to minors
- Increase the price of alcohol by increasing alcohol taxes
- Regulate alcohol outlet density
- Dram shop (commercial host) liability
- Avoiding privatization of retail alcohol sales
- Maintain limits on the days and hours when alcohol is sold (in settings such as liquor stores, restaurants, and bars).

## References

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