

# Alcohol Use among Youth in Minnesota

## DECLINES IN OVERALL YOUTH DRINKING MASK HEALTH INEQUITIES.

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 2016 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 (85% of public school districts participated in 2016). Participation was voluntary and surveys were anonymous. Overall participation was 68% of all students enrolled.

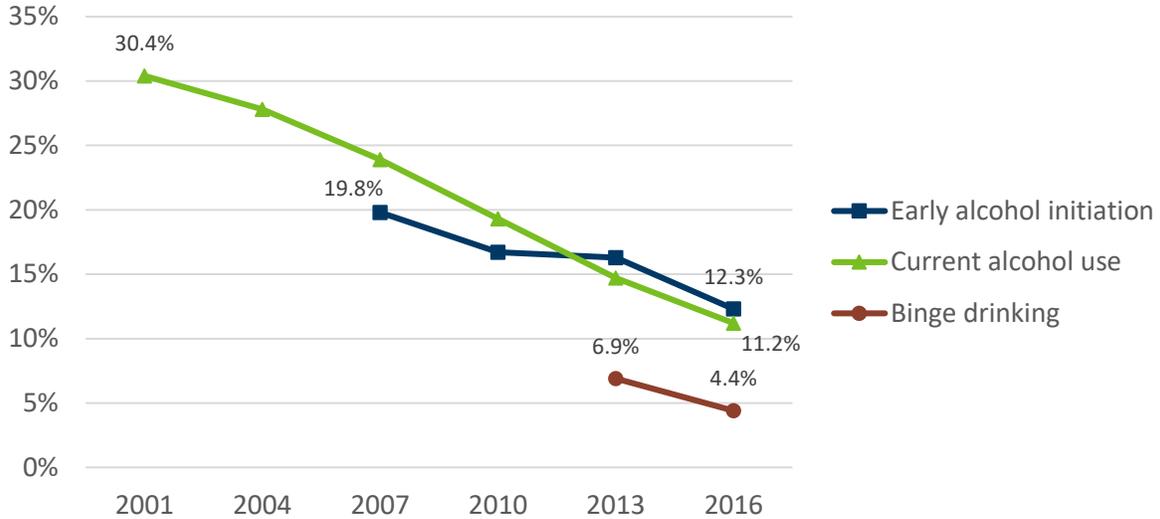
## Alcohol Consumption among Youth in Minnesota has Declined

- Among 9th and 11th grade students in Minnesota, 11% reported early initiation of alcohol use (drinking more than a few sips of alcohol before age 13). Male students were more likely to report early initiation of alcohol use (13%) than female students (10%). These rates are lower than those reported by students in the same grade in a nationally representative study—20% of 9th and 15% of 11th grade students nationally reported early initiation of alcohol use.<sup>3</sup>
- Current alcohol use (consuming one or more drinks in the past 30 days) was reported by 17% of 9th and 11th grade students in 2016, down from 21% in 2013. In 2016, 8% of 9th and 11th grade students reported binge drinking (consuming five or more alcoholic drinks on one occasion), down from 11% in 2013.
- Chart 1 shows the prevalence of 9th grade students who reported these drinking behaviors over time (see Chart 1). While the percent of 9<sup>th</sup> grade students overall who reported binge drinking is low (4.4% in 2016), 37.7% of 9<sup>th</sup> grade students who were current drinkers reported binge drinking, down from 44.7% in 2013.

Although the overall rates of alcohol consumption among Minnesota youth have declined, rates of risky drinking patterns are particularly high among some groups of youth.

**Alcohol use declined over time among 9th grade Minnesota students.**

Chart 1: Percent of 9th grade students who reported alcohol use indicators, 2001 to 2016



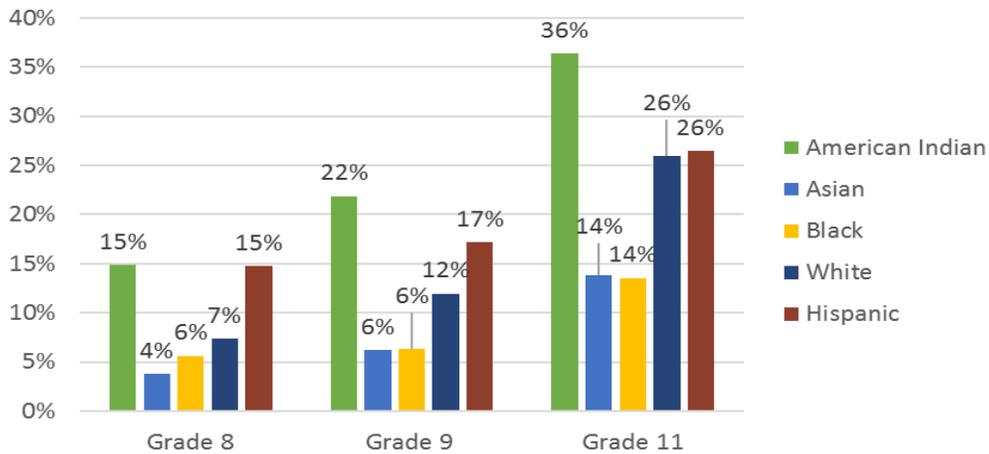
Minnesota Student Survey, 2001 to 2016. Note: Data are shown for all years variable was available.

**Disparities in Youth Alcohol Consumption**

Significant disparities of 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 youth of any other racial/ethnic and gender group. Results were similar for males.

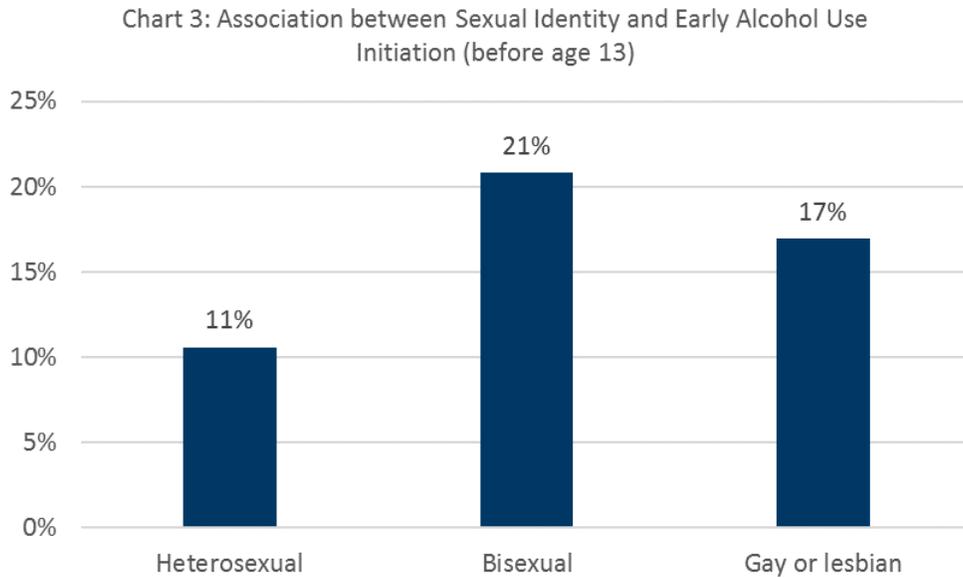
**As grade level increases, the rate of drinking increases.**

Chart 2: Percent of Female Students who had 1+ Drinks, Past 30 Days

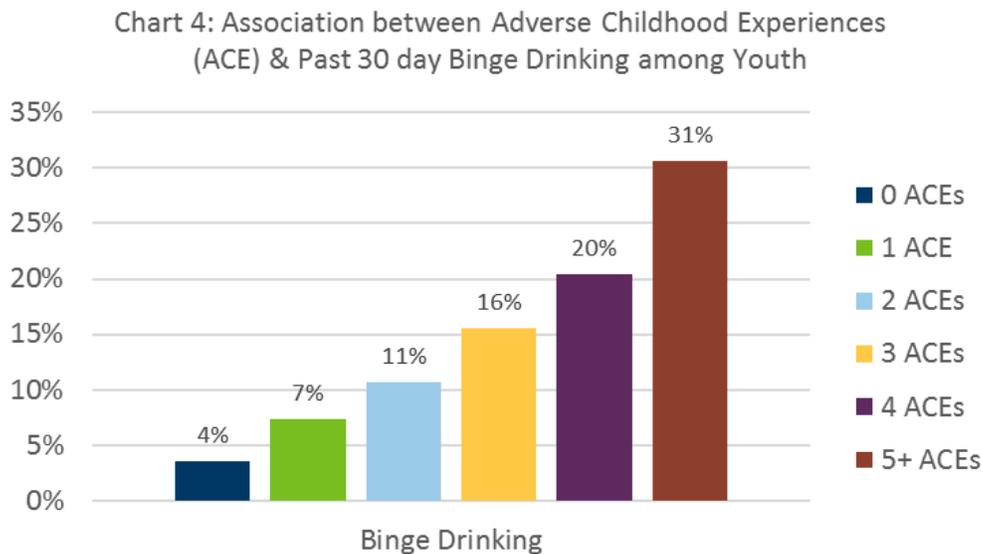


2016 Minnesota Student Survey.

**Compared to heterosexual students, 9th and 11th grade students who identify as bisexual, gay, or lesbian were more likely to report early alcohol use.**



Minnesota Student Survey, 2016. Note: 5% of 9<sup>th</sup> & 11<sup>th</sup> grade students reported identifying as bisexual; 1% reported being gay/lesbian.



**Young people who report adverse childhood experiences were significantly more likely to report binge drinking.**

Minnesota Student Survey, 2016. ACEs included verbal abuse, physical abuse, sexual abuse, witnessing domestic violence, parental incarceration, and household drug or alcohol abuse. Visit the [CDC's website for more information about ACEs: cdc.gov/violenceprevention/acestudy/index.html](https://www.cdc.gov/violenceprevention/acestudy/index.html)

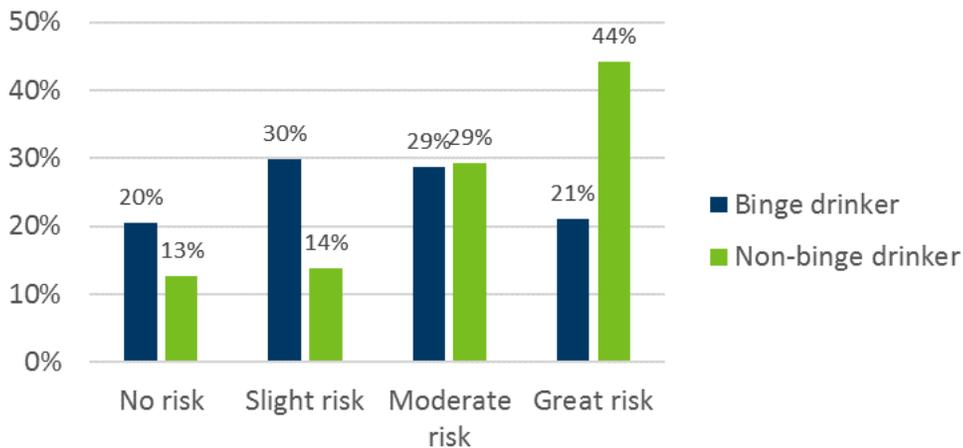
## Binge Drinking among Youth

Research estimates that youth consume 90% of their alcohol through binge drinking.<sup>4</sup> Binge drinking is defined in this survey as consuming five or more alcoholic drinks during one occasion. Rates of binge drinking increase during high school. Nationally, the proportion of students reporting binge drinking went from 10% of 9th grade students to 22% of 11th grade students in 2015.<sup>3</sup> In Minnesota, the proportion of students reporting binge drinking went from 5% of 9th grade students to 13% of 11th grade students in 2016.

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.

### Students who binge drink were less likely to perceive binge drinking as a risky behavior.

Chart 5: Percent Students Who Perceive Binge Drinking as Risky, by Binge Drinking Status

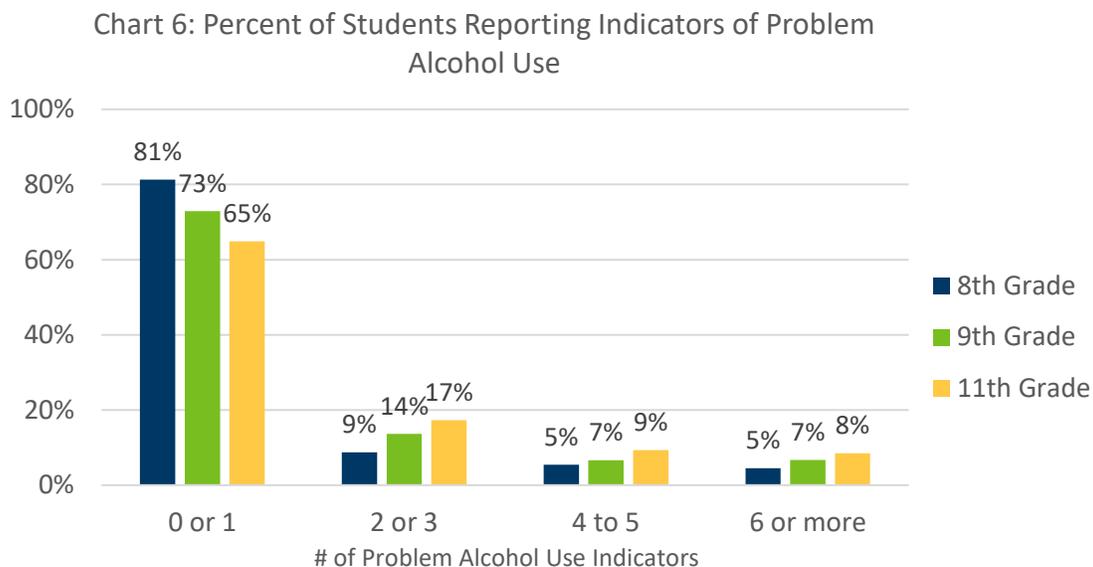


*According to the 2016 Minnesota Student Survey, about 6% of all 8th, 9th, and 11th grade students in Minnesota reported binge drinking (5 or more drinks on one occasion).*

## 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>

### Substantial percentages of 8th, 9th & 11th grade students reported $\geq 2$ indicators of problem drinking.



*Minnesota Student Survey, 2016. Using 10 of the 11 indicators of Alcohol Use Disorder in the DSM-5, 0 to 1 indicators is associated with no AUD; 2 to 3 indicators is mild AUD; 4 to 5 indicators is moderate AUD, and 6 or more severe AUD.*

- Compared to students who did not report any problem drinking behaviors, students who reported early alcohol initiation, binge drinking, or 2 or more indicators of problem alcohol use were all significantly less likely to report sleeping eight hours or more each night, to get adequate physical activity, or to report their health as being good or excellent.
- Compared to students who did not report any problem drinking behaviors, students who began drinking before age 13 were less likely than those who began drinking later to report getting mostly A's and B's at school (63% vs. 81%, respectively), as were those who reported binge drinking (60% vs. 81%, respectively).

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

**Students who reported problem drinking behavior were also more likely to report mental health issues.**

Additional mental health issue reported	Initiated alcohol use before age 13	Initiated alcohol use after age 13	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	28%	18%	32%	17%	38%	23%
Self-injurious behavior	30%	14%	34%	14%	42%	23%
Considered suicide	38%	19%	41%	18%	50%	28%
Attempted suicide	20%	6%	23%	6%	27%	11%

*Minnesota Student Survey, 2016. All differences are significant, p<.05.*

## 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 2016, Minnesota students who reported various protective factors were **significantly less likely** to report problem drinking. For example, among 11<sup>th</sup> grade students:

- 12% of students who said they could talk to their mom/dad about their problems reported drinking before age 13 compared to 19% who felt less able to talk to their mom/dad.
- Fewer students who reported positive relationships with their teachers reported binge drinking in the past 30 days (8%) than those who reported less positive relationships with teachers (16%).
- 7% of students who reported feeling safe at school reported drinking before age 13 compared to 13% of those who reported feeling less safe at school.
- Students who had stronger internal assets such as social competence and a positive identity were less likely to report binge drinking in the past 30 days (7%) than those who had lower internal assets (17%).
- 6% of students who reported feeling empowered said they started drinking before age 13 compared to 12% of those who felt less empowered.

## References

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