

# **Epidemiological Profile of Substance Use + Related Factors among Minnesota's Somali Youth**

Developed by EpiMachine, LLC on behalf of the Minnesota State Epidemiological Outcomes Workgroup

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# INTRODUCTION

### MINNESOTA STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP

The Minnesota State Epidemiological Outcomes Workgroup (SEOW) has been monitoring trends in substance use and related problems since 2007. The SEOW is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Prevention (CSAP), led by the Minnesota Department of Human Services (DHS) Alcohol and Drug Abuse Division (ADAD), and staff through a subcontract with EpiMachine, LLC.

SEOW membership includes representation from the Minnesota Department of Human Services, Minnesota Department of Health, Minnesota Department of Education, Minnesota Board of Pharmacy, Wilder Research, the Hazelden Betty Ford Graduate School of Addiction Studies, and EpiMachine. Project staff manage and maintain the online substance abuse prevention data query system SUMN.org, provide training and technical assistance to communities across Minnesota, and develop a variety of data products—including this community profile.

# **SUMN.org**

The Substance Use in Minnesota or SUMN.org website houses county, regional, and state data from a number of sources on:

- Alcohol use, consequences, and related factors
- Tobacco use, consequences, and related factors
- Drug use, consequences, and related factors
- Mental health
- Risk and protective factors shared between substance use and mental health

Site visitors can produce tables, maps, graphs, and charts using Data by Topic. Visitors can also search available data by location, or by demographic group. In addition to key prevention data, SUMN.org also features Publications, Community Resources, Toolbox, and Gallery. The Publications page includes SEOW data products, and links to state and national reports, articles, and websites. The Community Resources page provides links and contact information on coalitions and prevention organizations across Minnesota. The Toolbox includes tip sheets, guidance documents, training materials, and toolkits related to data collection, analysis, translation, formatting, dissemination, and use. The Gallery features examples of fact sheets, posters, public service announcements, infographics, and more created by visitors using SUMN data.

### **COMMUNITY PROFILES**

This profile is grounded in CSAP's Strategic Prevention Framework (SPF). The SPF is a five-step prevention planning model consisting of 1) Assessment (of both need and resources), 2) Capacity Building, 3) Planning, 4) Implementation, and 5) Evaluation. The profile serves as an integral step in the assessment phase of the SPF. It has been created to summarize substance use and related factors among Somali youth.

This profile was created to help the state and communities determine prevention needs based upon available data on substance use and related factors. Accordingly, the profile can be used by a variety of audiences for related, but different, purposes. State-level administrators may use the profile to prepare applications for federal funding or to monitor prevention-related trends in local communities to which they administer grants. Community-level prevention planners may use it to assess the relative importance of substance related problems in their communities or to apply for grant funding themselves. Overall, the profile is intended to help all audiences in Minnesota make decisions based on existing evidence and demonstration of need.

It is important for state, county and city planners to have accurate and readily available data on Somali substance use and consequences—and for all communities—in order to paint a complete picture of need in our state. Aggregated data do not reveal disparities that exist in a given location or for a specific population. While overall use of a substance may be low in Minnesota, it could be quite high within a particular community or population. Community-specific data allows for well-planned and targeted interventions. Every effort should be made at the national-, state-, county- and city-level to collect data by race/ethnicity. It is also important to recognize the limits of broad race and ethnicity categories.

This profile can be used by community leaders and prevention professionals to plan, set priorities, target resources, and simply to spur conversation about community-level alcohol, tobacco and other drug use and consequences. The goal of this profile, and the State Epi Profile, is to encourage data-driven decision making over reliance on anecdotal information. This report is by no means exhaustive. Community leaders and prevention professionals can use this profile in conjunction with community-level data and qualitative information from surveys, focus groups and key informant interviews.

There are some important limitations and data gaps to note. Response options on surveys other than the Minnesota Student Survey(MSS) do not always allow for self-report of Somali ethnicity, and this was only added to the MSS in 2013. Data on substance-related consequences such as illness, injury, deaths, arrests, school disciplinary incidents, and abuse/dependence are often not available specifically for the Somali community.

# **POPULATION SNAPSHOT**

According to the 2015 American Community Survey estimates, 7% of Minnesotans identify as African American or Black alone (alone or in combination with other races/ethnicities). African American and Black communities in Minnesota are considerably younger than the state average, with almost four out of ten being under the age of 18.

2015	African Americans+ Blacks in		All Minnesotans	
	Minnesota			
	Number	Percent	Number	Percent
Under 18 years	152,003	38.6%	1,360,354	24.2%
18 to 24 years	47,910	12.2%	525,404	9.3%
25 to 44 years	113,285	28.8%	1,450,416	25.8%
45 to 64 years	63,534	16.2%	1,485,654	26.4%
65 years + over	16,663	4.2%	809,397	14.4%
Total	393,395		5,631,225	

Annual Estimates of the Resident Population by Sex, Age, Race Alone or in Combination, and Hispanic Origin for the

United States and States: April 1, 2010 to July 1, 2015

2015 Population Estimates

Minnesota is home to the nation's largest population of Somali residents. According to five-year estimates from the American Community Survey (2010-2014), Minnesota is home to approximately 38,578 individuals identifying as Somali. That's 30% of the total number of individuals in the United States identifying as such.

Number of 2016 Minnesota Student Survey Respondents Identifying as Somali				
	Male	Female	No answer	Total
5 <sup>th</sup> Grade	600	602	11	1,213
8 <sup>th</sup> Grade	507	462	4	973
9 <sup>th</sup> Grade	425	417	4	846
11 <sup>th</sup> Grade	305	274	8	587
Total	1,837	1,755	27	3,619

# **KEY FINDINGS**

### **POSITIVE FINDINGS**

- Somali students are less likely than the Minnesota state average to report any past 30 day alcohol use, tobacco/nicotine use, or marijuana use.
- Students identifying as Somali are less likely than the state average to report any pastyear suicidal ideation, past-year self-harm, or past two week depressive symptoms.
- Somali students are less likely than average to report any adverse childhood experiences (i.e., abuse, household substance use, domestic violence).
- Students identifying as Somali are less likely than the state average to report being the victim of bullying in the past month.
- Somali students are more likely than average to feel that school staff and other adults in their community care about them very much or quite a bit.

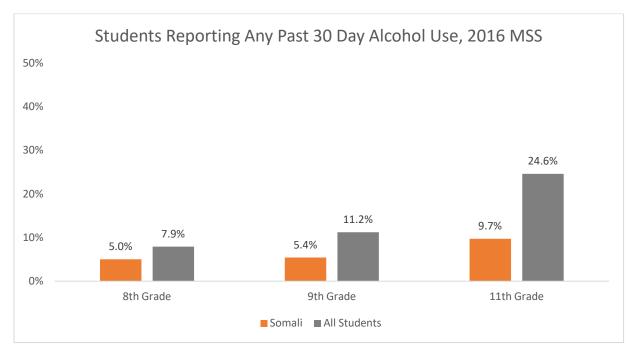
### AREAS FOR IMPROVEMENT

- Somali students are a bit more likely than the Minnesota state average to report any past month prescription drug misuse. They are also more likely than average to report past 12 month use of illicit drugs other than marijuana.
- Students identifying as Somali were less likely than average to perceive great or moderate risk of harm from using alcohol, tobacco, and drugs.
- Somali students are less likely than average to report feeling safe in their neighborhood, at school, or going to and from school.
- Students identifying as Somali are somewhat less likely than the state average to feel that other adult family members (other than parents) and friends care about them very much or quite a bit.

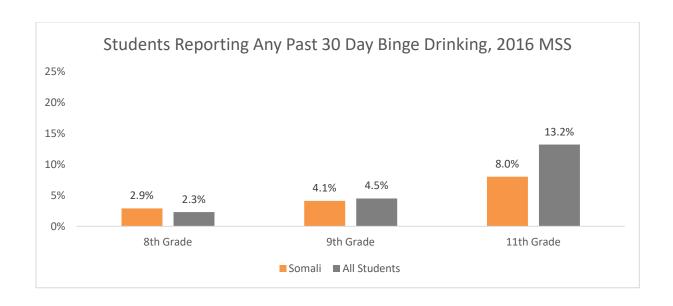
# **ALCOHOL**

### **YOUTH USE**

Current alcohol use is measured by the Minnesota Student Survey as students reporting any use of alcohol in the past 30 days. In 2016, 6.2% of Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported current alcohol use (down from 10.9% in 2013) as compared to the state average of 13.9% (down from 16.8% in 2013). Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were less likely than males to report current alcohol use in 2016: 4.3% vs. 8.1. Somali students were less likely than average to report past month alcohol use--regardless of grade level (see graph below).



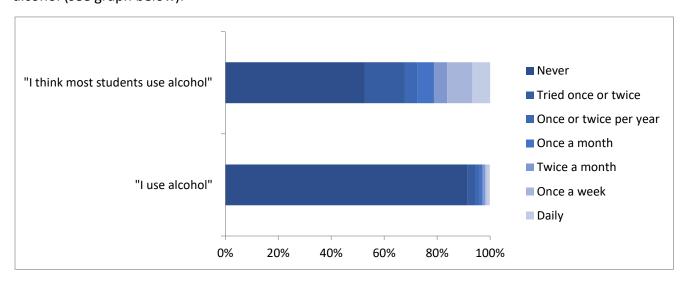
Binge drinking is measured by the Minnesota Student Survey as students reporting having five or more drinks in a row on one occasion within the past 30 days. In 2016, 4.5% of Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported binge drinking (down from 7.3% in 2013) as compared to the state average of 6.2% (down from 8.2% in 2013). Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were less likely than males to report binge drinking in 2016: 3.1% vs. 5.9%. While Somali 11<sup>th</sup> graders were considerably less likely than the state average to report binge drinking, Somali 8<sup>th</sup> graders were a bit more likely to do so (see graph at top of next page).



### **RISK + PROTECTIVE FACTORS**

Somali 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely than average to report in 2016 that they believe people put themselves at great or moderate risk of harm by frequently binge drinking: 64.5% vs. 71.2%. In 2016, Somali 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely than average to report their parents would think it's wrong or very wrong for them to have one or two drinks of an alcoholic beverage nearly every day: 84.0% vs. 90.5%. Similarly, they were a bit less likely than average to think their friends would feel it's wrong or very wrong: 79.9% vs. 81.6%.

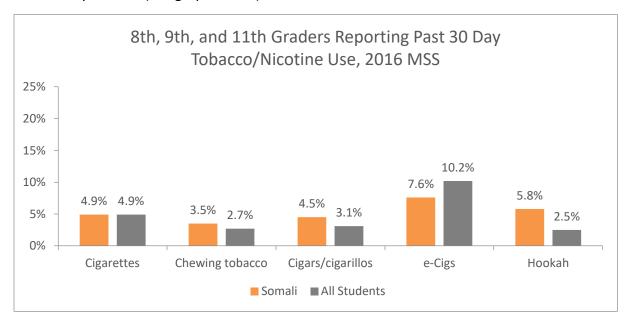
Youth tend to misperceive the number of peers who are drinking. Those who perceive that most students drink monthly or more often are more likely to report they drank in the past 30 days themselves. Among Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students, 52.6% think most students in their school have never had alcohol. However, 91.4% say they themselves have never had alcohol (see graph below).



# **TOBACCO**

### **YOUTH USE**

In 2016, 9.1% of Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported any past 30 day tobacco/nicotine use as compared to the state average of 12.8%. Among the various types of tobacco/nicotine products, Somali students were most likely to report use of e-cigarettes followed by hookah (see graph below).



Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were less likely than males to report any past month tobacco/nicotine use in 2016: 7.0% vs. 11.2%. Among Somali students, past 30 day tobacco/nicotine use was reported by 6.4% of 8th graders, 9.0% of 9th graders, and 14.4% of 11th graders.

Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were more likely to report any past 30 day tobacco/nicotine use compared to those living in the metro: 10.7% vs. 8.1%.

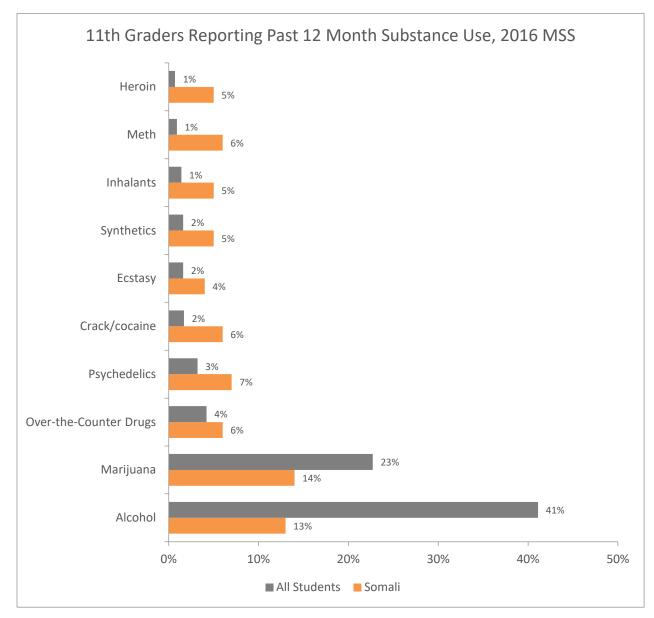
# **RISK + PROTECTIVE FACTORS**

Somali 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were considerably less likely than the state average to report in 2013 that they believe people put themselves at great or moderate risk of harm by smoking one or more packs of cigarettes per day: 63.1% vs. 78.1%.

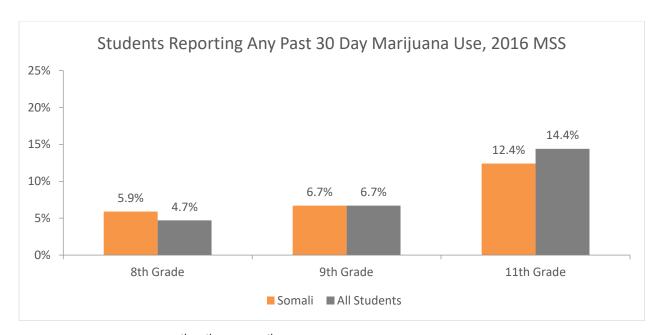
# **DRUGS**

# **YOUTH USE**

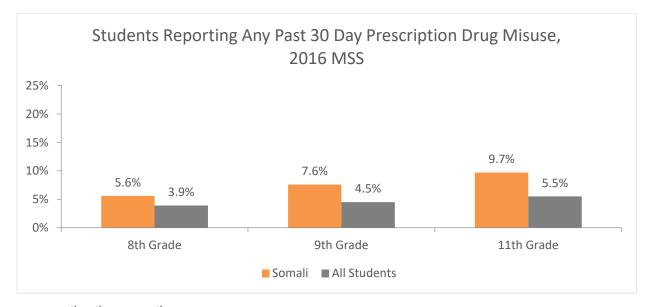
In 2016, Somali 11<sup>th</sup> graders were less likely than average to report past year alcohol use or marijuana use. However, they were more likely than average to report past year use of illicit drugs other than marijuana (see graph below).



In 2016, 7.6% of Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported any past 30 day marijuana as compared to the state average of 8.2%. Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade male students were more likely to report current marijuana use as compared to females: 9.1% vs. 6.1%. Somali 8<sup>th</sup> graders were a bit more likely than average to report use, while Somali 11<sup>th</sup> graders were less likely to do so (see graph on next page).



In 2016, 7.2% of Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported any past 30 day use of prescription drugs not prescribed for them (taken only to get high) as compared to the state average of 4.6%. Across all grade levels, Somali students were more likely than average to report past month prescription drug misuse (see graph below).



Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were more likely than average to report past 12 month misuse of prescription drugs, regardless of drug type:

Pain relievers: 4.8% vs. 3.2%

ADD/ADHD drugs: 4.5% vs. 2.7%

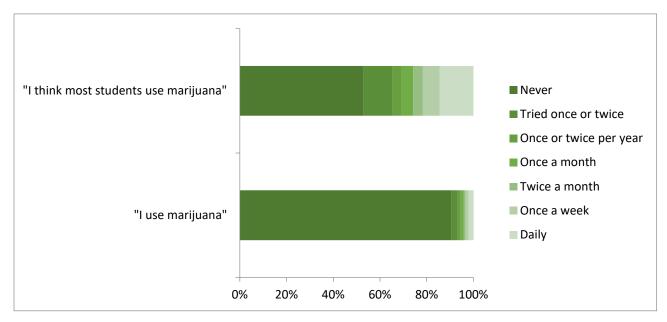
■ Tranquilizers: 3.8% vs. 1.8%

Stimulants: 3.1% vs. 0.9%

### **RISK + PROTECTIVE FACTORS**

According to the Minnesota Student Survey, Somali 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were somewhat less likely to report in 2016 that they believe people put themselves at great or moderate risk of harm by smoking marijuana once or twice per week as compared to the state average: 56.9% vs. 61.7%. They were also less likely than average to report that they believe people put themselves at great or moderate risk of harm by using prescription drugs not prescribed for them: 64.4% vs. 78.8%.

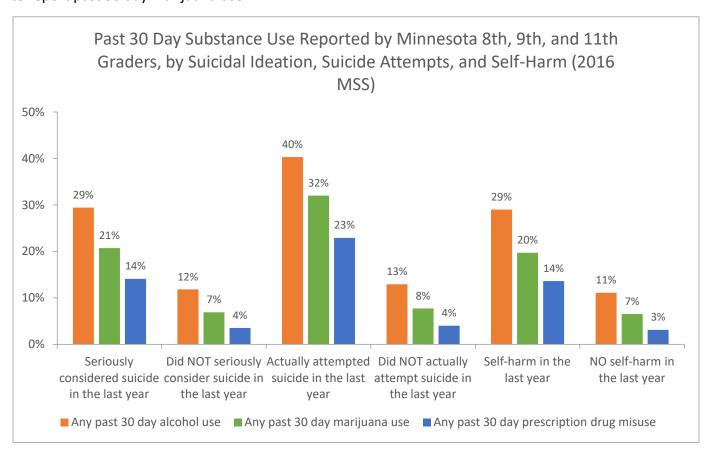
Youth tend to misperceive the number of peers who are using marijuana. Those who perceive that most students use marijuana monthly or more often are more likely to report they used in the past 30 days themselves. Among Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students, 53.0% think most students in their school have never had marijuana. However, 90.7% say they themselves have never had marijuana (see graph below).



# MENTAL HEALTH

We know from national research literature that substance use is a risk factor for mental health problems, and in turn mental health problems are a risk factor for substance use. We also know that many Minnesotans suffer from co-occurring substance use and mental health disorders.

As an example, Minnesota students who reported seriously considering suicide in the past year, actually attempting suicide in the past year, or harming themselves on purpose in the past year were more likely than those who did not report those experiences to abuse substances in the past 30 days. As shown in the chart below, Minnesota students reporting past year suicidal ideation were over twice as likely to report past 30 day alcohol use and three times more likely to report past 30 day marijuana use.



# **SUICIDE**

Minnesota Student Survey findings from 2016 show that Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely than the state average to report past-year suicidal ideation: 6.6% and 11.8% respectively. They were about as likely as average to report a past-year suicide attempt: 3.4% and 3.6% respectively.

# **SELF-HARM**

Somali 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely than average to report any past-year self-harm 11.9% vs. 15.6%. Self-harm includes doing something to purposely injure oneself without want to die, such as cutting, burning, or bruising oneself on purpose.

# **DEPRESSION**

In 2016, Somali students were a bit less likely than the state average to report past two week depressive symptoms: 18.5% vs. 21.9%. Depressive symptoms are measured by scoring responses to two questions--one about little interest or pleasure in doing things, and one about feeling down, depressed or hopeless.

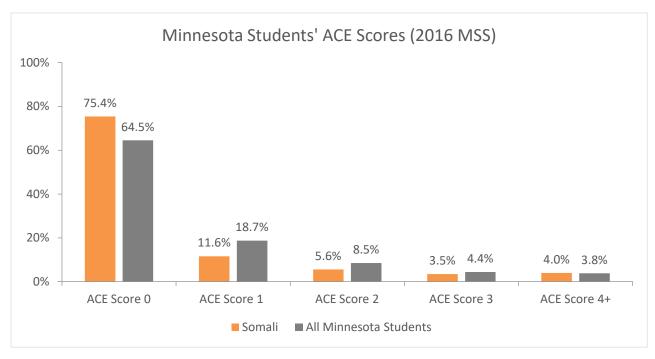
# SHARED RISK + PROTECTIVE FACTORS

Risk factors are characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of problem outcomes; protective factors are characteristics associated with a lower likelihood of problem outcomes or that reduces the negative impact of a risk factors on problem outcomes. Some risk factors are specifically associated with substance use, such as perceived risk of harm. Some risk and protective factors are associated with both substance use/abuse and with mental health.

# ADVERSE CHILDHOOD EXPERIENCES (ACEs)

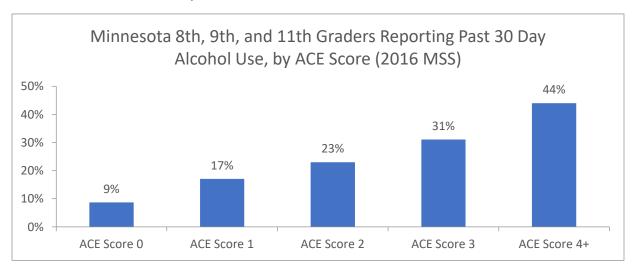
The Adverse Childhood Experiences (ACE) Study was a collaboration between the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente's Health Appraisal Clinic in San Diego. The study found that childhood experiences of abuse, neglect, and family dysfunction are linked to leading causes of illness, poor quality life, and death. An "ACE Score" is calculated by adding 1 point for each ACE experienced. An ACE score from the 2016 MSS can range from zero to seven based on the following survey items:

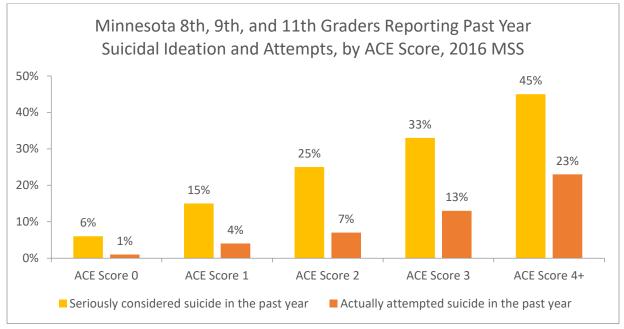
- Parent or guardian who is currently in jail, and/or has been in jail in the past
- Live with someone who drinks too much alcohol
- Live with someone who uses illegal drugs or abuses prescription drugs
- Verbal abuse by a parent or other adult in the household
- Physical abuse by a parent or other adult in the household
- Parents or other adults in the home who physically abuse each other
- Sexual abuse by an older or stronger family member, or someone outside the family



Somali 8th, 9th, and 11th grade students were more likely than the state average to report no adverse childhood experiences. However, among those reporting ACEs, Somali students were as likely as the state average to report four or more ACEs.

Past 30 day alcohol use increases incrementally with ACE score, as do past year suicidal ideation and attempts. While not shown here, each increase in ACE score is also associated with: increased marijuana use, increased cigarette smoking, lower grades, lower feelings of safety at school, home or in the community, and a decreased perception that parents, friends, teachers, and adults in the community care.





### **BULLYING**

The 2016 Minnesota Student Survey included a number of measures of bullying and harassment. Bullying behaviors experienced at school include:

- Pushed, shoved, slapped, hit or kicked by another student who was not kidding around, and/or
- Another student threatened to beat them up, and/or
- Spread mean rumors or lies about them, and/or
- Made sexual jokes, comments or gestures toward them, and/or
- Excluded them from friends, other students, or activities

Factors Associated with Bullying Behavior among 8th, 9th, and 11th Graders, 2016 Minnesota			
Student Survey			
		Did NOT	
	Experienced any	experience any	
	past 30 day	past 30 day	
	bullying behavior	bullying behavior	
Past 30 day alcohol use	18.4%	10.2%	
Past 30 day marijuana use	11.2%	6.4%	
Past 12 month self-harm	25.3%	7.8%	
Past 12 month serious suicide consideration	19.5%	5.7%	

Compared to the state average, Somali students were considerably less likely to report experiencing bullying in the past 30 days (30.3% vs. 44.2%).

# **SAFETY**

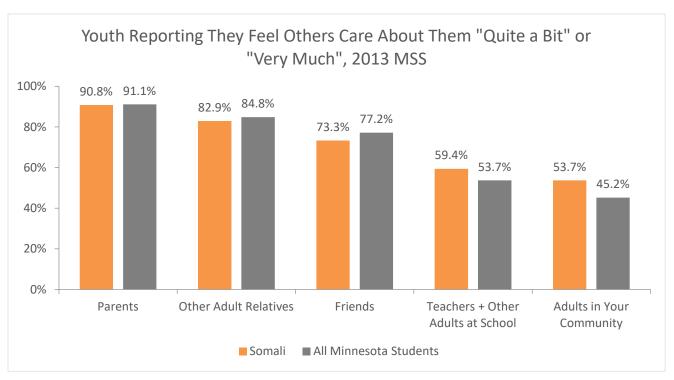
Students who feel safe at school are less likely to report past 30 day substance use, and less likely to report mental health issues. According to the 2016 MSS, Somali students are a bit less likely than the state average to report feeling safe at school—90.2% said they "strongly agree" or "agree" they feel safe at school compared to the state average of 92.7%. They are also less likely to report feeling safe going to and from school: 92.2% vs. 95.6%.

Factors Associated with School Safety, 2016 Minnesota Student Survey			
		Students	
	Students "strongly	"disagree" or	
	agree" or "agree"	"strongly disagree"	
	that they feel safe	that they feel safe	
	at school	at school	
Past 30 day alcohol use	13.0%	24.4%	
Past 30 day marijuana use	7.9%	17.1%	
Past 12 month self-harm	13.9%	37.3%	
Past 12 month serious suicide consideration	10.2%	32.0%	

Youth who feel safe in their neighborhoods are also less likely to report past month substance use or past year mental health problems. In 2016, 90.3% of Somali students said they "strongly agree" or "agree" that they feel safe in their neighborhood compared to the state average of 95.0%.

### **SUPPORT**

Youth who feel that others care about them are less likely to report substance use and mental health problems. For example, Minnesota students who feel their teachers and other adults at school care about them quite a bit or very much are 2.7 times less likely to report past 30 day alcohol use than those who feel they care about them a little or not all. They are 4.3 times less likely to report suicidal ideation. In 2016, Somali students were a bit less likely than the state average to report feeling that family and friends care about them very much, but more likely than average to feel that school staff and other adults in the community care.



# **DATA SOURCES**

# **MINNESOTA STUDENT SURVEY (MSS)**

The MSS is a confidential and anonymous self-administered survey sponsored by the Minnesota schools, the Minnesota Department of Education, the Minnesota Department of Health, the Minnesota Department of Human Services, and the Minnesota Department of Public Safety. The survey is administered every three years to students attending Minnesota public, charter and tribal schools. From 1995 to 2010, the survey was given to 6<sup>th</sup>, 9<sup>th</sup> and 12<sup>th</sup> graders; starting in 2013 the survey was administered to 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> graders.

http://www.health.state.mn.us/divs/chs/mss/

http://education.state.mn.us/MDE/StuSuc/SafeSch/MNStudentSurvey/