

Epidemiological Profile of Substance Use + Related Factors among Minnesota's Hmong 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 Hmong 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 Hmong 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. Communityspecific 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 Hmong 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 Hmong community.

POPULATION SNAPSHOT

According to the 2015 American Community Survey, just over 5% of Minnesotans identify as Asian American or Pacific Islander alone (alone or in combination with any other races/ethnicities)—5.4% identify as Asian and 0.15% as Pacific Islander. Asian American and Pacific Islander communities in Minnesota are younger than the state average, with about onethird of Asians and Pacific Islanders being under the age of 18.

2015	Asian Americans in		Pacific Islanders in		All Minnesotans	
	Minnesota		Minnesota			
	Number	Percent	Number	Percent	Number	Percent
Under 18 years	99,265	32.5%	2,865	35.0%	1,360,354	24.2%
18 to 24 years	37,913	12.4%	1,044	12.8%	525,404	9.3%
25 to 44 years	104,646	34.2%	2,509	30.7%	1,450,416	25.8%
45 to 64 years	47,926	15.7%	1,392	17.0%	1,485,654	26.4%
65 years + over	15,906	5.2%	375	4.6%	809,397	14.4%
Total	305,656		8,185		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

According to U.S. Census Bureau 2015 Population Estimates, the fastest growing racial group in Minnesota from 2010 to 2015 was the Asian population. During this time period, the population grew by 22% adding nearly 48,000 people. In 2014, Hmong residents made up the second-largest group of foreign-born Minnesotans (28,000 born in Laos and 17,000 born in Thailand). After English and Spanish, the third most common language spoken at home among Minnesotans age 5 and older was Hmong (65,000 speakers).

Number of 2016 Minnesota Student Survey Respondents Identifying as Hmong				
	Male	Female	No answer	Total
5 th Grade	618	560	6	1,184
8 th Grade	623	553	3	1,179
9 th Grade	646	636	10	1,292
11 th Grade	590	564	6	1,160
Total	2,477	2,313	25	4,815

KEY FINDINGS

POSITIVE FINDINGS

- Hmong students were slightly less likely than the Minnesota state average to report past month alcohol use and past month binge drinking; they were somewhat less likely than average to report past month tobacco/nicotine and marijuana use, and slightly less likely to report past month prescription drug misuse.
- Hmong students were less likely to report having been a victim of bullying in the past month, as compared to the state average.

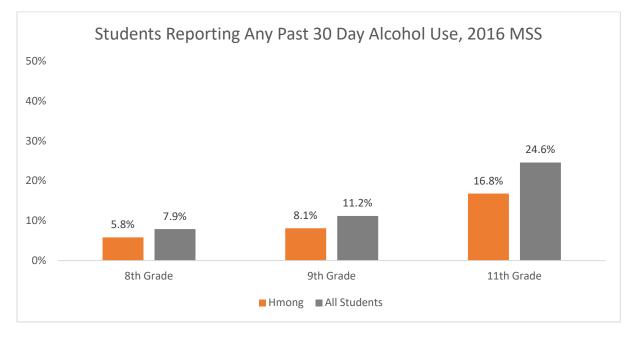
AREAS FOR IMPROVEMENT

- Students identifying as Hmong were less likely than average to perceive great or moderate risk of harm from using alcohol, tobacco, and drugs.
- Students identifying as Hmong were a bit more likely than average to report past-year suicidal ideation, past-year self-harm, and past two week depressive symptoms.
- Hmong youth were less likely than average to feel that others care about them very much or quite a bit, including their parents, other family members, friends, school staff, and adults in their community.
- Hmong youth were less likely than average to feel safe at school, safe going to and from school, or safe in their neighborhood.

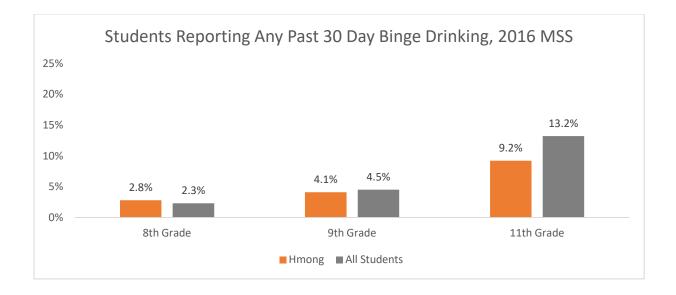
ALCOHOL

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, 10.1% of Hmong 8th, 9th, and 11th grade students reported current alcohol use (down from 14.7% in 2013) as compared to the state average of 13.9% (down from 16.8% in 2013). Hmong 8th, 9th, and 11th grade females were somewhat less likely than males to report current alcohol use in 2016: 9.5% vs. 10.7%. Hmong students were less likely than the state average to report past month alcohol use--regardless of grade level (see graph below).



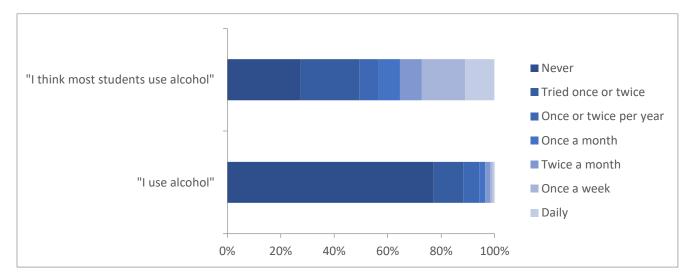
Binge drinking is measured by the Minnesota Student Survey as students reporting having five or more drinks in a row on one occasion within the past 30 days. In 2016, 5.3% of Hmong 8th, 9th, and 11th grade students reported binge drinking (down from 7.2% in 2013) as compared to the state average of 6.2% (down from 8.2% in 2013). Hmong 8th, 9th, and 11th grade females were a bit less likely than males to report binge drinking in 2016: 4.7% vs. 5.8%. While Hmong 11th graders are considerably less likely than average to report past month binge drinking, Hmong 8th graders are slightly more likely to report binging (see graph at top of next page).



RISK + PROTECTIVE FACTORS

Hmong 5th, 8th, 9th, and 11th 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: 65.9% vs. 71.2%. In 2016, Hmong 5th, 8th, 9th, and 11th 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: 87.5% vs. 90.5%. They were about as likely as average to think their friends would feel it's wrong or very wrong: 81.0% vs. 81.6%.

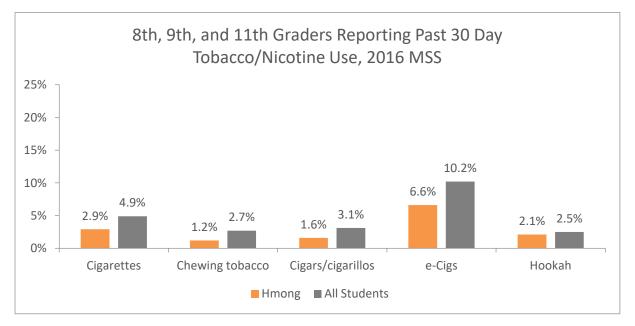
Youth tend to misperceive the number of peers who are drinking. Those who perceive that most students drink monthly or more often are more likely to report they drank in the past 30 days themselves. Among Hmong 8th, 9th, and 11th grade students, 27.4% think most students in their school have never had alcohol. However, 77.2% say they themselves have never had alcohol (see graph below).



TOBACCO

YOUTH USE

In 2016, 7.7% of Hmong 8th, 9th, and 11th 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, Hmong students were most likely to report use of e-cigarettes followed by standard commercial cigarettes (see graph below).



Hmong 8th, 9th, and 11th grade females were less likely than males to report any past month tobacco/nicotine use in 2016: 6.5% vs. 8.9%. Among Hmong students, past 30 day tobacco/nicotine use was reported by 5.6% of 8th graders, 6.6% of 9th graders, and 11.3% of 11th graders.

Hmong 8th, 9th, and 11th grade students living outside the seven-county metro area were considerably more likely to report any past 30 day tobacco/nicotine use compared to those living in the metro: 14.4% vs. 7.1%.

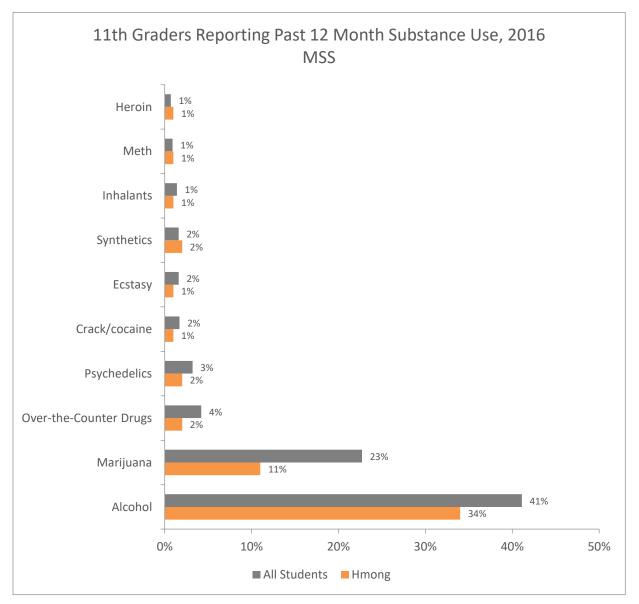
RISK + PROTECTIVE FACTORS

Hmong 5th, 8th, 9th, and 11th grade students were considerably less likely than the state average to report in 2016 that they believe people put themselves at great or moderate risk of harm by smoking one or more packs of cigarettes per day: 65.5% vs. 78.1%.

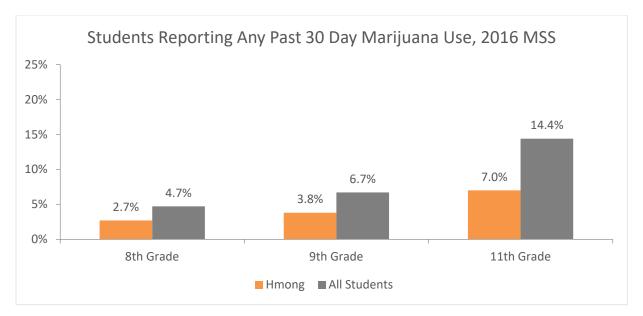
DRUGS

YOUTH USE

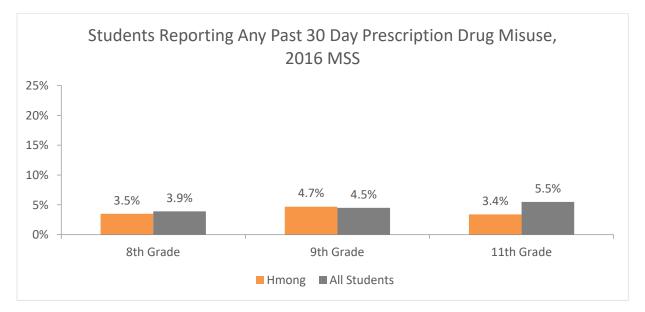
In 2016, Hmong 11th graders were less likely than average to report past year alcohol use, marijuana use, and use of over-the-counter drugs, psychedelics, crack/cocaine, and ecstasy (see graph below). Chart labels are rounded to the nearest whole percent, but the bars show differences to the nearest tenth of one percent.



In 2016, 4.4% of Hmong 8th, 9th, and 11th grade students reported any past 30 day marijuana as compared to the state average of 8.2%. Hmong 8th, 9th, and 11th grade male students were slightly more likely to report current marijuana use as compared to females: 4.9% vs. 3.9%. Hmong students across all grades were less likely than the state average to report current marijuana use (see graph on next page).



In 2016, 3.9% of Hmong 8th, 9th, and 11th 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%. Hmong 8th and 9th graders were about as likely as average to report past month misuse; Hmong 11th graders were less likely to do so (see graph below).



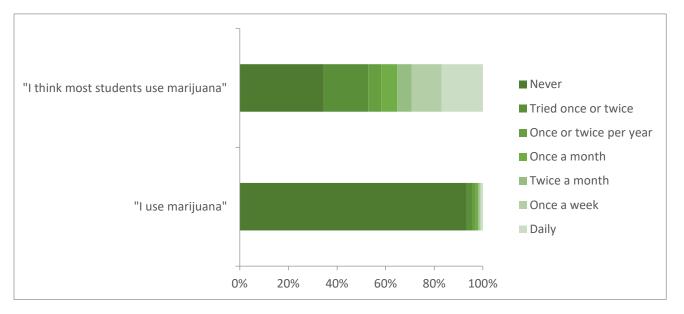
With the exception of stimulants, Hmong 8th, 9th, and 11th grade students were less likely than average to report past 12 month misuse of prescription drugs:

- Pain relievers: 2.1% vs. 3.2%
- ADD/ADHD drugs: 1.2% vs. 2.7%
- Tranquilizers: 0.9% vs. 1.8%
- Stimulants: 0.9% vs. 0.9%

RISK + PROTECTIVE FACTORS

According to the Minnesota Student Survey, Hmong 5th, 8th, 9th, and 11th grade students were a bit 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: 59.6% 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: 67.7% vs. 78.8%.

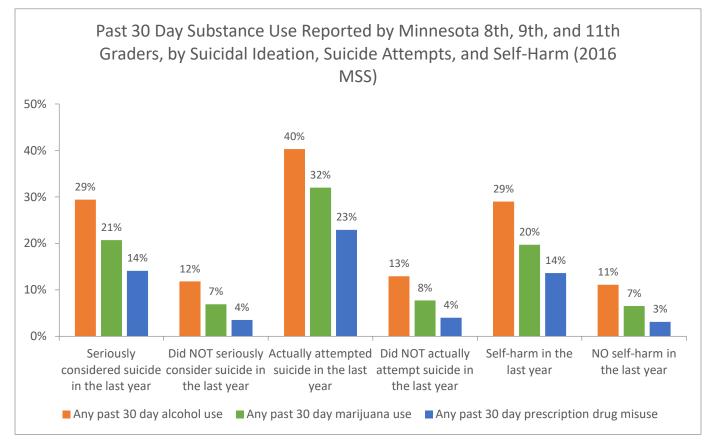
Youth tend to misperceive the number of peers who are using marijuana. Those who perceive that most students use marijuana monthly or more often are more likely to report they used in the past 30 days themselves. Among Hmong 8th, 9th, and 11th grade students, 34.6% think most students in their school have never had marijuana. However, 93.3% 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 Hmong 8th, 9th, and 11th grade students were a bit more likely than the state average to report past-year suicidal ideation: 12.7% and 11.8% respectively. They were about as likely as average to report a past-year suicide attempt: 3.3% and 3.6% respectively.

SELF-HARM

Hmong 8th, 9th, and 11th grade students were more likely than average to report any past-year self-harm 18.0% 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, Hmong students were more likely than the state average to report past two week depressive symptoms: 28.9% 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.

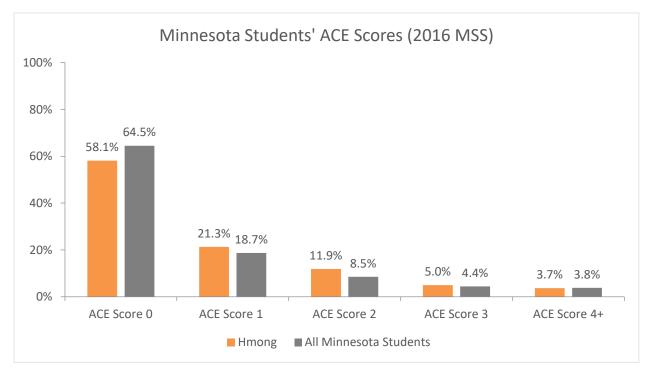
SHARED RISK + PROTECTIVE FACTORS

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)

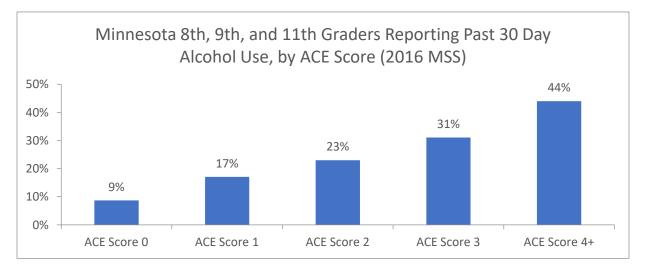
The Adverse Childhood Experiences (ACE) Study was a collaboration between the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente's Health Appraisal Clinic in San Diego. The study found that childhood experiences of abuse, neglect, and family dysfunction are linked to leading causes 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:

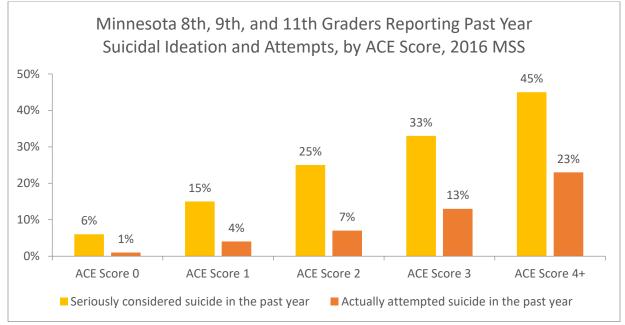
- Parent or guardian who is currently in jail, and/or has been in jail in the past
- Live with someone who drinks too much alcohol
- Live with someone who uses illegal drugs or abuses prescription drugs
- Verbal abuse by a parent or other adult in the household
- Physical abuse by a parent or other adult 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



Hmong 8th, 9th, and 11th graders were slightly more likely than the state average to report ACE scores of one, two, or three; they 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, Hmong students were less likely to report experiencing bullying in the past 30 days (37.2% vs. 44.2%).

SAFETY

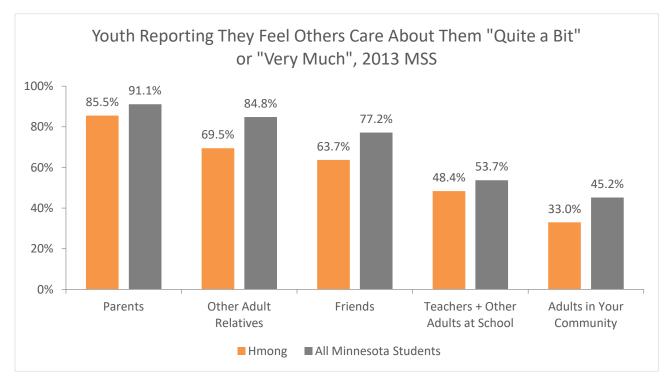
Students who feel safe at school are less likely to report past 30 day substance use, and less likely to report mental health issues. According to the 2016 MSS, Hmong students are a bit less likely than the state average to report feeling safe at school—89.5% said they "strongly agree" or "agree" they 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: 92.6% 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, 88.6% of Hmong 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, Hmong students were somewhat less likely than the state average to report feeling that others care about them very much.



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 6th, 9th and 12th graders; starting in 2013 the survey was administered to 5th, 8th, 9th, and 11th graders. http://www.health.state.mn.us/divs/chs/mss/

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