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

April 2015
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, Wilder Research, 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. 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 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.
According to the 2012 American Community Survey, just over 5% of Minnesotans identify as Asian American or Pacific Islander alone (not in combination with any other race/ethnicity)—4.9% identify as Asian and 0.2% as Pacific Islander. Asian American and Pacific Islander communities in Minnesota are younger than the state average, with almost one-third of Asians and half of Pacific Islanders being under the age of 18.

### POPULATION SNAPSHOT

<table>
<thead>
<tr>
<th></th>
<th>2012 Asian Americans in Minnesota</th>
<th>Pacific Islanders* in Minnesota</th>
<th>All Minnesotans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Under 18 years</td>
<td>65,829</td>
<td>29.0%</td>
<td>906</td>
</tr>
<tr>
<td>18 to 24 years</td>
<td>30,382</td>
<td>13.4%</td>
<td>257</td>
</tr>
<tr>
<td>25 to 44 years</td>
<td>81,590</td>
<td>36.0%</td>
<td>583</td>
</tr>
<tr>
<td>45 to 64 years</td>
<td>37,478</td>
<td>16.5%</td>
<td>362</td>
</tr>
<tr>
<td>65 years + over</td>
<td>11,623</td>
<td>5.1%</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>226,902</td>
<td></td>
<td>1,795</td>
</tr>
</tbody>
</table>

*2010-2012 three year average estimates

The largest and fastest growing Asian population in Minnesota are those of Southeast Asian ancestry; 27% are Hmong and 11% are Vietnamese. The next largest Asian population are East Asians; over 11% are Chinese and over 8% are Korean. The third largest Asian population are South Asians—over 15% of Asian Minnesotans are Indian. (State of the Asian Pacific Minnesotans. 2010 Census and 2008-2010 American Community Survey Report. April 2012. Council on Asian Pacific Minnesotans).

### Number 2013 Minnesota Student Survey Respondents Identifying as Hmong

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>521</td>
<td>494</td>
<td>1015</td>
</tr>
<tr>
<td>8&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>476</td>
<td>431</td>
<td>907</td>
</tr>
<tr>
<td>9&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>615</td>
<td>564</td>
<td>1179</td>
</tr>
<tr>
<td>11&lt;sup&gt;th&lt;/sup&gt; Grade</td>
<td>613</td>
<td>539</td>
<td>1152</td>
</tr>
<tr>
<td>Total</td>
<td>2225</td>
<td>2028</td>
<td>4253</td>
</tr>
</tbody>
</table>

It's important to note that Minneapolis Public Schools did not participate in the 2013 Minnesota Student Survey. This is important because data on language spoken most often at home indicate that at least 1,175 of the Minneapolis Public School District's 35,400 enrolled K-12 students identify as Hmong.
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 considerably less likely than average to report past month tobacco and marijuana use, and somewhat less likely to report past month prescription drug misuse.
- Students identifying as Hmong were less likely than average to report any past-year suicidal ideation or suicide attempts
- Hmong students were slightly 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.
- Among students reporting any past 30 day alcohol use, Hmong youth were considerably more likely than the state average to say they got alcohol from family members (other than parents); they were also slightly more likely to report having bought alcohol.
- Hmong students were slightly more likely than the Minnesota state average to report any past-year self-harm, and more likely to report past-year significant problems with internalizing disorders (i.e., depression, anxiety).
- 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.
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 2013, 14.7% of Hmong 8th, 9th, and 11th grade students reported current alcohol use as compared to the state average of 16.8%. Hmong 8th, 9th, and 11th grade females were somewhat less likely than males to report current alcohol use in 2013: 13.2% vs 16.0%. While Hmong 8th graders were more likely than the state average to report current alcohol use, Hmong 9th and 11th graders were less likely to do so (see graph below).

Students Reporting Any Past 30 Day Alcohol Use, 2013
MSS

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 2013, 7.2% of Hmong 8th, 9th, and 11th grade students reported binge drinking as compared to the state average of 8.2%. Hmong 8th, 9th, and 11th grade females were somewhat less likely than males to report binge drinking in 2013: 6.5% vs 7.9%. While Hmong 9th graders as likely as the state average to report binge drinking, Hmong 8th graders were more likely to do so and 11th graders less likely to do so (see graph at top of next page).
RISK + PROTECTIVE FACTORS

Hmong 5th, 8th, 9th, and 11th grade students were somewhat less likely than the state average to report in 2013 that they believe people put themselves at great or moderate risk of harm by frequently binge drinking: 67.7% vs 71.8%. Hmong 8th, 9th, and 11th graders were slightly more likely than the Minnesota average to report age of first alcohol use at 13 or younger: 23.6% vs. 21.3%. Hmong students who reported any past month drinking were slightly more likely than the Minnesota average to report buying the alcohol from someone or somewhere (10.3% vs 8.5%), but less likely to report taking the alcohol from someone or somewhere (24.3% vs 32.1%) and less likely to report that they got the alcohol from someone or somewhere: 64.5% vs 72.5%. See graph on next page for data on specific sources of alcohol; students were asked to select all applicable response options.
Alcohol Sources for Students Reporting Any Past 30 Day Alcohol Use, 2013 MSS

- I bought alcohol at gas stations or convenience stores
- I bought alcohol at bars or restaurants
- I bought alcohol at liquor or other stores
- I bought alcohol on the internet
- I got alcohol from friends
- I got alcohol from my parents
- I got alcohol from other family members
- I got alcohol by getting someone else to buy for me
- I got alcohol at parties
- I took alcohol from my home
- I took alcohol from a friend's home
- I took alcohol from stores
- I took alcohol from a friend's home
- I took alcohol from a friend's home

For All Students and Hmong
TOBACCO

YOUTH USE

In 2013, 6.0% of Hmong 8th, 9th, and 11th grade students reported any past 30 day tobacco use as compared to the state average of 11.2%. Hmong females were less likely than males to report past month tobacco use: 4.4% vs 7.5%. Reported past month use increased by grade level (see graph below). Among 8th, 9th, and 11th graders identifying as Hmong, 5.2% reported any past month cigarette smoking, 2.9% reported any past month use of cigars or cigarillos, and 1.9% reported any past month use of chewing tobacco.

RISK + PROTECTIVE FACTORS

Hmong 5th, 8th, 9th, and 11th grade students were 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: 68.9% vs 79.8%.
DRUGS

YOUTH USE

In 2013, 4.9% of Hmong 8th, 9th, and 11th grade students reported any past 30 day marijuana as compared to the state average of 10.0%. Hmong 8th, 9th, and 11th grade male students were twice as likely to report current marijuana use in 2013 as compared to females: 6.5% vs. 3.2%. Hmong students across all grades were less likely than the state average to report current marijuana use (see graph below).

Hmong 8th, 9th, and 11th grade students were also less likely than the state average to report any past month misuse of prescription drugs in 2013: 3.9% vs 5.3%. Hmong 8th, 9th, and 11th grade male students were as likely as females to report prescription drug misuse: 3.9% and 4.0% respectively. Hmong students in 8th grade were as likely as the state average to report misuse of prescription drugs, while 9th and 11th grade Hmong students were less likely to do so (see graph on next page).
According to the Minnesota Student Survey, Hmong 5th, 8th, 9th, and 11th grade students were slightly less likely to report in 2013 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: 64.5% vs 66.4%. 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: 70.3% vs. 81.3%.

RISK + PROTECTIVE FACTORS
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 almost three times more likely to report past 30 day marijuana use.

SUICIDE

Minnesota Student Survey findings from 2013 show that Hmong 8th, 9th, and 11th grade students were slightly less likely than the state average to report past-year suicidal ideation: 9.6% and 10.8% respectively. They were also slightly less likely to report a past-year suicide attempt: 3.0% and 3.3% respectively. However, Hmong students were a bit more likely to report any past-year self harm: 17.0% vs 14.8%.
YOUTH MENTAL HEALTH

Internalizing disorders are measured on the 2013 Minnesota Student Survey using the Global Appraisal of Individual Needs—Short Screener (GAIN-SS). Youth are asked about “significant” problems in the past 12 months—having problems for two or more weeks, problems that keep coming back, problems that keep you from meeting your responsibilities, or problems that make you feel like you can’t go on—with the following:

- Feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future
- Sleep trouble, such as bad dreams, sleeping restlessly or falling asleep during the day
- Feeling very anxious, nervous, tense, scared, panicked or like something bad was going to happen
- Becoming very distressed and upset when something reminded you of the past
- Thinking about ending your life or committing suicide

Significant problems with one or two indicates some level of distress with internalizing disorders; significant problems with three or more indicators a high level of distress. Minnesota students with high distress levels related to internalizing disorders were 1.8 times more likely to report past month alcohol use compared to those with some distress, and 2.6 times more likely to report past month alcohol use compared to students with no distress.
Externalizing disorders are similarly measured using the GAIN-SS, and include doing any of the following two or more times in the past 12 months: lie or con to get things you wanted or to avoid having to do something; have a hard time paying attention at school, work or home; have a hard time listening to instructions at school, work or home; be a bully or threaten other people; start fights with other people. As with internalizing disorders, problems with one or two indicators some level of distress while problems with three or more indicators a high level of distress. Minnesota students with high distress levels related to internalizing disorders were 2.0 times more likely to report past month alcohol use compared to those with some distress, and 4.4 times more likely to report past month alcohol use compared to students with no distress.

Hmong students are slightly less likely to report externalizing disorders as compared to the state average, but more likely to report internalizing disorders.
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. In 2013, some ACE questions were added to the Minnesota Student Survey and some were revised to better align with national surveys. An ACE score from the 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

![Minnesota Students' ACE Scores (2013 MSS)](image-url)
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 2013 Minnesota Student Survey included a number of measures of bullying and harassment. One way to measure exposure to bullying behavior (being a “victim”) is to assess the percentage of students reporting any times in the past 30 days other students at school:

- Pushed, shoved, slapped, hit or kicked them when they weren’t kidding around, and/or
- 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 for All Minnesota Students, 2013 Minnesota Student Survey

<table>
<thead>
<tr>
<th>Factor</th>
<th>Experienced any past 30 day bullying behavior</th>
<th>Did NOT experience any past 30 day bullying behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past 30 day alcohol use</td>
<td>22.1%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Past 30 day marijuana use</td>
<td>12.8%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Past 30 day prescription drug misuse</td>
<td>8.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Past 12 month significant problems feeling trapped, lonely, sad, blue, depressed, or hopeless about life</td>
<td>41.6%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Past 12 month self-harm</td>
<td>23.3%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Past 12 month serious suicide consideration</td>
<td>17.6%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Similarly, one way to measure exhibition of bullying behaviors (being a “bully”) is to assess the percentage of students who did one of the above actions to other students at school in the past 30 days. Victims, bullies, and students who are both victims and bullies are at increased risk for substance use and mental health issues.

Compared to the state average, Hmong students were slightly less likely to report being a victim only in the past 30 days (21.8% vs. 23.7%), slightly less likely to report being a bully only in the past 30 days (5.1% vs. 6.0%), and less likely to report having been both a victim and a bully (15.1% and 22.1% respectively). About one in five (21.6%) Hmong students reported being bullied in the past month due to their race, ethnicity, or national origin; about one in ten (10.8%) reported being bullied in the past month due to their religion.

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 2013 Minnesota Student Survey, Hmong students are slightly less likely than the state average to report feeling safe at school—90.4% said they “strongly agree” or “agree” they feel safe at school compared to the state average of 92.6%. They are also slightly less likely to report feeling safe going to and from school: 92.8% vs. 95.1%.
Factors Associated with School Safety for All Minnesota Students, 2013 Minnesota Student Survey

<table>
<thead>
<tr>
<th></th>
<th>Students &quot;strongly agree&quot; or &quot;agree&quot; that they feel safe at school</th>
<th>Students &quot;disagree&quot; or &quot;strongly disagree&quot; that they feel safe at school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past 30 day alcohol use</td>
<td>15.8%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Past 30 day marijuana use</td>
<td>9.4%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Past 30 day prescription drug misuse</td>
<td>4.7%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Past 12 month significant problems feeling trapped, lonely, sad, blue, depressed, or hopeless about life</td>
<td>20.9%</td>
<td>54.9%</td>
</tr>
<tr>
<td>Past 12 month self-harm</td>
<td>13.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Past 12 month serious suicide consideration</td>
<td>9.4%</td>
<td>29.0%</td>
</tr>
</tbody>
</table>

While not shown here, youth who feel safe in their neighborhoods are also less likely to report past month substance use or past year mental health problems. In 2013, 86.7% of Hmong students said they “strongly agree” or “agree” that they feel safe in their neighborhood compared to the state average of 94.1%.

**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 2.5 times less likely to report past 30 day alcohol use than those who feel they care about them a little or not at all. They are over 4 times less likely to report suicidal ideation. In 2013, 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/