



# **Epidemiological Profile of Substance Use + Related Factors in Minnesota's American Indian + Alaska Native Communities**

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

April 2016

## **TABLE OF CONTENTS**

<b>INTRODUCTION</b>	<b>3</b>
<b>POPULATION SNAPSHOT</b>	<b>5</b>
<b>KEY FINDINGS</b>	<b>6</b>
<b>ALCOHOL</b>	<b>7</b>
<b>TOBACCO</b>	<b>12</b>
<b>DRUGS</b>	<b>14</b>
<b>MENTAL HEALTH</b>	<b>19</b>
<b>SHARED RISK + PROTECTIVE FACTORS</b>	<b>22</b>
<b>DATA SOURCES</b>	<b>26</b>

## 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, 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 among American Indians and Alaska Natives in Minnesota, and related factors.

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 American Indian and Alaska Native 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. Race selections on surveys do not always allow for self-report of specific tribal affiliation or membership. Racial designations made on death and arrest reports are often done by medical examiners and law enforcement, and therefore may not be accurate. Race/ethnicity is not always labeled or defined uniformly; some sources report for —mixed race while others report for American Indian and Alaska Native alone or in combination with one or more races/ethnicities. County and city level data on American Indians and Alaska Natives are often not available due to small numbers and/or low survey response rate, if collected at all. Also, rates may fluctuate greatly due to small numbers.

## POPULATION SNAPSHOT

According to the 2014 American Community Survey, 2% of Minnesotans identify as American Indian and Alaska Native alone (alone or in combination with other races/ethnicities). American Indian and Alaska Native communities in Minnesota are considerably younger than the state average, with over one-third being under the age of 18.

2014	American Indians +Alaska Natives in Minnesota		All Minnesotans	
	Number	Percent	Number	Percent
Under 18 years	42,196	36.4%	1,356,782	24.3%
18 to 24 years	14,252	12.3%	525,753	9.4%
25 to 44 years	30,416	26.3%	1,445,633	25.8%
45 to 64 years	22,107	19.1%	1,482,904	26.5%
65 years + over	6,880	5.9%	783,648	14.0%
Total	115,851		5,594,720	

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, 2014   
2014 Population Estimates

There are two tribes located in Minnesota, the Sioux and Ojibwe; four nations in the Sioux tribe and seven nations in the Ojibwe tribe. Members of other tribes have moved to Minnesota as well. Approximately one-third of Minnesota's American Indians reside on reservation lands, and slightly more than one third live in the cities of Minneapolis and Saint Paul.

Minnesota's American Indian and Alaska Native population has grown in some Minnesota counties and declined in others from 2000 to 2010. Martin, Steel, and Pennington counties saw the greatest percentage increase during that period, while Kittson, Lincoln, and Grant counties saw the greatest percentage decrease (Viz: Population Counts and Change by Racial and Ethnic Groups, 2000 and 2010, for Counties, Minnesota State Demographic Center: <http://mn.gov/admin/demography/map-viz-gallery/viz-co-pop-race-ethnicity-change-2000-2010.jsp>)

## KEY FINDINGS

### POSITIVE FINDINGS

- The number of American Indians and Alaska Natives arrested for driving under the influence has been decreasing over time, as have the number of juveniles arrested for liquor laws (MN BCA)
- American Indian/Alaska Native students are less likely to report getting alcohol from their parents as compared to the state average: 9% vs. 14% (2013 MSS)
- While still higher than average, American Indian and Alaska Native adult rates of binge drinking, cigarette use, and depressive symptoms are down from 2010 (2015 MNSASU)

### AREAS FOR IMPROVEMENT

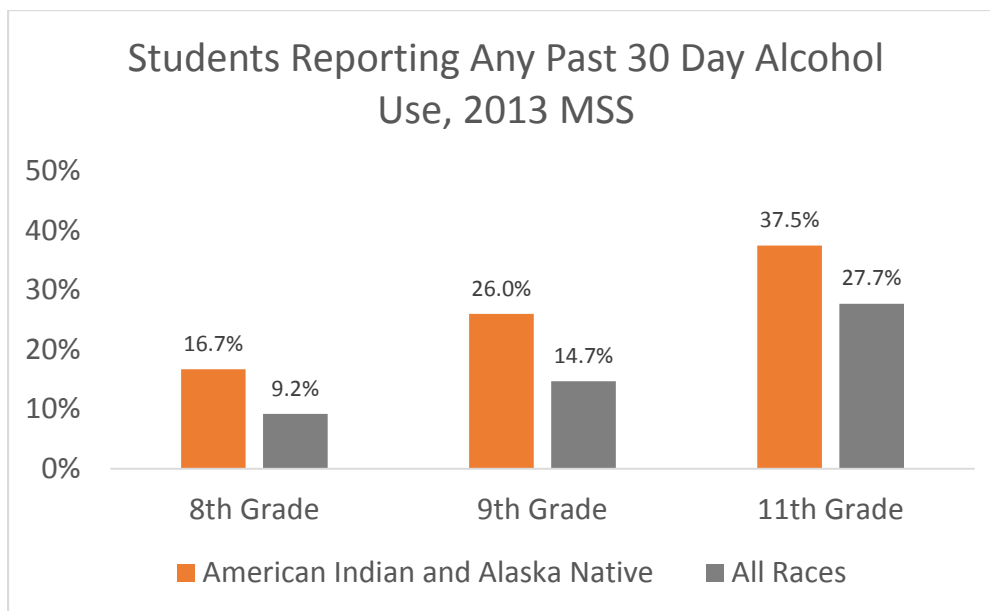
- American Indian/Alaska Native students were less likely than the state average to perceive great or moderate risk of harm from using alcohol, cigarettes, marijuana, or prescription drugs (2013 MSS)
- American Indian/Alaska Native students were more likely than the state average to report past 30 day alcohol use, 24% vs. 17%, binge drinking, 15% vs. 8%, cigarette smoking, 21% vs. 8%, marijuana use, 23% vs. 10%, and prescription drug misuse: 11% vs. 5% (2013 MSS)
- American Indian/Alaska Native adults were more likely than average to report past 30 day binge drinking, cigarette and e-cigarette smoking, marijuana use, and past two week depressive symptoms; they are also less likely to perceive great or moderate risk of harm from substance use (2015 MNSASU)
- The percentage of American Indians and Alaska Natives admitted to Minnesota treatment programs for opioids as their primary substance of abuse has risen sharply, as have admissions for methamphetamines (DAANES)
- American Indian/Alaska Native students were more likely than the state average to report past year suicidal ideation, 17% vs. 11%, and past year suicide attempts: 7% vs. 3% (2013 MSS)
- American Indian/Alaska Native students were more likely than the state average to report high distress levels for both internalizing and externalizing disorders (2013 MSS)
- American Indian/Alaska Native students were more likely than the state average to report one or more adverse childhood experiences (2013 MSS)
- American Indian/Alaska Native students were less likely than the state average to feel safe at school, feel safe going to and from school, or feel safe in their neighborhood (2013 MSS)
- American Indian/Alaska Native students were less likely than the state average to feel that their parents, other adults, friends, teachers and other adults at school, and adults in their community care about them “quite a bit” or “very much” (2013 MSS)

## 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, 24.2% of American Indian and Alaska Native (non-Hispanic) 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported current alcohol use as compared to the state average of 16.8%.

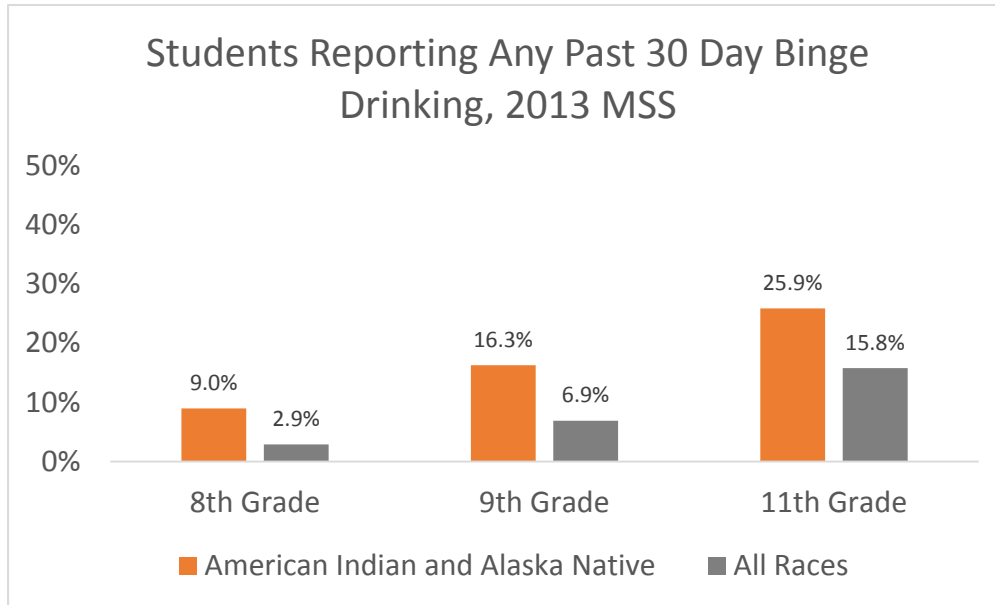
American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were more likely than males to report current alcohol use in 2013: 29.3% vs. 20.1%. American Indian and Alaska Native 5<sup>th</sup> graders were slightly more likely than the state average to report any use of alcohol in the last 12 months: 5.0% vs. 3.6%. American Indian and Alaska Native students were more likely than the state average to report current alcohol use regardless of grade level.



American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were about as likely to report current alcohol use as those living in the metro: 24.0% vs. 24.8%.

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, 14.9% of American Indian and Alaska Native (non-Hispanic) 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported binge drinking as compared to the state average of 8.2%.

American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were more likely to report binge drinking in 2013 as compared to males: 17.3% vs. 13.1%. American Indian and Alaska Native students were more likely than the state average to report binge drinking, regardless of grade level.



American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were about as likely to report binge drinking as those living in the metro: 15.1% vs. 14.5%.

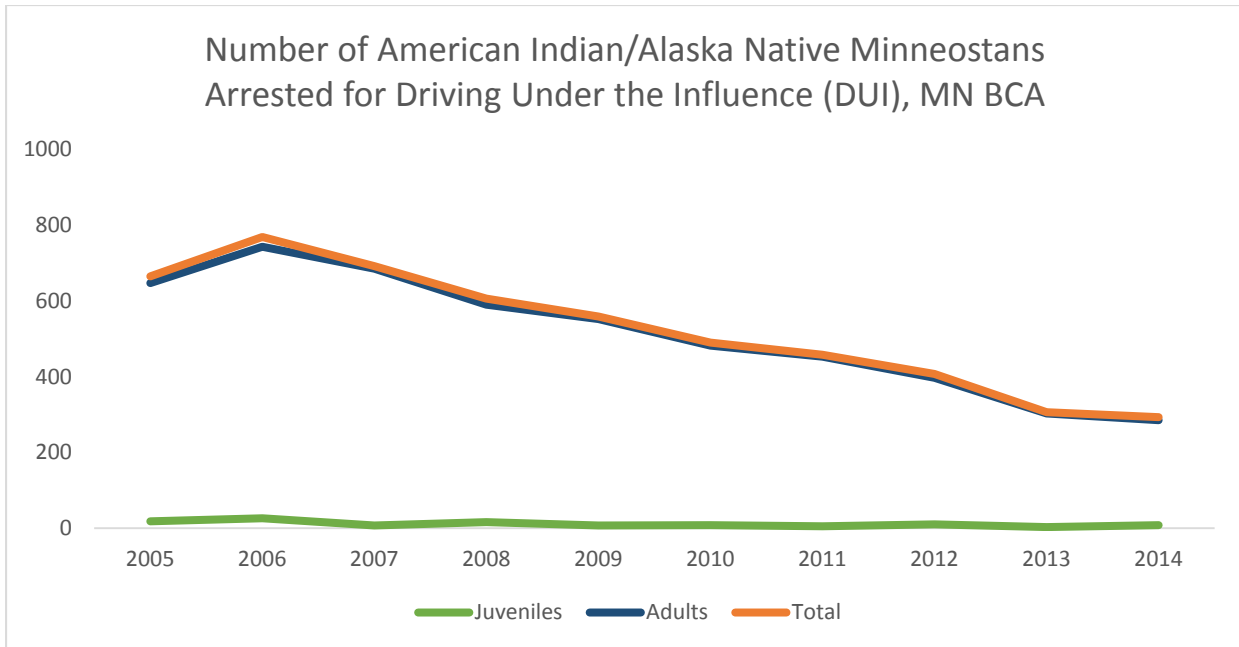
### ADULT USE

Binge drinking is measured by the Minnesota Survey of Adult Substance Use as having five or more drinks (four or more for women) in a row on one occasion within the past 30 days. In 2015, 16.1% of American Indian and Alaska Native adults in Minnesota reported binge drinking (down from 20.3% in 2010) as compared to the state average of 13.9% (down from 18.2% in 2010).

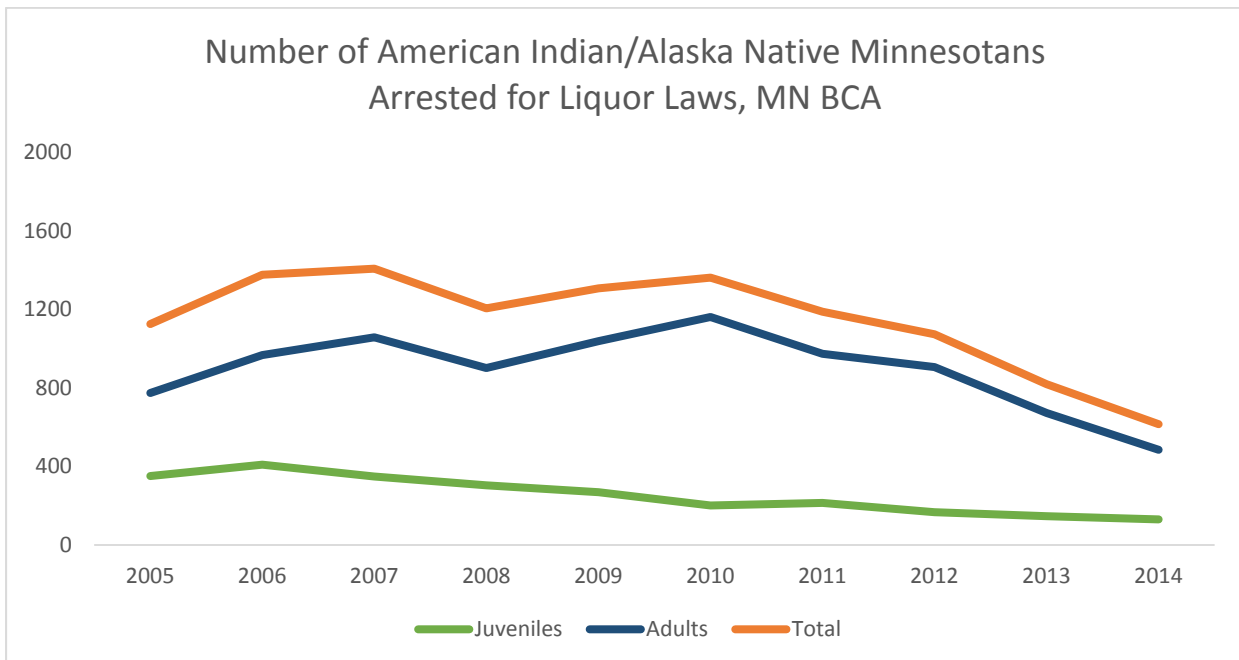
### CONSEQUENCES

The Minnesota Bureau of Criminal Apprehension (BCA) provides data on arrests for driving under the influence (DUI). The number of American Indian and Alaska Native juveniles in Minnesota arrested for DUI has declined slightly over time, and averages only about 11 per year (the number in 2014 was eight). The number of American Indian and Alaska Native adults arrested for DUI has declined steadily, down from 743 in 2006 to 285 in 2014.

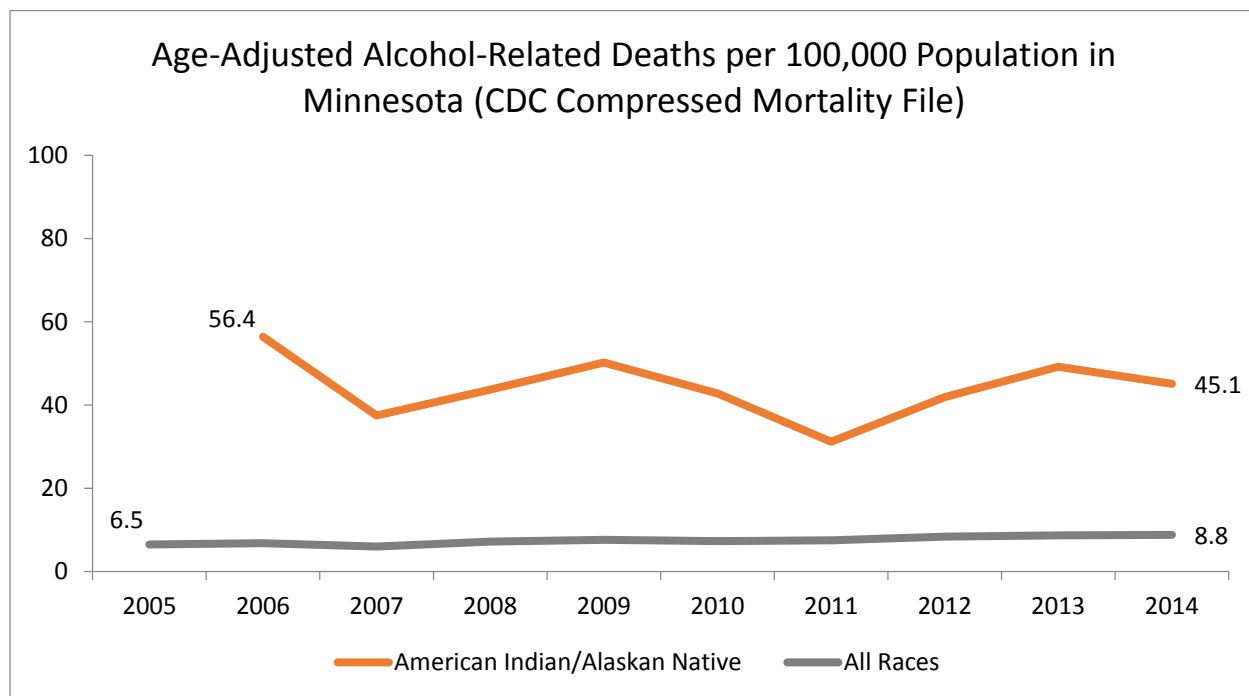




The BCA also provides data on liquor law arrests. This indicator excludes drunkenness, driving under the influence, and federal violations. It includes state or local violations related to furnishing liquor to a minor, using of a vehicle for illegal transportation of liquor, bootlegging, and operating a still. The number of American Indian and Alaska Native juveniles in Minnesota arrested for liquor laws has declined from 409 in 2006 to 130 in 2014. The number of American Indian and Alaska Native adults arrested for liquor laws has declined from 1161 in 2010 to 485 in 2014.



Data from the Centers for Disease Control and Prevention Compressed Mortality File show that age-adjusted alcohol-related deaths among American Indians and Alaska Natives in Minnesota have been consistently higher than the state average. The average age-adjusted alcohol-related death rate per 100,000 population from 2005 to 2014 was 43.1 for American Indians and Alaska Natives and 7.8 for the state as a whole. Alcohol-induced causes of death were determined by the National Center for Health Statistics based on analysis by the Selected Cause of Death groups. Note: the 2005 rate for American Indians and Alaska Natives was deemed unreliable as it was based on 20 or fewer deaths.



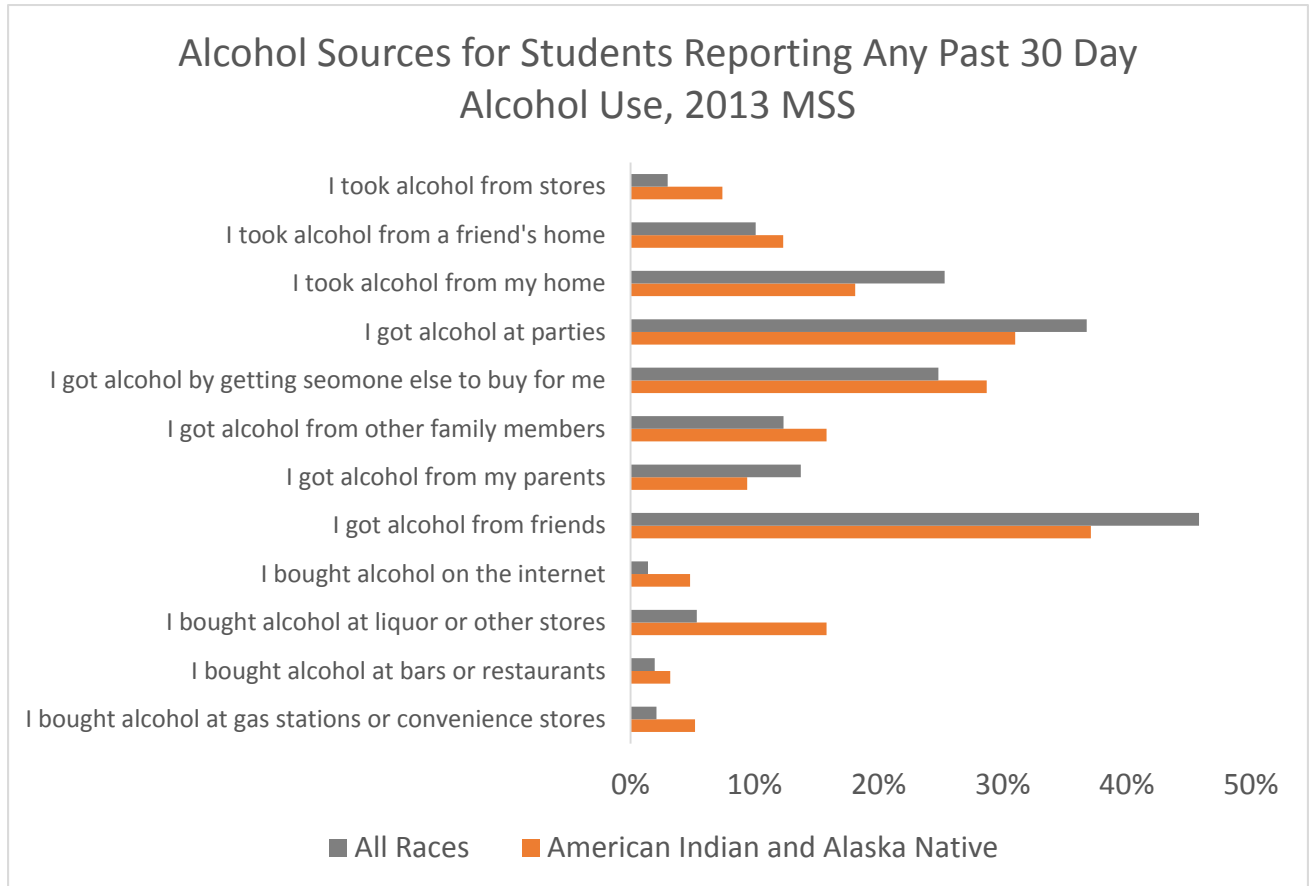
## TREATMENT

In 2014, 34.0% of American Indians and Alaska Natives admitted to Minnesota treatment facilities were admitted for alcohol as their primary substance of abuse (compared to 43.7% for all races) according to the Drug and Alcohol Abuse Normative Evaluation System. The percent of American Indians and Alaska Natives admitted for alcohol, as opposed to other substances, has declined over time as has the state average.

## RISK + PROTECTIVE FACTORS

American Indian and Alaska Native 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were considerably less likely than average to report in 2013 that they believe people put themselves at great or moderate risk of harm by frequently binge drinking: 53.8% vs. 71.8%. American Indian and Alaska Native students were considerably more likely than the Minnesota average to report age of first alcohol use at 13 or younger: 37.9% vs. 21.3%.

American Indian and Alaska Native students were more likely than the Minnesota average to report buying alcohol. They were less likely than average to report getting alcohol from friends, parties, or their parents, but more likely to report taking alcohol from stores or getting someone else to buy it for them.



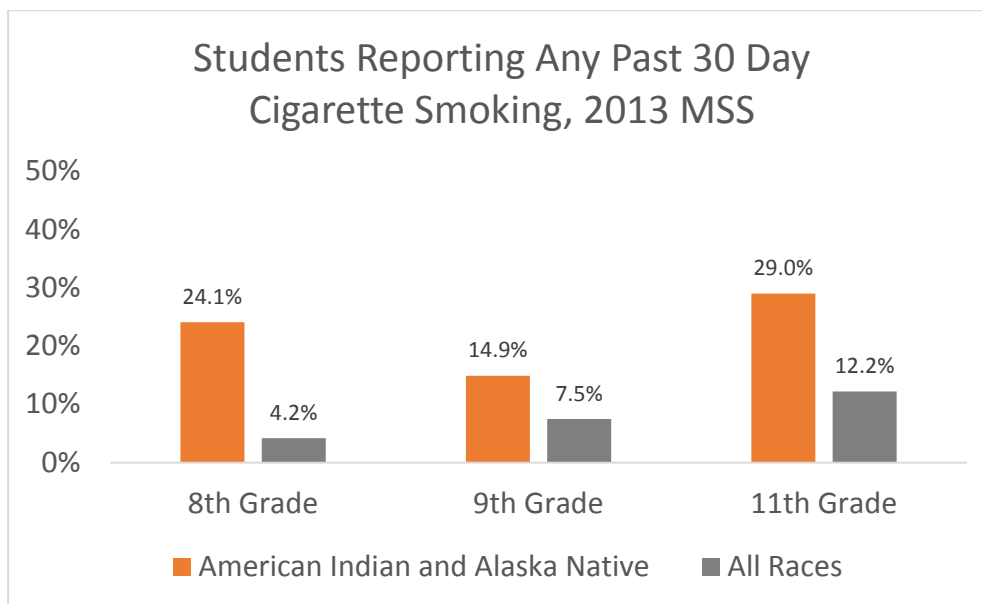
According to the 2015 Minnesota Survey of Adult Substance, American Indian and Alaska Native adults in Minnesota were less likely than average to believe people put themselves at great risk of harm by binge drinking: 62.6% vs. 69.9%. They were somewhat more likely than average though to believe it's very or somewhat likely that someone drinking and driving would be stopped by the police in their community: 78.8% vs. 75.6%.

## TOBACCO

### YOUTH USE

In 2013, 21.0% of American Indian and Alaska Native (non-Hispanic) 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported any past 30 day cigarette smoking as compared to the state average of 7.8%.

American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were much more likely than males to report current cigarette smoking in 2013: 27.2% vs. 16.2%. American Indian and Alaska Native 5<sup>th</sup> graders were more likely than the state average to report any cigarette smoking in the last 30 days: 2.5% vs. 0.6%. American Indian and Alaska Native were considerably more likely than the state average to report current cigarette smoking, regardless of grade level: 8<sup>th</sup> graders were almost 6 times more likely to report current smoking, 9<sup>th</sup> graders were twice as likely, and 11<sup>th</sup> graders were almost 2.5 times more likely.



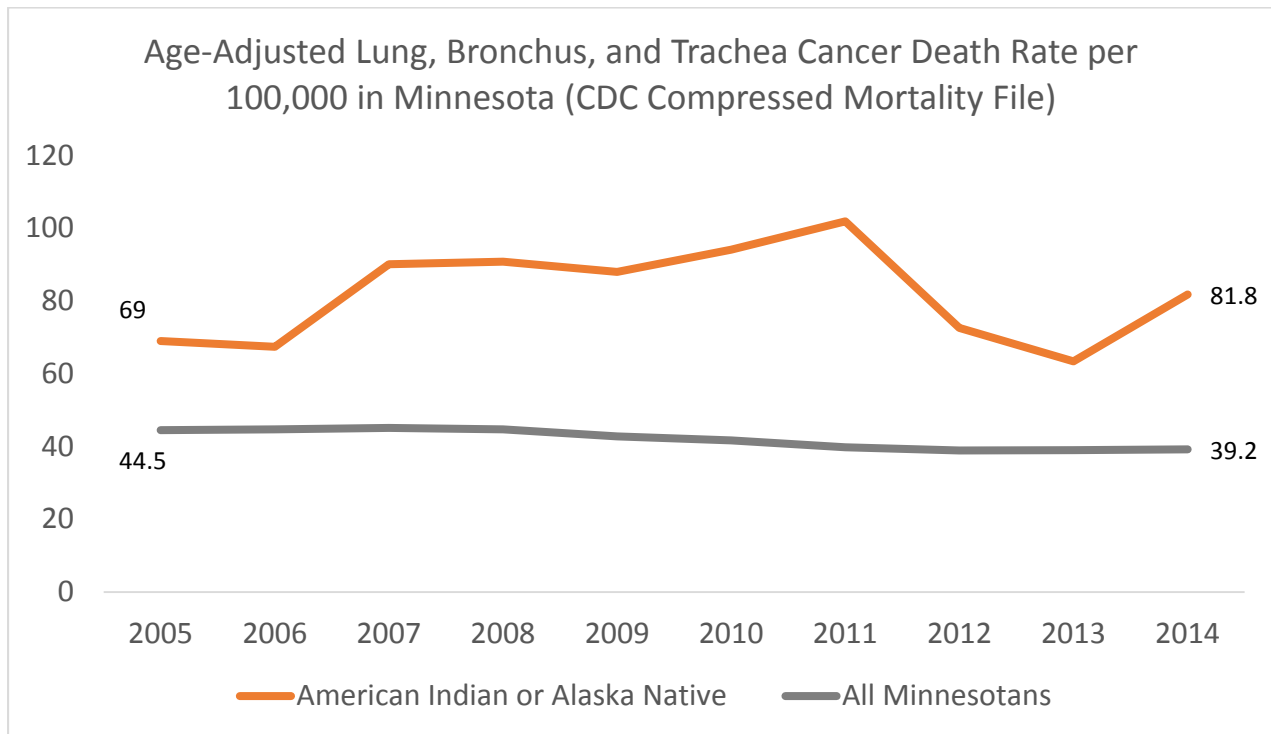
American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were a bit more likely to report current cigarette smoking as compared to those living in the metro: 21.9% vs. 18.5%.

### ADULT USE

According to the 2015 Minnesota Survey of Adult Substance Use, 46.1% of American Indian and Alaska Native adults in Minnesota reported smoking cigarettes on one or more days in the past 30 days (down from 58.9% in 2010) as compared to the state average of 15.7% (down from 19.7% in 2010). American Indian and Alaska Native adults were also considerably more likely than average to report past 30 day use of e-cigarettes: 11.9% vs. 5.3%.

## CONSEQUENCES

Data from the Centers for Disease Control and Prevention Compressed Mortality File show that age-adjusted lung, bronchus, and trachea cancer death rates (ICD codes C33 and C34) for American Indians and Alaska Natives in Minnesota has fluctuated over time, but remained consistently higher than the overall state rate.



## RISK + PROTECTIVE FACTORS

American Indian and Alaska Native 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: 59.5% vs. 79.8%.

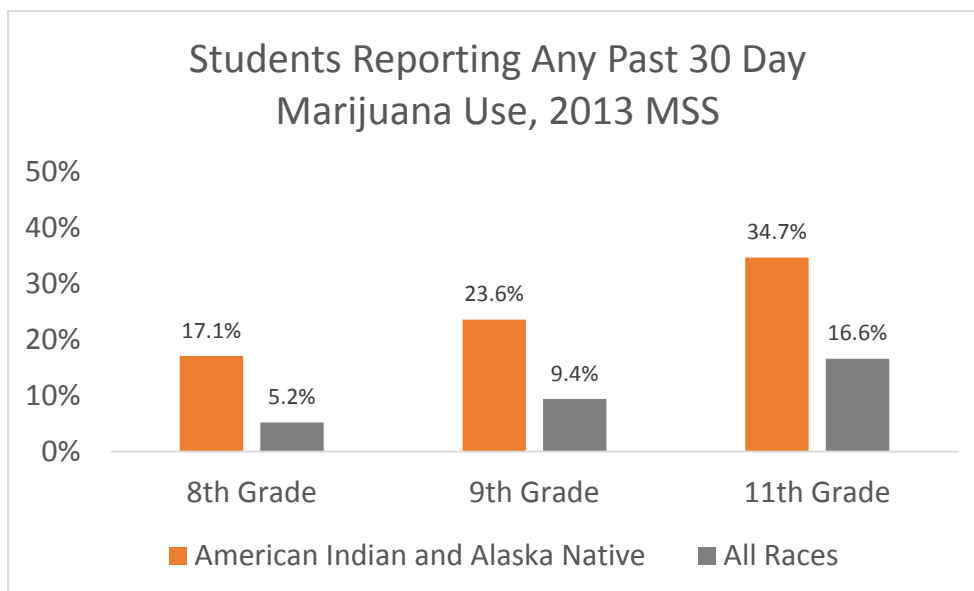
According to the 2015 Minnesota Survey of Adult Substance, American Indian and Alaska Native adults in Minnesota were less likely than average to believe people put themselves at moderate or great risk of harm from smoking cigarettes: 78.8% vs. 85.2%. They were also less likely than average to perceive moderate or great risk of harm from using e-cigarettes: 57.3% vs. 60.9%.

## DRUGS

### YOUTH USE

In 2013, 23.0% of American Indian and Alaska Native (non-Hispanic) 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 10.0%.

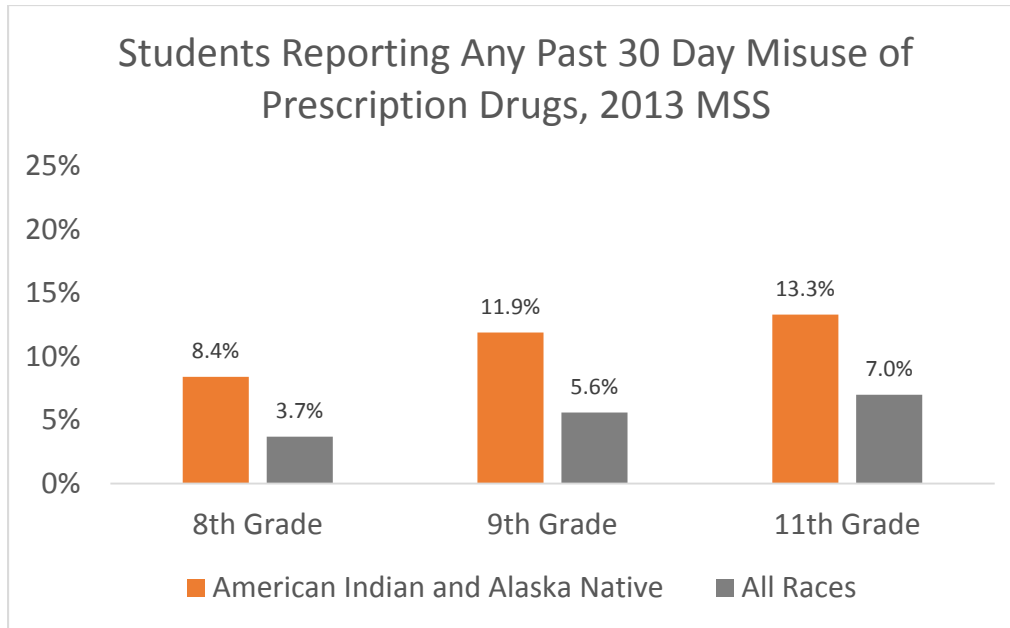
American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were considerably more likely than males to report current marijuana use in 2013: 28.2% vs. 18.8%. American Indian and Alaska Native 5<sup>th</sup> graders were more likely than the state average to report any use of marijuana in the last 12 months: 3.5% vs.1.1%. American Indian and Alaska Native students across all grades were considerably more likely than the state average to report current marijuana use.



American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were a bit less likely to report current marijuana as compared to those living in the metro: 22.1% vs. 25.5%.

In 2013, 10.6% of American Indian and Alaska Native (non-Hispanic) 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 5.3%.

American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were about twice as likely as males to report past-month prescription drug misuse in 2013: 14.6% vs. 7.5%. American Indian and Alaska Native 5<sup>th</sup> graders were more likely than the state average to report any misuse of prescription drugs in the past 12 months: 1.8% vs. 1.0%. American Indian and Alaska Native students across all grades were considerably more likely than the state average to report past month prescription drug misuse.



American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were less likely to report past month prescription drug misuse as compared to those living in the metro: 9.1% vs. 14.9%.

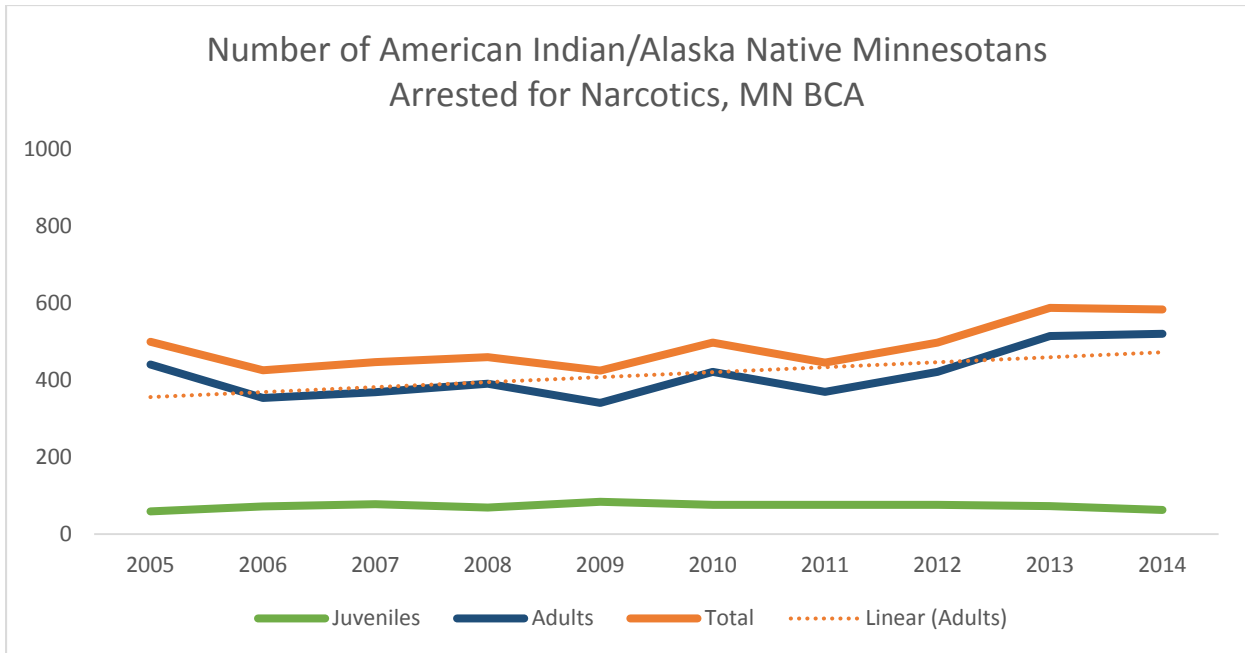
Compared to 2013 past 30 day rates of alcohol use, marijuana use, and overall prescription drug misuse, Minnesota students are much less likely to report past 12 month abuse of illicit, synthetic, and over-the-counter drugs.

#### ADULT USE

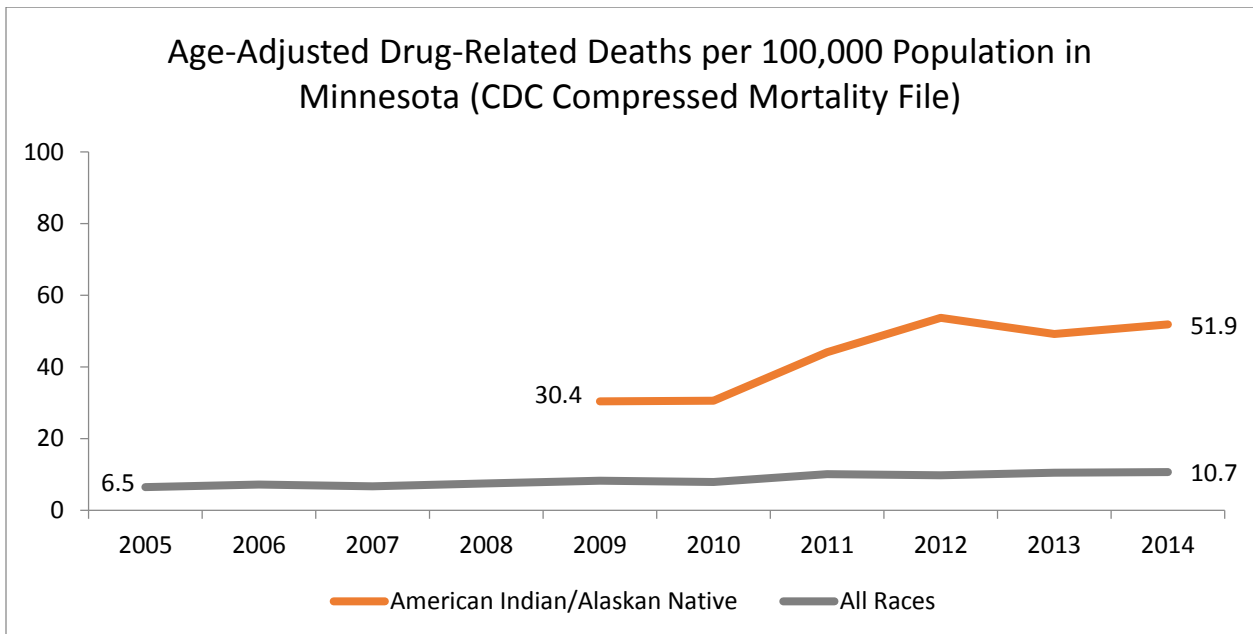
According to the 2015 Minnesota Survey of Adult Substance Use, 9.9% of American Indian and Alaska Native adults in Minnesota reported use of marijuana in the past 30 days (down from 10.5% in 2010) as compared to the state average of 4.8% (up from 4.4% in 2010). In 2010, American Indian and Alaska Native adults in Minnesota were considerably more likely than the state average to report any past 12 month use of illicit drugs other than marijuana: 11.1% vs. 4.6%. While the 2015 survey didn't provide large enough estimates to reliably report illicit drug use by race/ethnicity, the over state-level rate dropped from 4.6% to 1.9%.

#### CONSEQUENCES

The number of American Indian and Alaska Native juveniles in Minnesota arrested for narcotics decreased slightly from 84 arrests in 2009 to 63 arrests in 2014. The number of American Indian and Alaska Native adults in Minnesota arrested for narcotics has increased somewhat, from 341 arrests in 2009 to 521 arrests in 2014.



Data from the Centers for Disease Control and Prevention Compressed Mortality File show that age-adjusted drug-related deaths among American Indians and Alaska Natives in Minnesota have been consistently higher than the state average and have increased sharply since 2009. The average age-adjusted drug-related death rate per 100,000 population from 2005 to 2014 was 37.1 for American Indians and Alaska Natives and 8.5 for the state as a whole. Drug-induced causes of death were determined by the National Center for Health Statistics based on analysis by the Selected Cause of Death groups. Note: the 2005, 2006, and 2008 rates for American Indians and Alaska Natives were deemed unreliable as they were based on 20 or fewer deaths.

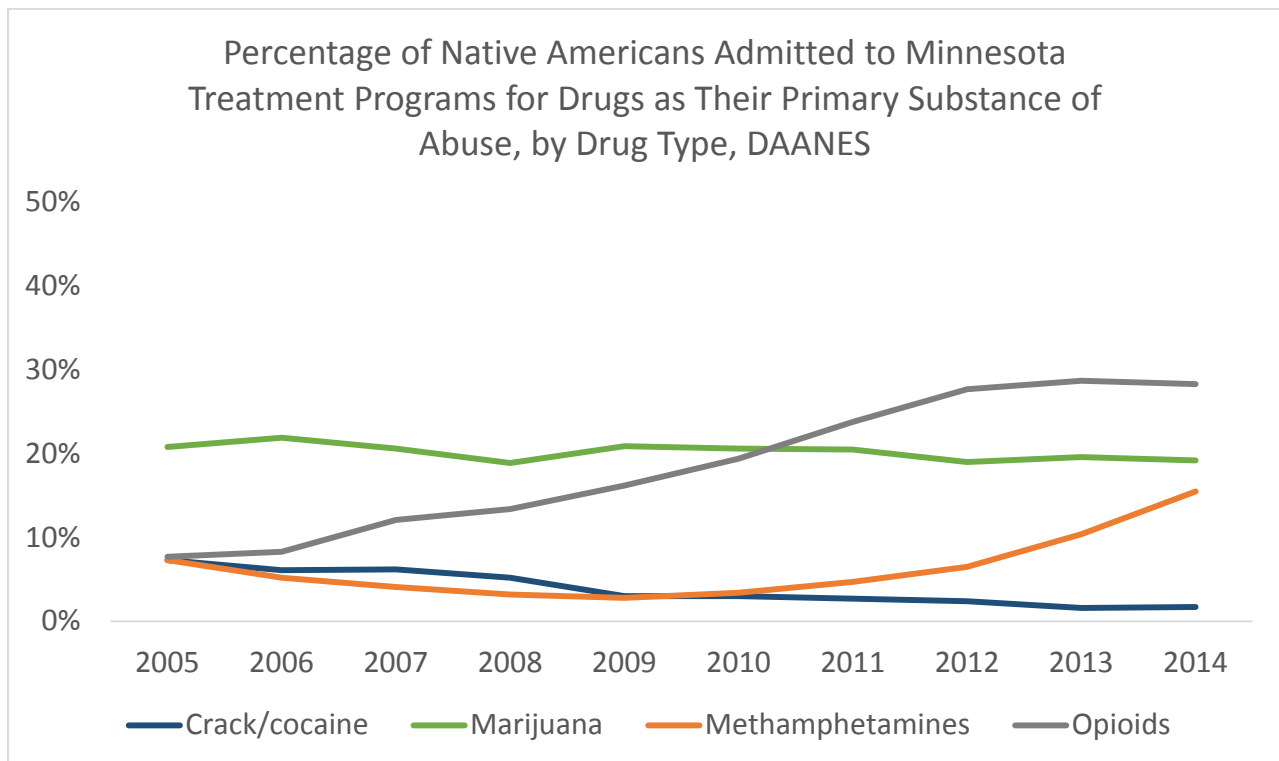




## TREATMENT

According to the Drug and Alcohol Abuse Normative Evaluation System, American Indians and Alaska Natives admitted to Minnesota treatment programs for a primary substance of abuse other than alcohol were most likely to be admitted for opioids. In prior years marijuana had been the second primary substance of abuse after alcohol. Admissions to treatment for opioids has increased significantly among American Indians and Alaska Natives since 2005, as it has among the overall treatment population.

While American Indians and Alaska Natives have been less likely than the state average to be admitted for methamphetamines as their primary substance use abuse, rates of admission are on the rise. In 2014, admissions for American Indians and Alaska Natives were as follows: 19.2% for marijuana, 28.3% for opioids, 15.5% for methamphetamines, and 1.7% for crack/cocaine.



## RISK + PROTECTIVE FACTORS

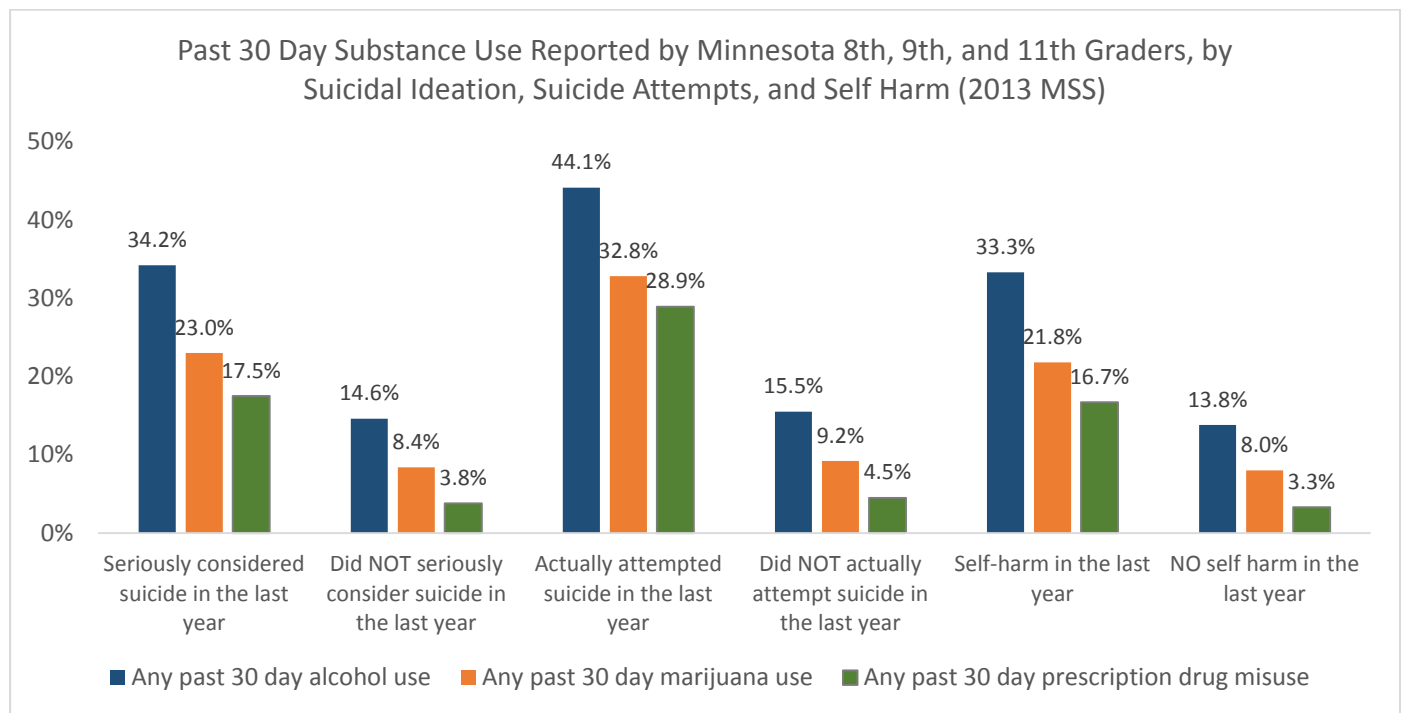
According to the Minnesota Student Survey, American Indian and Alaska Native 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were considerably less likely to report in 2013 that they believe people put themselves at great or moderate risk of harm by smoking marijuana once or twice per week as compared to the state average: 48.0% vs. 66.4%. They were also considerably 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: 61.0% vs. 81.3%.

According to the 2015 Minnesota Survey of Adult Substance, American Indian and Alaska Native adults in Minnesota were considerably less likely than average to believe people put themselves at moderate or great risk of harm from using marijuana: 46.8% vs. 60.2%. They were also considerably less likely than average to perceive moderate or great risk of harm from misusing prescription drugs: 81.8% vs. 93.9%.

## MENTAL HEALTH

We also 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

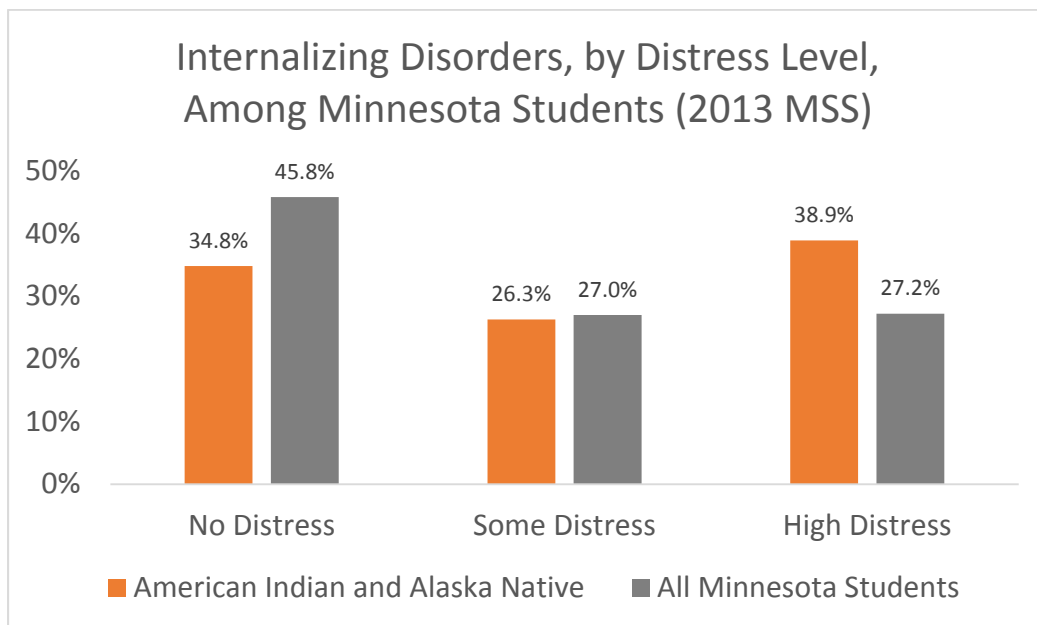
Minnesota Student Survey findings from 2013 show that American Indian and Alaska Native 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were much more likely than the state average to report past-year suicidal ideation: 16.5% and 10.8% respectively. They were also more likely to report a past-year suicide attempt: 6.8% and 3.3% respectively.

## YOUTH MENTAL HEALTH

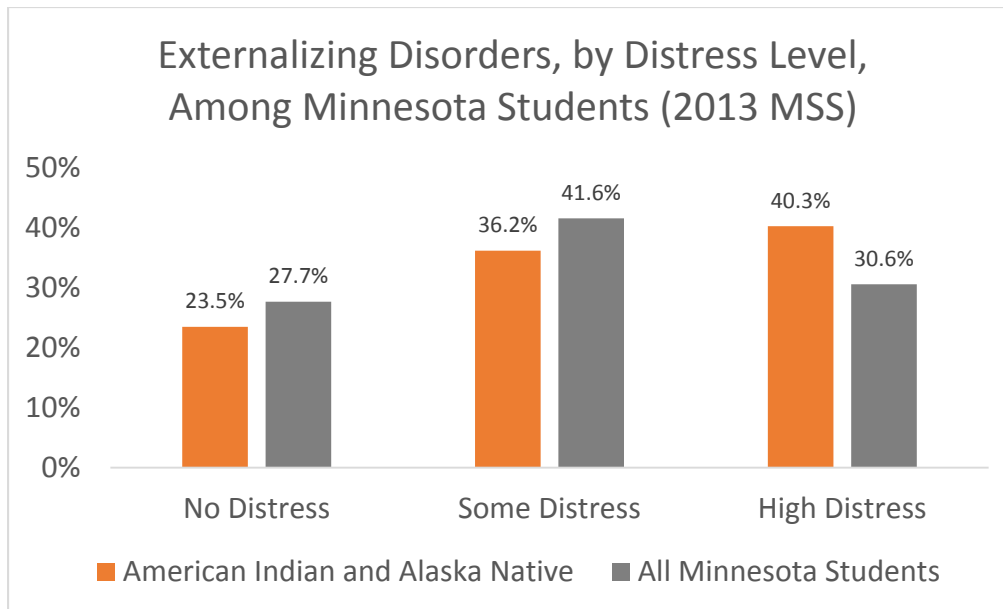
Internalizing disorders are measured on the 2013 Minnesota Student Survey using the Global Appraisal of Individual Needs –Short Screener (GAIN-SS). Youth are asked about “significant” problems in the past 12 months—having problems for two or more weeks, problems that keep coming back, problems that keep 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.



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 indicates some level of distress while problems with three or more indicators a high level of distress.



American Indian and Alaska Native students are considerably more likely than the state average to report high distress levels for both internalizing disorders and externalizing disorders.

#### **ADULT MENTAL HEALTH**

According to the 2015 Minnesota Survey of Adult Substance Use, American Indian and Alaska Native adults in Minnesota were more likely than the state average to report at least moderate depressive symptoms in the past two weeks: 12.5% vs. 7.4%. Depressive symptoms are based on the 8-item Patient Health Questionnaire (PHQ-8). However, rates for American Indian and Alaska Native adults were down from 21.0% in 2010.

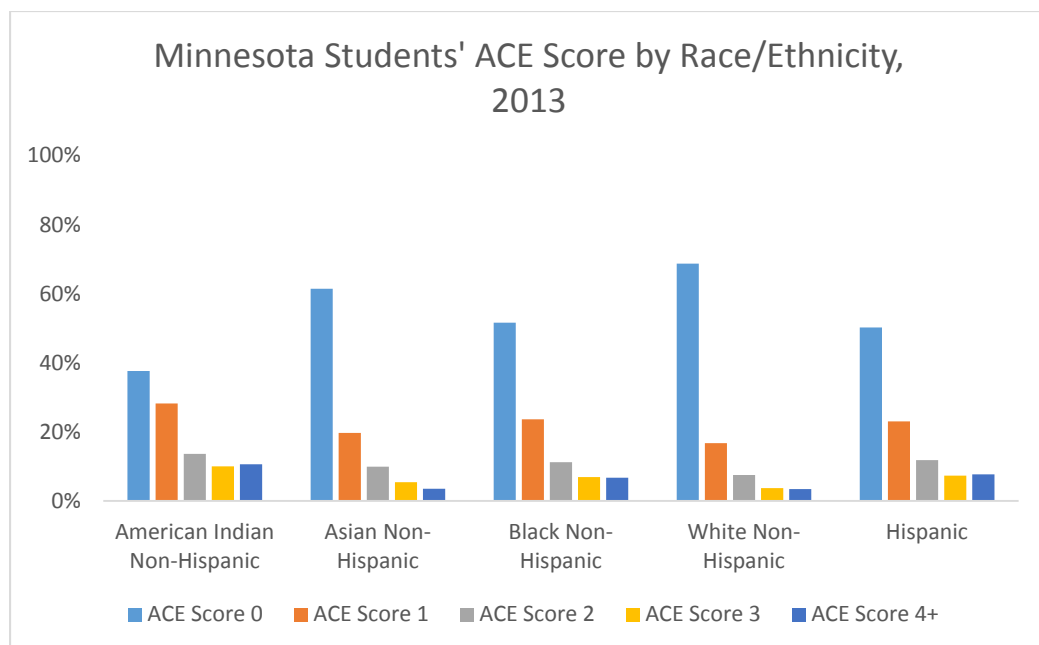
## SHARED RISK + PROTECTIVE FACTORS

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)

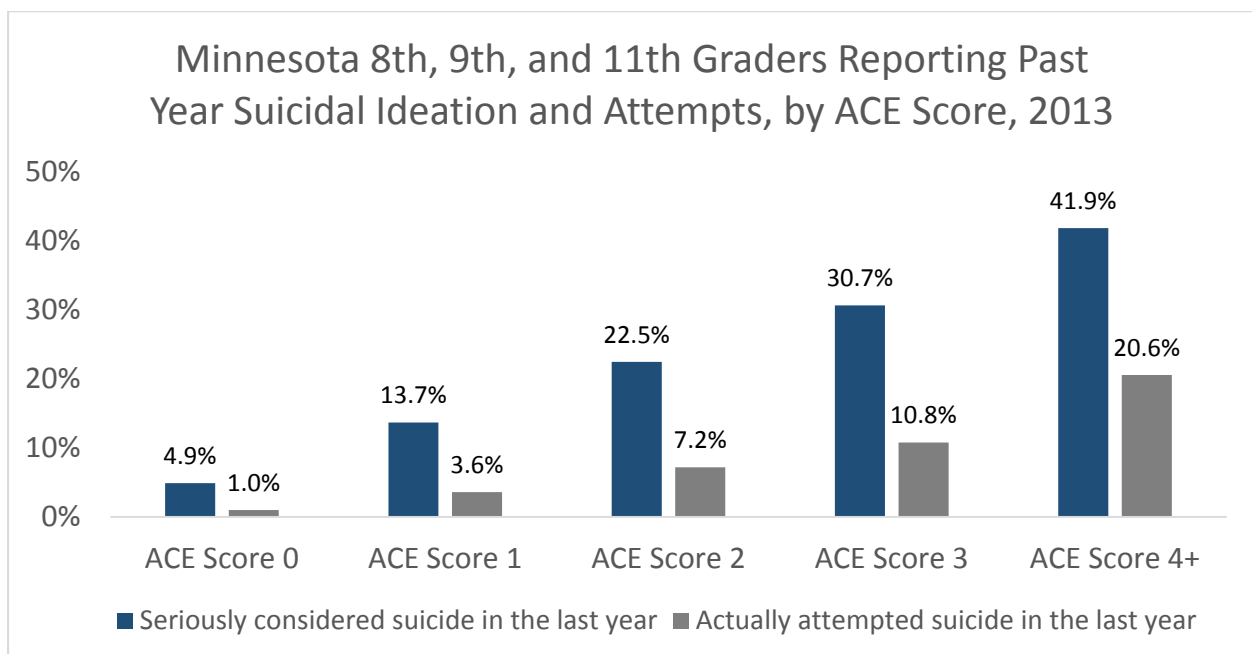
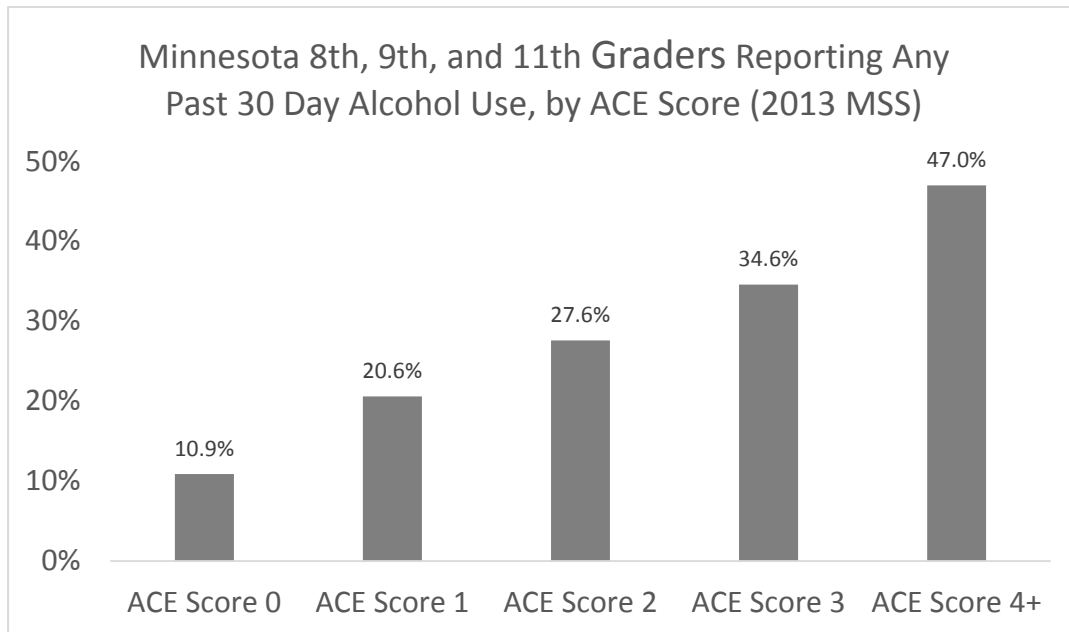
The Adverse Childhood Experiences (ACE) Study was a collaboration between the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente’s Health Appraisal Clinic in San Diego. The study found that childhood experiences of abuse, neglect, and family dysfunction are linked to leading causes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



Among American Indian and Alaska Native students responding to the 2013 Minnesota Student Survey, 37.6% reported an ACE score of zero, 28.2% an ACE score of one, 13.6% an ACE score of two, 10.0% an ACE score of three, and 10.6% an ACE score of four or more.

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

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

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, American Indian and Alaska Native students were about as likely to report being a victim only in the past 30 days (23.1% and 23.7% respectively), slightly more likely to report being a bully only in the past 30 days (7.0% vs. 6.0%), but considerably more likely to report having been both a victim and a bully (28.1% vs. 22.1%).

## 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, American Indian and Alaska Native students are less likely than the state average to report feeling safe at school—87.6% said they “strongly agree” or “agree” they feel safe at school compared to the state average of 92.6%. They are also less likely to report feeling safe going to and from school: 90.9% vs. 95.1%.

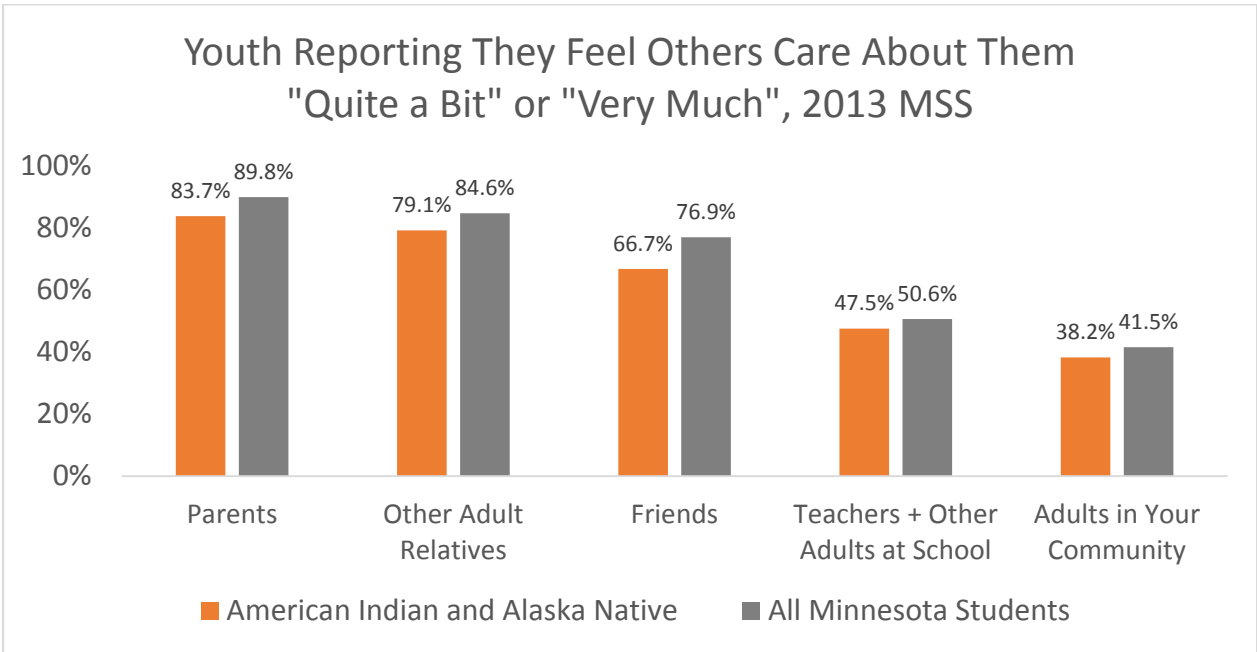


Factors Associated with School Safety, 2013 Minnesota Student Survey		
	Students "strongly agree" or "agree" that they feel safe at school	Students "disagree" or "strongly disagree" that they feel safe at school
Past 30 day alcohol use	15.8%	28.4%
Past 30 day marijuana use	9.4%	18.4%
Past 30 day prescription drug misuse	4.7%	12.5%
Past 12 month significant problems feeling trapped, lonely, sad, blue, depressed, or hopeless about life	20.9%	54.9%
Past 12 month self-harm	13.1%	34.3%
Past 12 month serious suicide consideration	9.4%	29.0%

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, 87.0% of American Indian and Alaska Native 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 all. They are over 4 times less likely to report suicidal ideation. In 2013, American Indian and Alaska Native students were a bit 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 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/>

### MINNESOTA SURVEY ON ADULT SUBSTANCE USE (MNSASU)

The MNSASU is a statewide telephone survey conducted by DHS—the last survey was administered in 2014/2015. The primary objective of this project is to obtain current estimates of the number of adults in the general population in Minnesota who are abusing or dependent on alcohol or other drugs and are in need of treatment. The population for this survey included Minnesota residents 18 years of age or older and non-institutionalized.

[http://www.dhs.state.mn.us/main/idcplg?IdcService=GET\\_DYNAMIC\\_CONVERSION&dID=158864](http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&dID=158864)

### UNIFORM CRIME REPORTS (UCR)

The Minnesota Bureau of Criminal Apprehension collects activity information from law enforcement agencies throughout the State of Minnesota. Uniform Crime Reports measure the amount of criminal activity within the State as collected and prepared from data submitted by individual law enforcement agencies. The offense categories presented in the Profile are Part II offenses: liquor laws and narcotics arrests. <http://www.dps.state.mn.us/bca/CJIS/Documents>

### DRUG AND ALCOHOL ABUSE NORMTATIVE EVALUATION SYSTEM (DAANES)

DAANES includes data on all private- and public-pay treatment facility admissions and discharges. Data were obtained by request from the Performance Measurement and Quality Improvement (PMQI) Division.

### CDC COMPRESSED MORTALTY FILE

The Centers for Disease Control and Prevention Compressed Mortality database contains mortality and population counts for all U.S. counties for the years 1979 to 2010. Counts and rates of death can be obtained by underlying cause of death, state, county, age, race, sex, and year. Beginning in 1999, cause of death is specified with the International Classification of Diseases 10th Revision (ICD 10) codes. <http://wonder.cdc.gov/mortSQL.html>