



# **Epidemiological Profile of Substance Use + Related Factors in Minnesota's Hispanic + Latino Communities**

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

April 2017

## **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>11</b>
<b>DRUGS</b>	<b>13</b>
<b>MENTAL HEALTH</b>	<b>17</b>
<b>SHARED RISK + PROTECTIVE FACTORS</b>	<b>19</b>
<b>DATA SOURCES</b>	<b>23</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, 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 among Hispanics/Latinos 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 Hispanic/Latino 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. Ethnicity selections are not always available on surveys, nor is country of origin frequently captured for Hispanics and Latinos. Race/ethnicity 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. County and city level data on Hispanics/Latinos 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, over 5% of Minnesotans identify as Hispanic/Latino alone (alone or in combination with other ethnicities). Hispanic/Latino communities in Minnesota are considerably younger than the state average, with about four out of ten being under the age of 18.

2015	Hispanics/Latinos in Minnesota		All Minnesotans	
	Number	Percent	Number	Percent
Under 18 years	120,015	39.9%	1,360,354	24.2%
18 to 24 years	35,949	11.9%	525,404	9.3%
25 to 44 years	93,077	30.9%	1,450,416	25.8%
45 to 64 years	42,569	14.1%	1,485,654	26.4%
65 years + over	9,359	3.1%	809,397	14.4%
Total	300,969		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

Between 2010 and 2015, the third fastest growing racial group in Minnesota was Hispanic population. The population grew by 13%, adding about 32,000 people. However, Mexico is the one country most foreign-born Minnesotans consider their country of origin. According to the Minnesota State Demographic Center's Young Adults in Minnesota: A Demographic & Economic Profile, 6 of every 100 young adults (ages 18-34) are Hispanic.

[https://mn.gov/admin/assets/young-adults-in-mn-profile-popnotes-june2015\\_tcm36-219658.pdf](https://mn.gov/admin/assets/young-adults-in-mn-profile-popnotes-june2015_tcm36-219658.pdf)

The Minnesota Student Survey provides data for a number of indicators in this profile. In 2016, the overall survey sample identifying as Hispanic was 15,942.

Number of 2016 Minnesota Student Survey Respondents Identifying as <b>Hispanic</b>				
	Male	Female	No answer	Total
5 <sup>th</sup> Grade	1,945	1,944	13	3,902
8 <sup>th</sup> Grade	2,408	2,417	13	4,838
9 <sup>th</sup> Grade	2,143	2,060	10	4,213
11 <sup>th</sup> Grade	1,500	1,482	7	2,989
Total	7,996	7,903	43	15,942

## KEY FINDINGS

### POSITIVE FINDINGS

- Hispanic/Latino adults were less likely than the state average to report past 30 day binge drinking, cigarette smoking, and marijuana use. Further, rates of use dropped among Hispanic/Latino adults since 2010 (2015 MNSASU)
- Hispanic/Latino adults were more likely than the state average to perceive great or moderate risk of harm from binge drinking, smoking cigarettes or e-cigarettes, or using marijuana (2015 MNSASU)
- The number of Hispanic/Latino Minnesotans arrests for liquor laws has been declining over time (MN BCA)
- They are less likely than average to report past two week depressive symptoms, and rates dropped from 10% in 2010 to 6% in 2015 (2015 MNSASU)

### AREAS FOR IMPROVEMENT

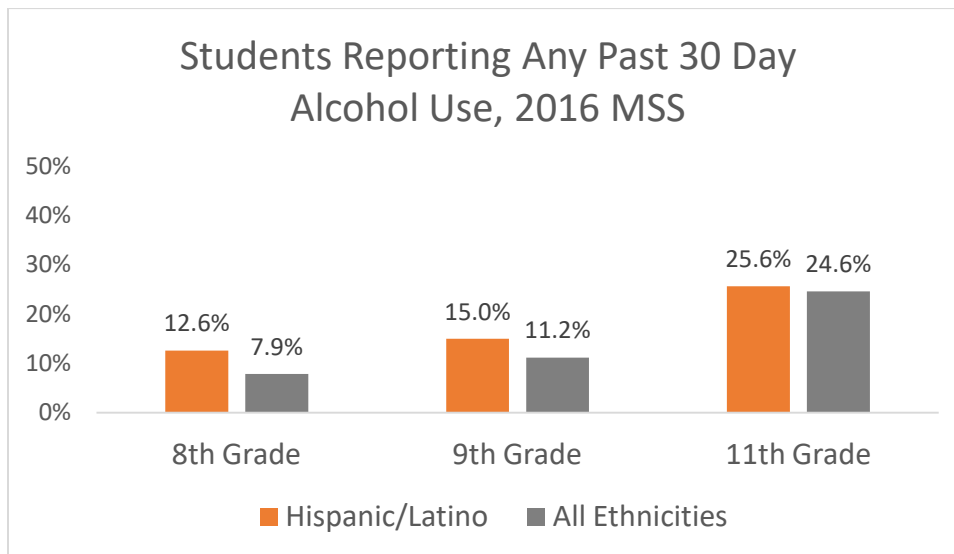
- Hispanic/Latino students were less likely than the state average to perceive great or moderate risk of harm from using alcohol, cigarettes, marijuana, or prescription drugs (2016 MSS)
- Hispanic/Latino students were more likely than the state average to report past 30 day alcohol use, 19% vs. 15%, tobacco/nicotine use, 16% vs. 13%, marijuana use, 12% vs. 8%, and prescription drug misuse: 7% vs. 5% (2016 MSS)
- The average age-adjusted drug-related death rate from 2011 to 2015 among Hispanics/Latinos in Minnesota was 4.4 per 100,000 population. In comparison, the statewide average was 9.9 per 100,000. (CDC)
- Admissions to treatment for methamphetamines and opioids as the primary substance of abuse has risen among Hispanic/Latino Minnesotans (DAANES)
- Hispanic/Latino students were more likely than the state average to report past year suicidal ideation, 15% vs. 12%, and past year suicide attempts: 6% vs. 4% (2016 MSS)
- Hispanic/Latino students were more likely than the state average to report one or more adverse childhood experiences (2016 MSS)
- Hispanic/Latino 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 (2016 MSS)
- Hispanic/Latino 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” (2016 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 2016, 16.7% of Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported current alcohol use (down from 21.1% in 2013) as compared to the state average of 13.9% (down from 16.8% in 2013).

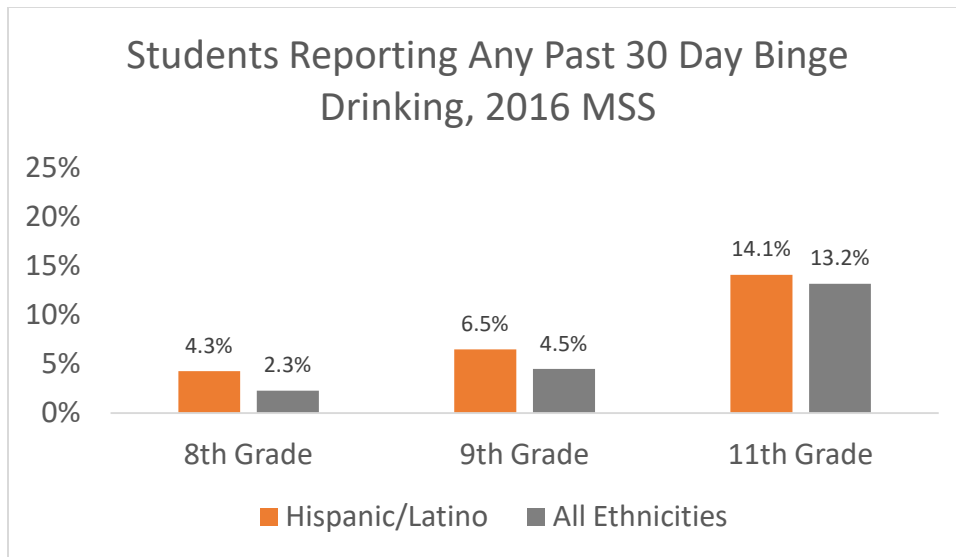
Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were more likely than males to report current alcohol use in 2016: 18.5% vs. 14.8%. Hispanic/Latino 5<sup>th</sup> graders were a bit more likely than the state average to report any use of alcohol in the last 12 months: 4.3% vs. 3.4%. Hispanic/Latino students were more likely than the state average to report current alcohol use regardless of grade level (see graph below).



Hispanic/Latino 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: 16.9% vs. 16.5%.

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, 7.5% of Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reported binge drinking (down from 10.6% in 2013) as compared to the state average of 6.2% (down from 8.2% in 2013).

Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were slightly more likely to report binge drinking in 2016 as compared to males: 7.8% vs. 7.2%. Hispanic/Latino students were a bit more likely than the state average to report binge drinking, regardless of grade level (see graph at top of next page).



Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students living outside the seven-county metro area were slightly more likely to report binge drinking as compared to those living in the metro: 8.0% vs. 7.1%.

### ADULT USE

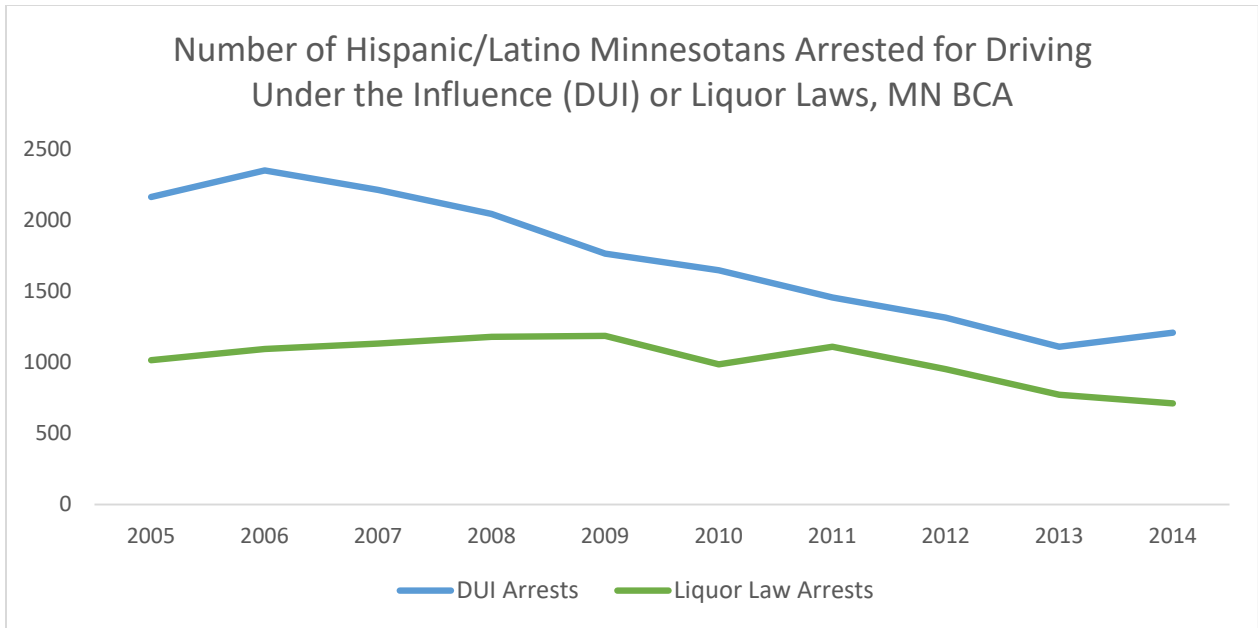
Binge drinking is measured by the Minnesota Survey of Adult Substance Use as having five or more drinks (four or more for women) in a row on one occasion within the past 30 days. In 2015, 11.6% of Hispanic/Latino adults in Minnesota reported binge drinking (down from 14.9% in 2010) as compared to the state average of 13.9% (down from 18.2% in 2010).

### CONSEQUENCES

Data from the Centers for Disease Control and Prevention Compressed Mortality File show that average 2006-2015 age-adjusted alcohol-related deaths among Hispanics in Minnesota has been lower than average: 7.0 vs. 7.9 per 100,000 population. Alcohol-induced causes of death were determined by the National Center for Health Statistics based on analysis by the Selected Cause of Death groups.

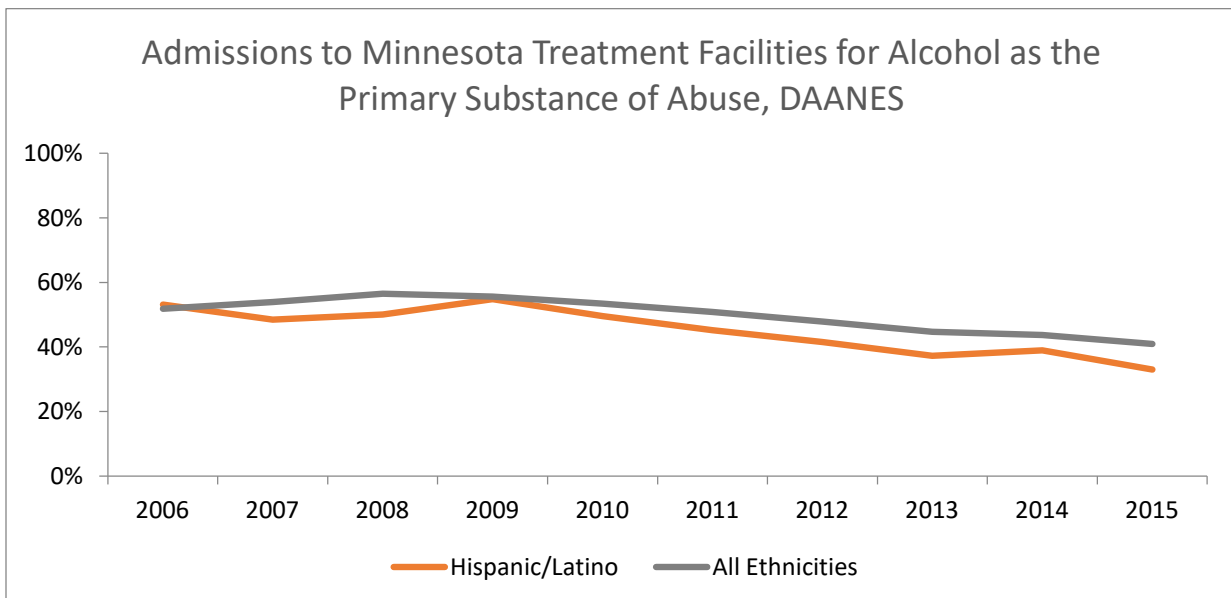
The Minnesota Bureau of Criminal Apprehension (BCA) provides data on arrests for driving under the influence (DUI). The number of Hispanic/Latino Minnesotans arrested for DUI dropped steadily and substantially from 2,352 in 2006 to 1,111 in 2013, then ticked up somewhat to 1,209 in 2014 (breakdowns for juveniles vs. adults are not available). 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 Hispanic/Latino Minnesotans arrested for liquor laws declined in recent years, from 1,111 in 2011 to 711 in 2014 (see graph at the top of the next page).





## TREATMENT

In 2015, 33.0% of Hispanics/Latinos admitted to Minnesota treatment facilities were admitted for alcohol as their primary substance of abuse (compared to 40.9% for all ethnicities combined) according to the Drug and Alcohol Abuse Normative Evaluation System. The percent of Hispanics/Latinos admitted for alcohol, as opposed to other substances, has declined over time as has the state average.

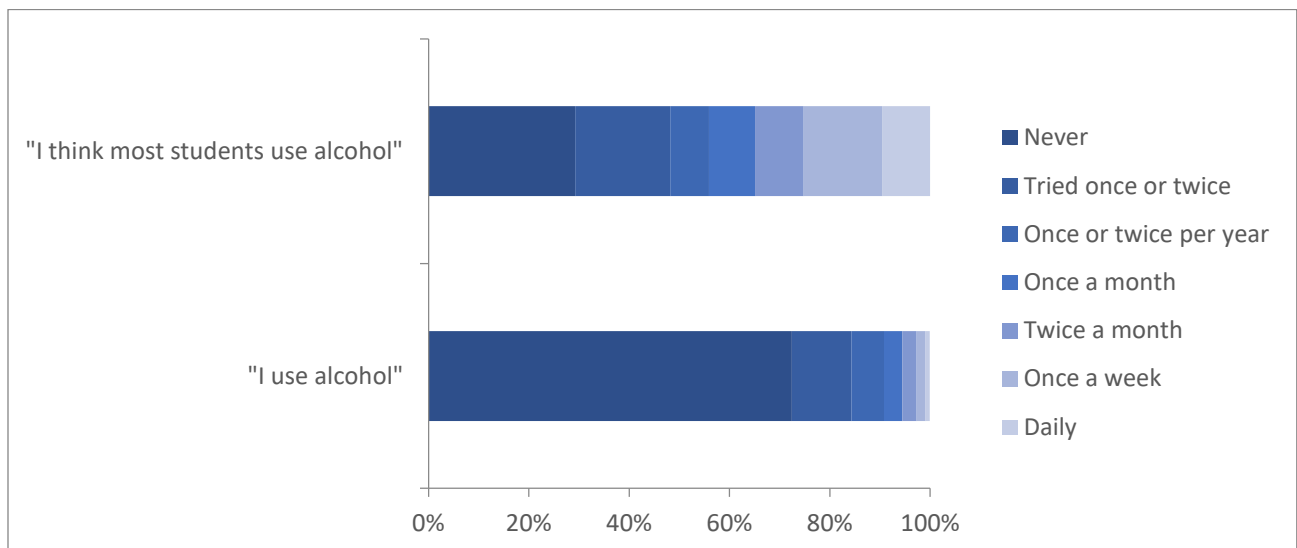


## RISK + PROTECTIVE FACTORS

Hispanic/Latino 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely to report in 2016 that they believe people put themselves at great or moderate risk of harm by frequently binge drinking: 64.2% vs. 71.2%. Hispanic/Latino 9<sup>th</sup> and 11<sup>th</sup> grade students were considerably more likely than the Minnesota average to report age of first alcohol use at 13 or younger: 24.5% vs. 16.9%.

In 2016, Hispanic/Latino 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: 86.8% vs. 90.5%. Similarly, they were less likely than average to think their friends would feel it's wrong or very wrong: 75.6% 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 Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students, 29.2% think most students in their school have never had alcohol. However, 72.4% say they themselves have never had alcohol (see graph below).

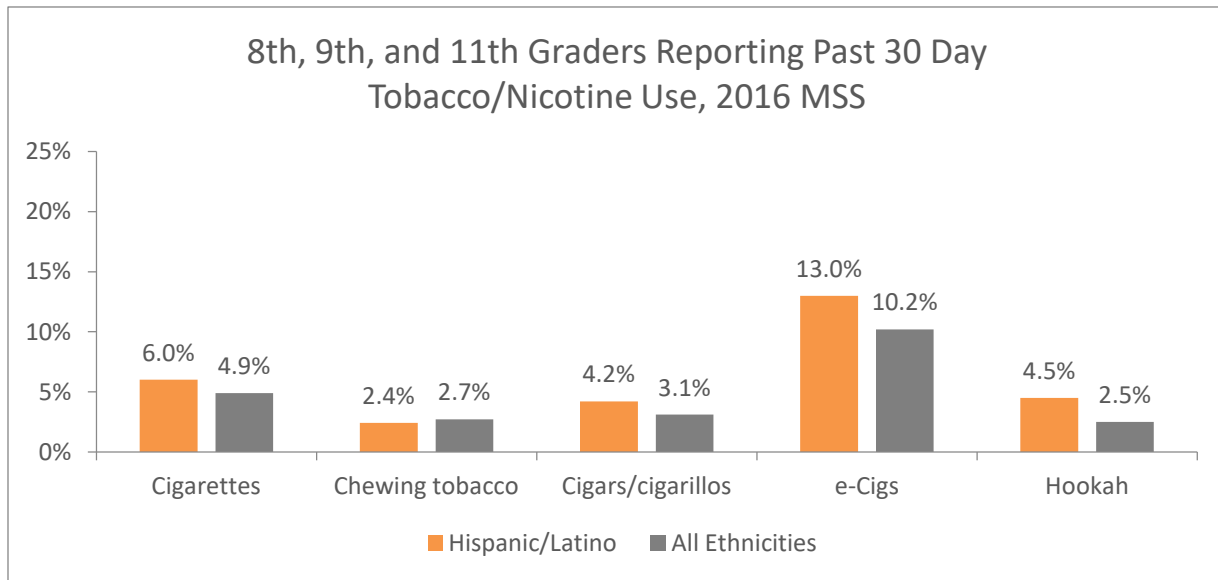


According to the 2015 Minnesota Survey of Adult Substance, Hispanic/Latino adults in Minnesota were more likely than average to believe people put themselves at great risk of harm by binge drinking: 79.7% vs. 69.9%. They were also more likely than average to believe it's very or somewhat likely that someone drinking and driving would be stopped by the police in their community: 77.8% vs. 75.6%.

## TOBACCO

### YOUTH USE

In 2016, 15.9% of Hispanic/Latino 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, Hispanic/Latino students were most likely to report use of e-cigarettes followed by standard commercial cigarettes (see graph below).



Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade females were about as likely as males to report any past month tobacco/nicotine use in 2016: 16.1% vs. 15.6%. Among Hispanic/Latino students, past 30 day tobacco/nicotine use was reported by 11.6% of 8th graders, 16.2% of 9th graders, and 22.4% of 11th graders.

Hispanic/Latino 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 any past 30 day tobacco/nicotine use as those living in the metro: 16.3% vs. 15.5%.

### ADULT USE

According to the 2015 Minnesota Survey of Adult Substance Use, 11.0% of Hispanic/Latino adults in Minnesota reported smoking cigarettes on one or more days in the past 30 days (down from 18.3% in 2010) as compared to the state average of 15.7% (down from 19.7% in 2010). Hispanic/Latino adults were slightly less likely than average to report past 30 day use of e-cigarettes: 4.1% 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 Minnesota declined somewhat from 45.1 per 100,000 in 2007 to 36.8 per 100,000 in 2015. While the age-adjusted rates for Hispanics/Latinos in Minnesota have been unreliable due to small numbers, the number of lung, bronchus, and trachea cancer death has remained relatively stable over time even as the population has grown (see table). Nationally, Hispanic/Latino death rates for lung and bronchus cancer are lower than for Whites, Blacks, American Indians, or Asian/Pacific Islanders.

	2006	2007	2008	2010	2013	2014	2015
Lung, bronchus and trachea cancer deaths	15	14	11	11	13	13	14
Population	212,924	223,561	234,029	250,258	271,317	277,719	284,214

Note: data for 2009, 2011 and 2012 were suppressed due to small numbers.

## RISK + PROTECTIVE FACTORS

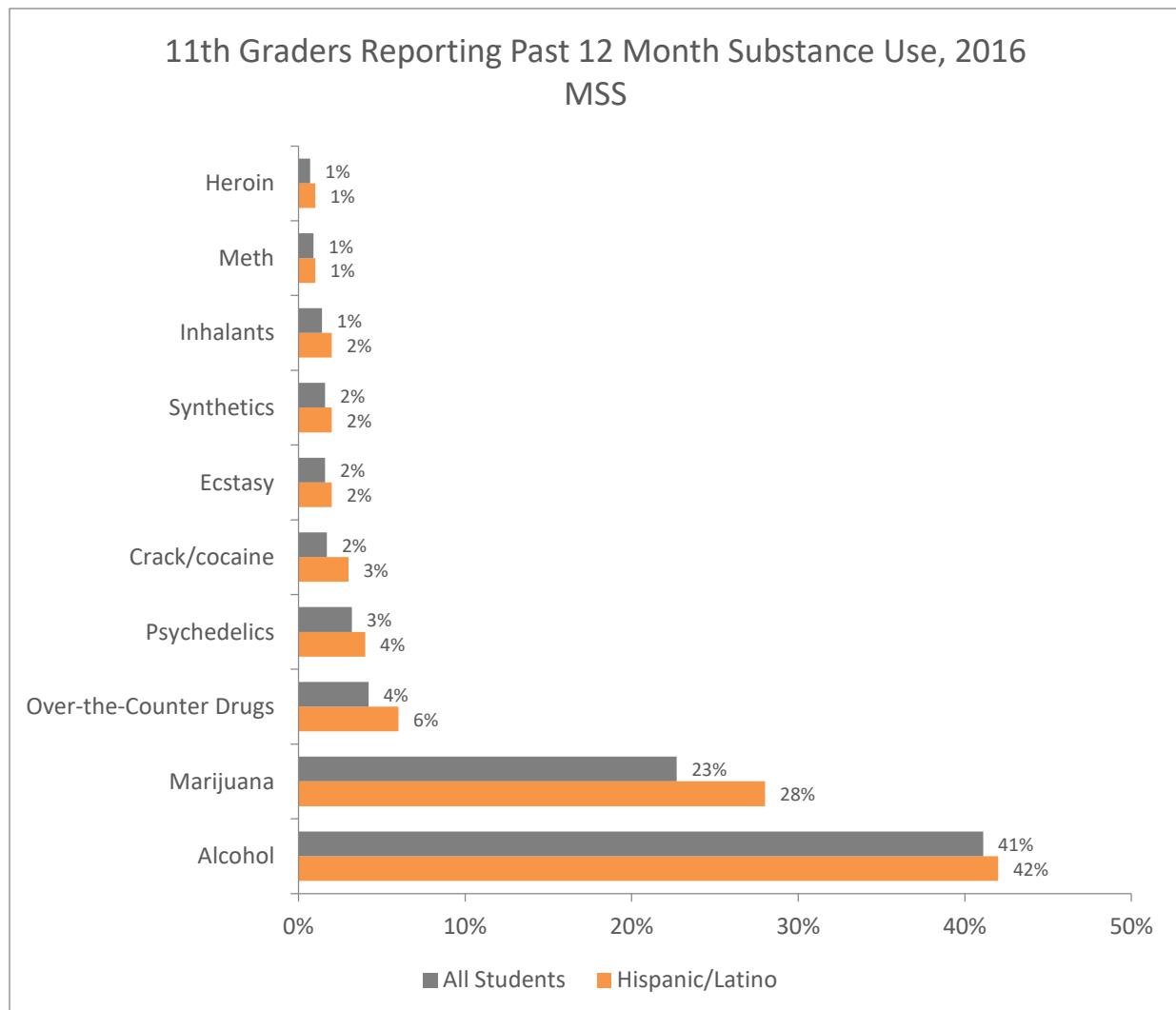
Hispanic/Latino 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were less likely than the state average to report in 2016 that they believe people put themselves at great or moderate risk of harm by smoking one or more packs of cigarettes per day: 68.6% vs. 78.1%.

According to the 2015 Minnesota Survey of Adult Substance, Hispanic/Latino adults in Minnesota were slightly more likely than average to believe people put themselves at moderate or great risk of harm from smoking cigarettes: 86.4% vs. 85.2%. They were considerably more likely than average to perceive moderate or great risk of harm from using e-cigarettes: 73.7% vs. 60.9%.

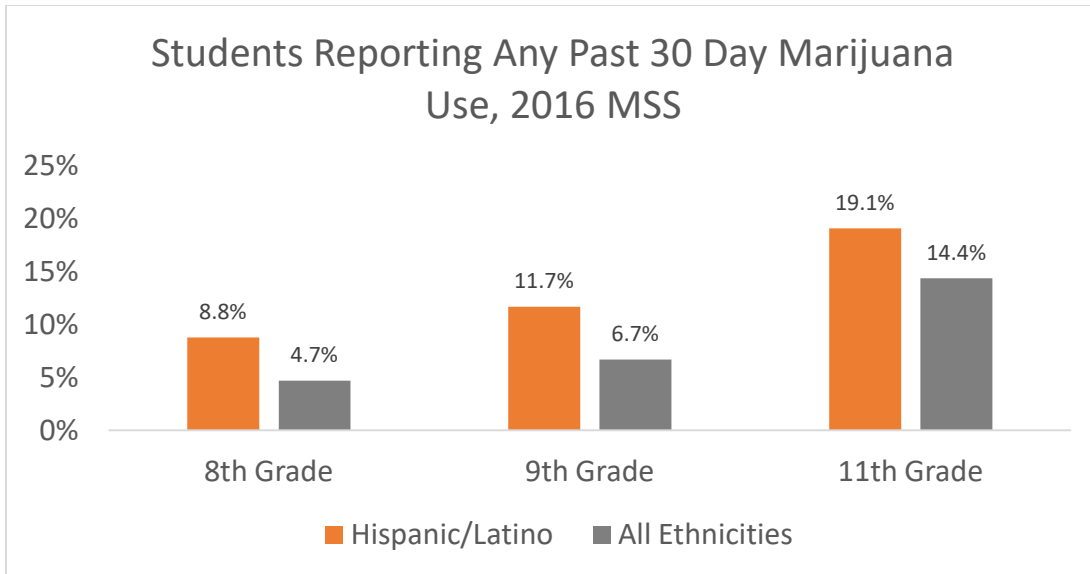
## DRUGS

### YOUTH USE

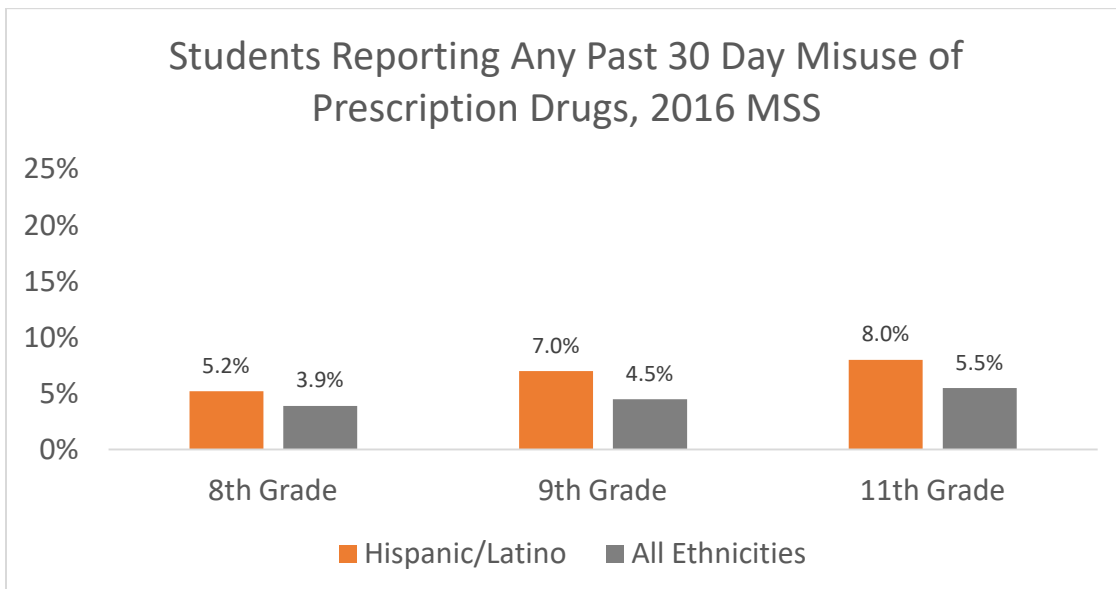
In 2016, Hispanic/Latino 11<sup>th</sup> graders were a bit more likely than average to report past year alcohol use, marijuana use, and use of over-the-counter drugs, psychedelics and crack/cocaine (see graph below). Chart labels are rounded to the nearest whole percent, but the bars show differences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



In 2016, 12.2% of Hispanic/Latino 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%. Hispanic/Latino 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 2016: 11.8% vs. 12.7%. Hispanic/Latino students across all grades were more likely than the state average to report current marijuana use (see graph on next page). Hispanic/Latino 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 marijuana as those living in the metro: 12.7% vs. 13.1%.



In 2016, 6.5% of Hispanic/Latino 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, Hispanic/Latino students were more likely than average to report past month prescription drug misuse (see graph below).



Hispanic/Latino 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: 4.5% vs. 3.2%
- ADD/ADHD drugs: 3.5% vs. 2.7%
- Tranquilizers: 3.1% vs. 1.8%
- Stimulants: 1.5% vs. 0.9%

## ADULT USE

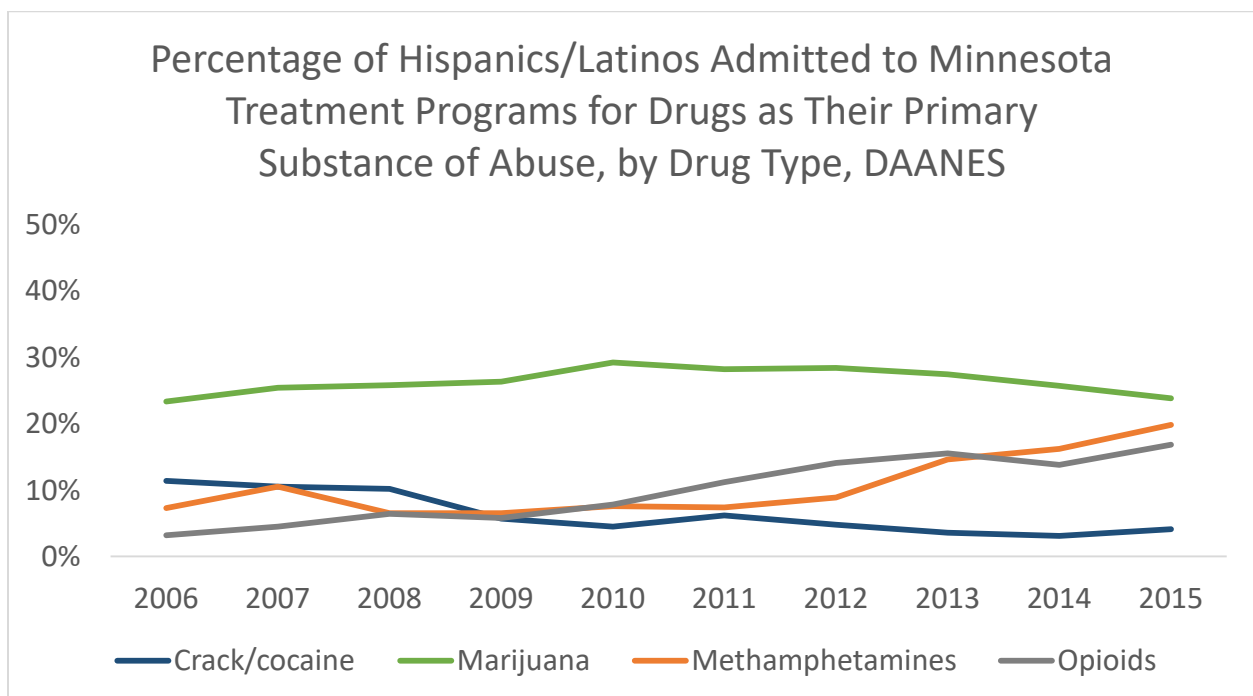
According to the 2015 Minnesota Survey of Adult Substance Use, 3.1% of Hispanic/Latino adults in Minnesota reported use of marijuana in the past 30 days (down from 5.7% in 2010) as compared to the state average of 4.8% (up from 4.4% in 2010). In 2010, Hispanic/Latino adults in Minnesota were more likely than the state average to report any past 12 month use of illicit drugs other than marijuana: 7.8% 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

Data from the Centers for Disease Control and Prevention Compressed Mortality File show that the average age-adjusted drug-related death rate (ICD -10 codes X40-44, X60-64, X85 and Y10-14) from 2011 to 2015 among Hispanics/Latinos in Minnesota was 4.4 per 100,000 population. In comparison, the statewide average was 9.9 per 100,000.

## TREATMENT

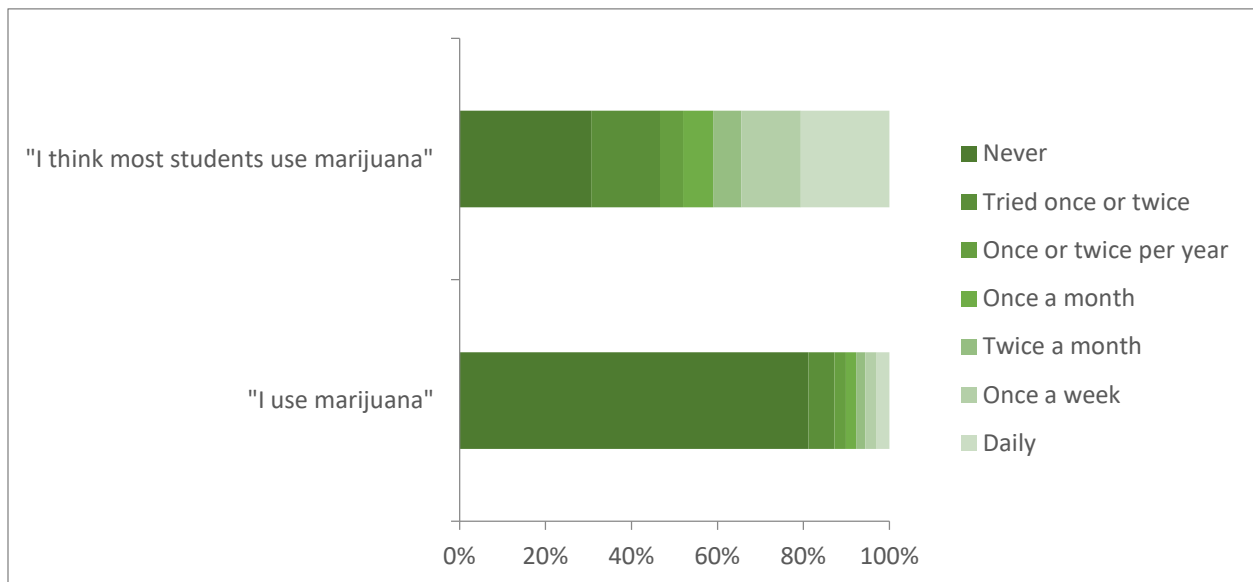
According to the Drug and Alcohol Abuse Normative Evaluation System, Hispanics/Latinos admitted to Minnesota treatment programs for a primary substance of abuse other than alcohol were most likely to be admitted for marijuana. Admissions to treatment for opioids and methamphetamines as the primary substance of abuse have increased over time among Hispanics/ Latinos, while admissions for crack/cocaine have been on the decline. In 2015, admissions for Hispanics/Latinos were as follows: 23.8% for marijuana, 16.8% for opioids, 19.8% for methamphetamines, and 4.1% for crack/cocaine.



## RISK + PROTECTIVE FACTORS

According to the Minnesota Student Survey, Hispanic/Latino 5<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were 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: 51.0% 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: 69.5% 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 Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students, 30.6% think most students in their school have never had marijuana. However, 81.2% say they themselves have never had marijuana (see graph below).



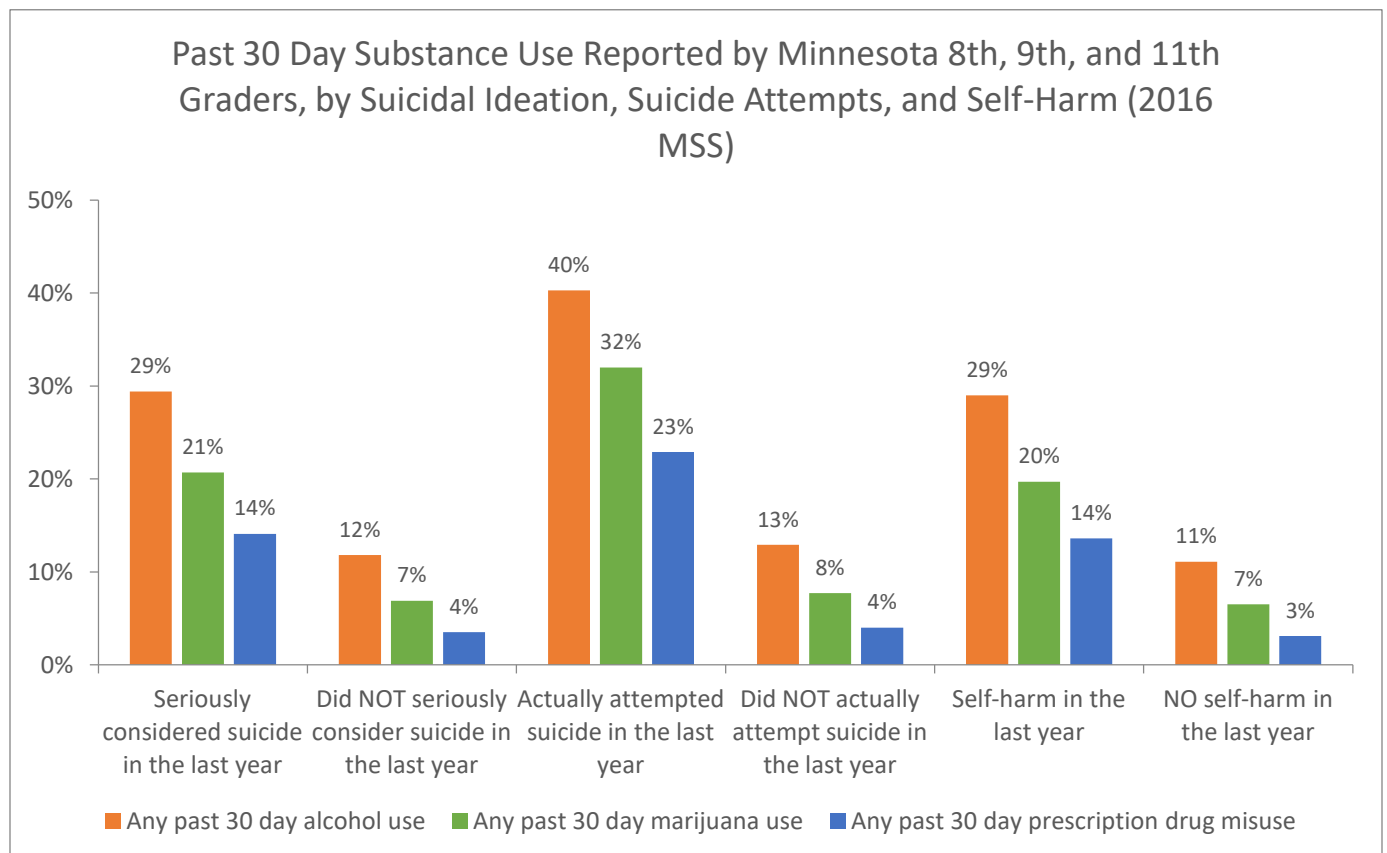
According to the 2015 Minnesota Survey of Adult Substance, Hispanic/Latino adults in Minnesota were considerably more likely than average to believe people put themselves at moderate or great risk of harm from using marijuana: 76.7% vs. 60.2%. They were about as likely as average to perceive moderate or great risk of harm from misusing prescription drugs: 93.1% 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 three times more likely to report past 30 day marijuana use.



## SUICIDE

Minnesota Student Survey findings from 2016 show that Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were more likely than the state average to report past-year suicidal ideation: 14.5% and 11.8% respectively. They were also more likely to report a past-year suicide attempt: 6.3% and 3.6% respectively.

## **SELF-HARM**

Hispanic/Latino 8<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students were more likely to report any past-year self-harm 20.5% 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.

## **ADULT MENTAL HEALTH**

According to the 2015 Minnesota Survey of Adult Substance Use, Hispanic/Latino adults in Minnesota were somewhat less likely than the state average to report at least moderate depressive symptoms in the past two weeks: 6.0% vs. 7.4%. Depressive symptoms are based on the 8-item Patient Health Questionnaire (PHQ-8). In addition, rates for Hispanic/Latino adults were down from 10.2% in 2010.

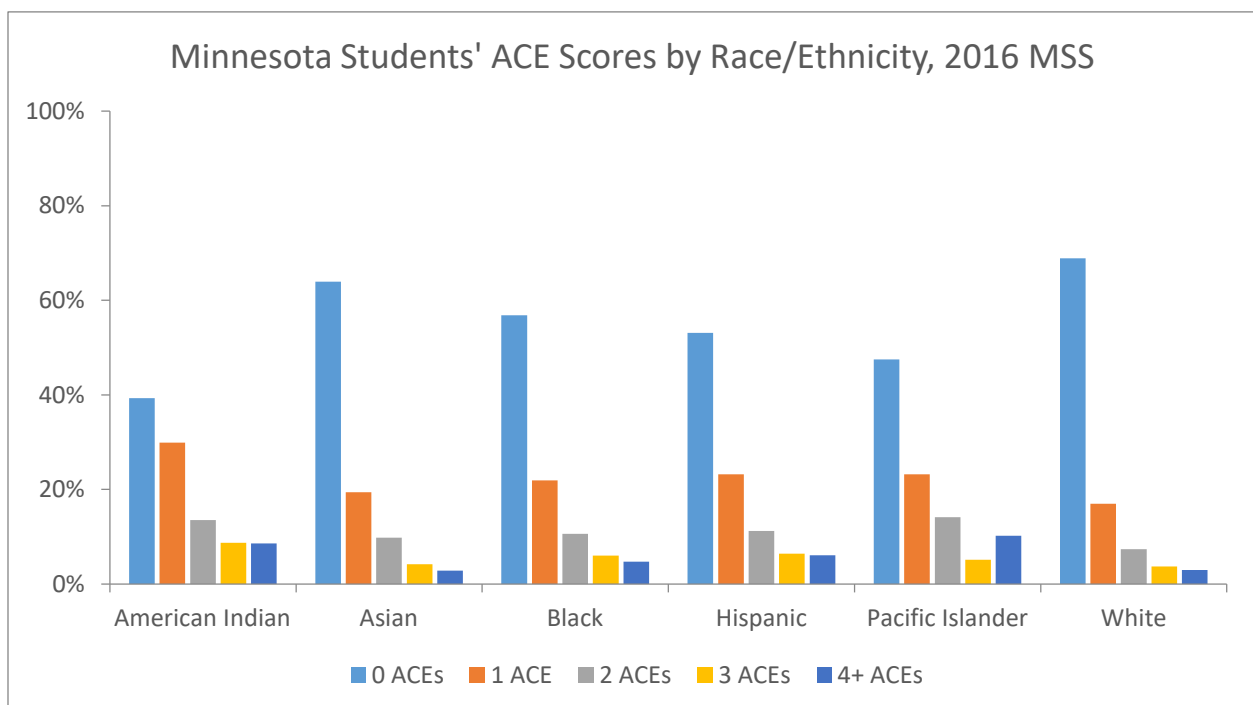
## SHARED RISK + PROTECTIVE FACTORS

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)

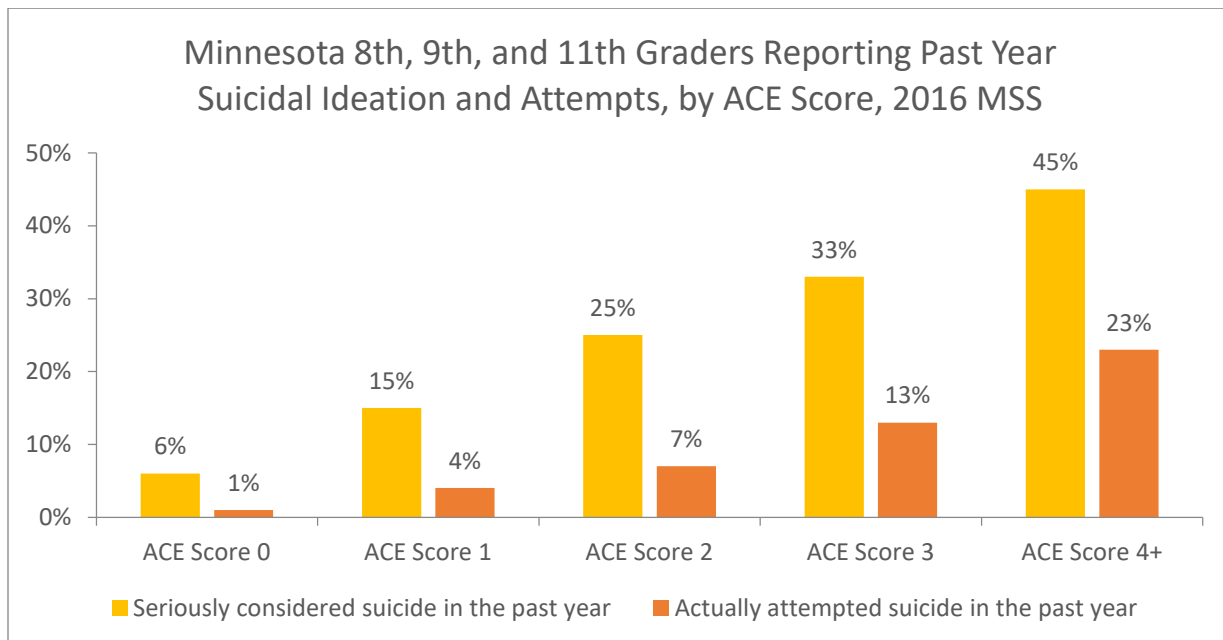
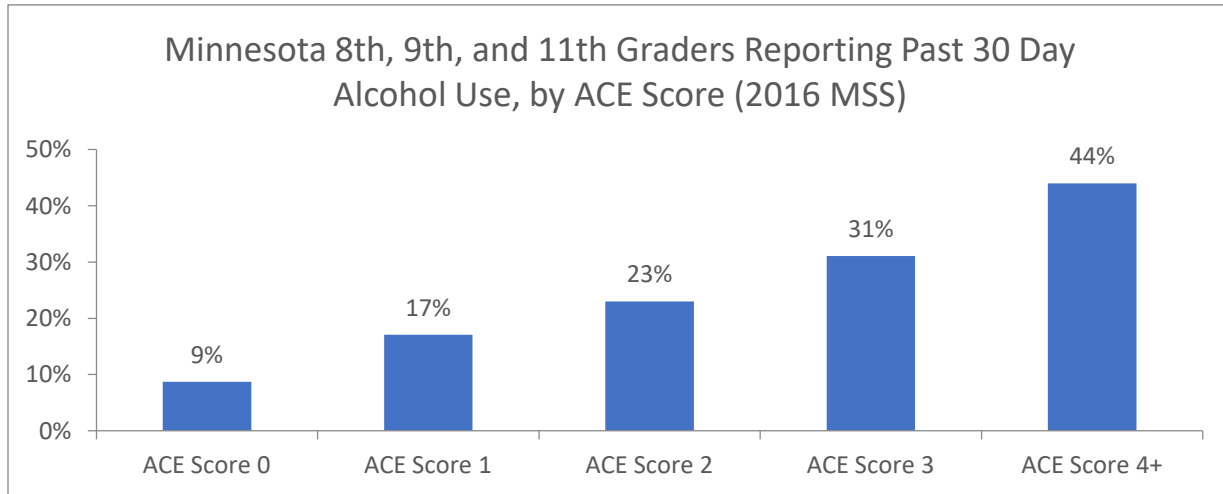
The Adverse Childhood Experiences (ACE) Study was a collaboration between the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente’s Health Appraisal Clinic in San Diego. The study found that childhood experiences of abuse, neglect, and family dysfunction are linked to leading causes of illness, poor quality life, and death. An “ACE Score” is calculated by adding 1 point for each ACE experienced. 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



Among Hispanic/Latino students responding to the 2016 Minnesota Student Survey, 53.1% reported an ACE score of zero, 23.2% an ACE score of one, 11.2% an ACE score of two, 6.4% an ACE score of three, and 6.1% 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 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

	Experienced any past 30 day bullying behavior	Did NOT experience any past 30 day 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, Hispanic/Latino students were a bit more likely to report experiencing bullying in the past 30 days (46.1% vs. 44.2%).

## SAFETY

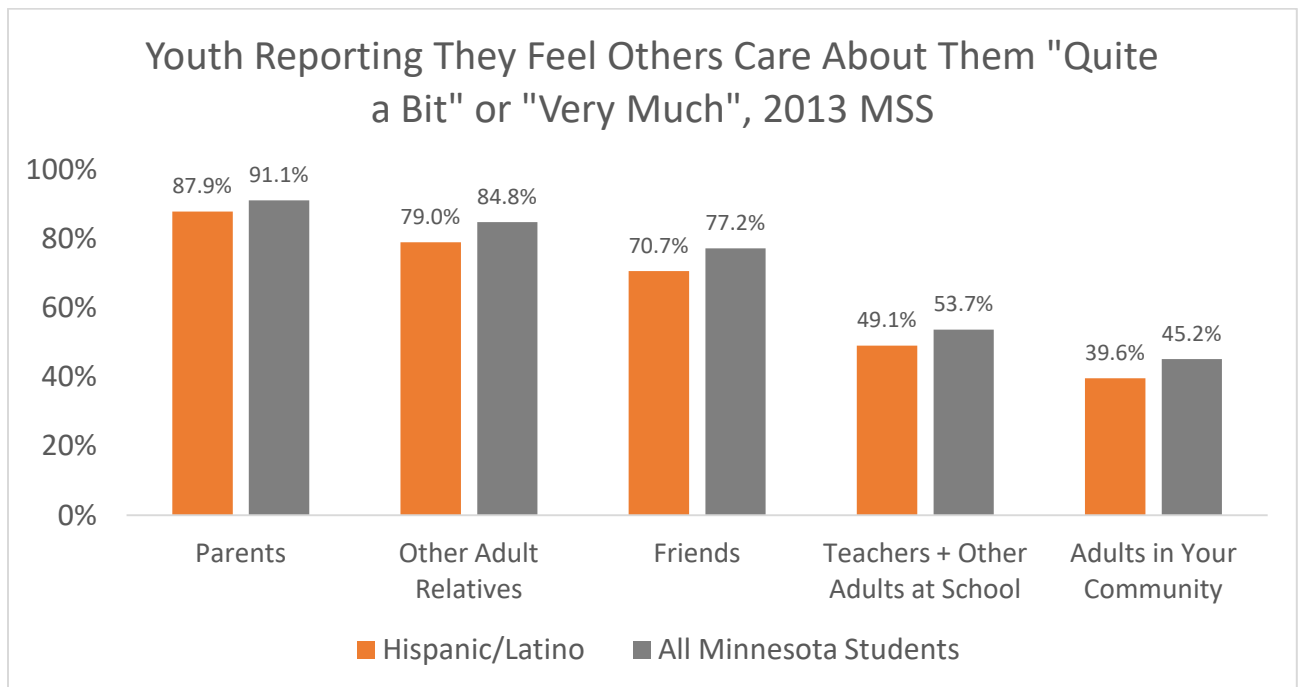
Students who feel safe at school are less likely to report past 30 day substance use, and less likely to report mental health issues. According to the 2016 MSS, Hispanic/Latino students are a bit less likely than the state average to report feeling safe at school—90.8% said they “strongly agree” or “agree” they feel safe at school compared to the state average of 92.7%. They are also a bit less likely to report feeling safe going to and from school: 94.3% vs. 95.6%.

	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	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, 92.0% of Hispanic/Latino 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, Hispanic/Latino 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 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>