



Minnesota's LGBTQ Communities: Epidemiological Profile of Substance Use and Related Factors

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

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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, 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 website (SUMN.org) 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, a Toolbox, and a 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 those in the LGBTQ (lesbian, gay, bisexual, transgender or transsexual, and queer or questioning) communities 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 LGBTQ 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 or other minority group. It is also important to recognize the limits of broad 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.



POPULATION SNAPSHOT

Minnesota Populations

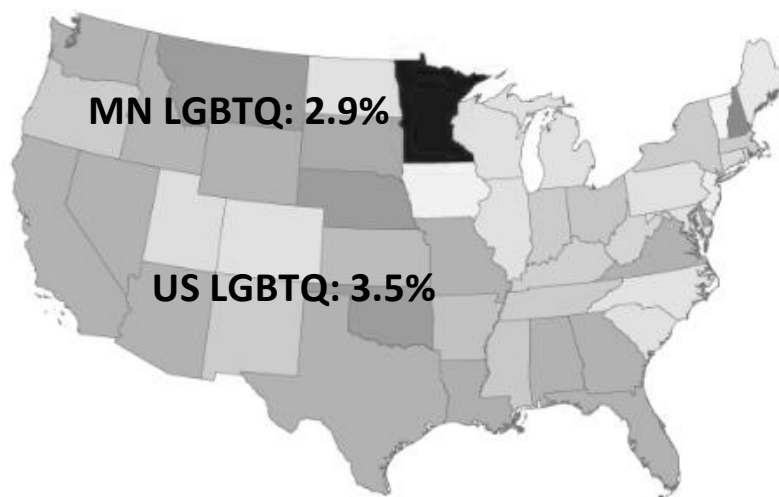
SEXUAL ORIENTATION AND GENDER IDENTITY

Sexual orientation describes romantic and sexual attraction: to people of the same sex, opposite sex, or any other combination of sexes or genders
(for example: heterosexual, bisexual, pansexual)

Gender identity is defined as one's personal conception of gender, which may or may not be correlated with one's assigned sex
(for example: transgender, cisgender, genderqueer)

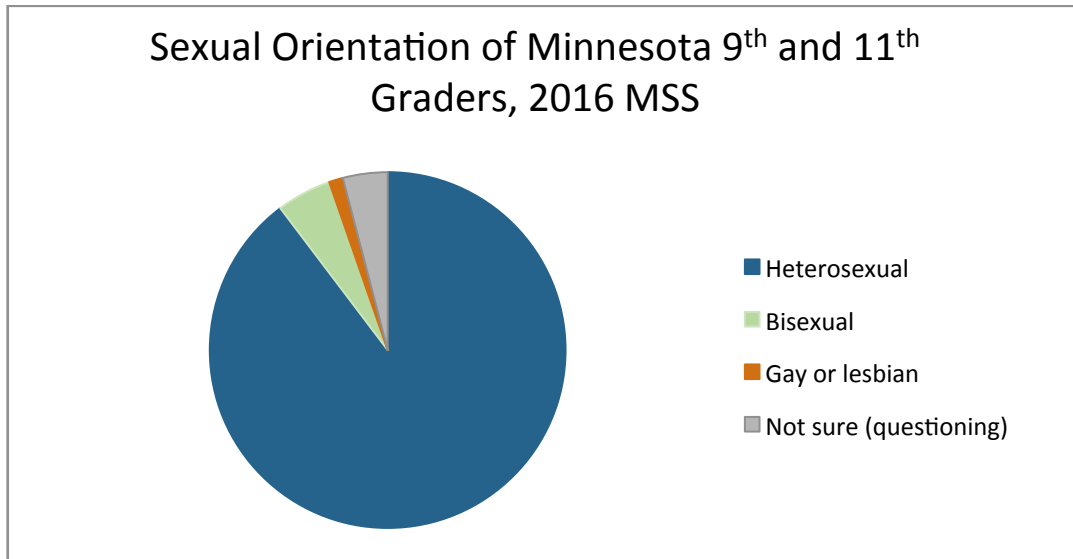
Here, we refer to members of these groups as **sexual and gender minorities**

According to the Gallup Special Report published in 2013, 2.9% of the population of Minnesota identifies as lesbian, gay, bisexual or transgender. LGBTQ populations in the United States range from 10% in Washington, DC to 1.7% in North Dakota, with a national average of 3.5%.

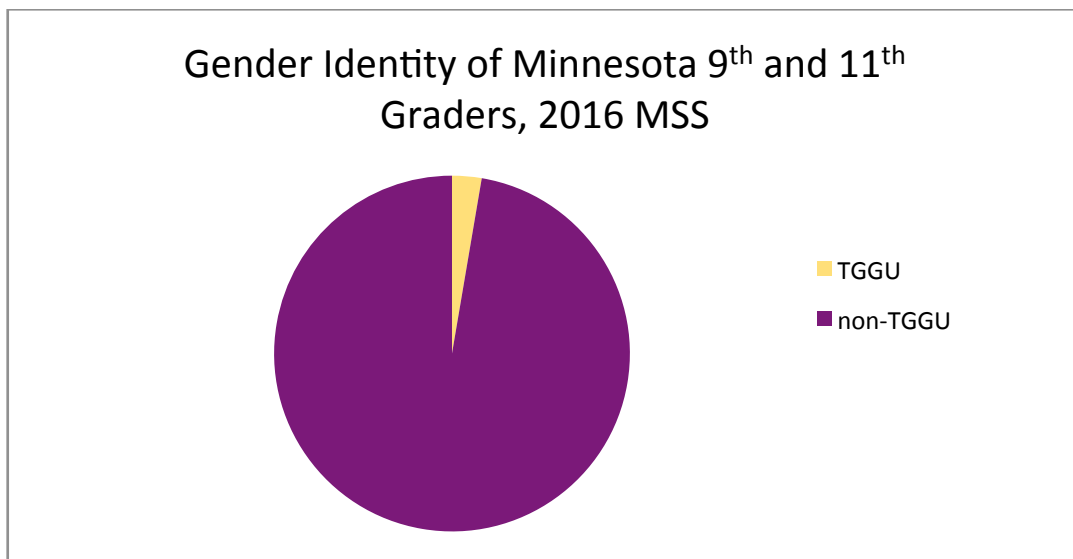


MINNESOTA POPULATION: YOUTH

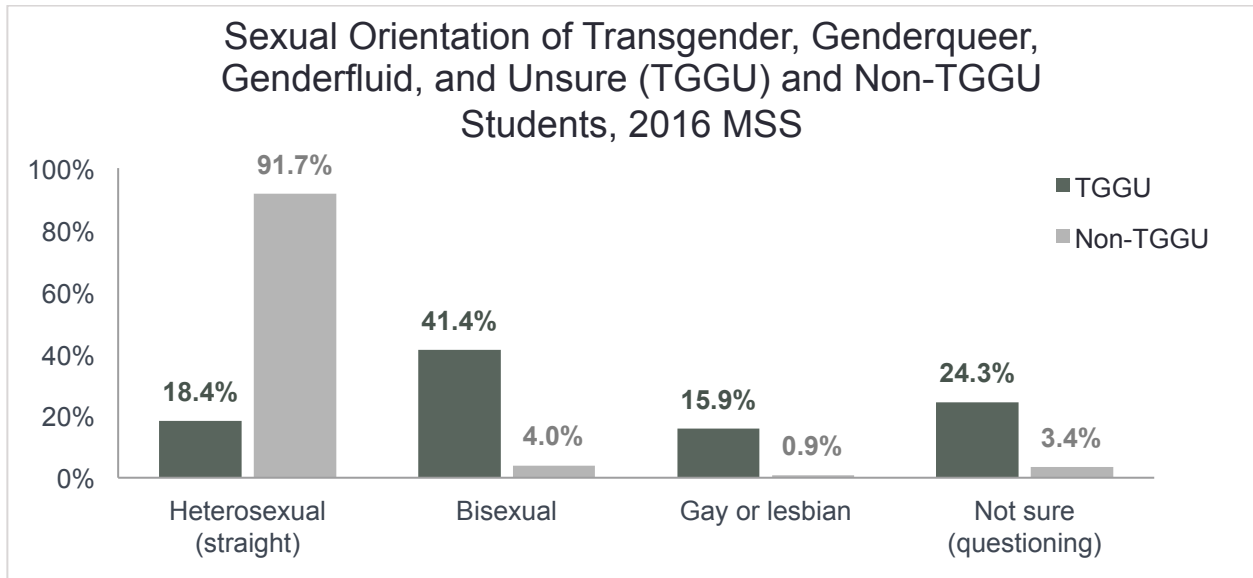
In the 2016 Minnesota Student Survey (MSS), 1.3% of students identified as gay or lesbian, 5.0% identified as bisexual, and 4.1% identified as not sure or questioning. Bisexual and gay or lesbian students therefore make up 6.3% of the surveyed population, and when questioning students are included, sexual minorities account for 10.3% of students. In 2013, the first year the question was included in the MSS, 6.4% of students identified as gay or lesbian, bisexual, or questioning (LGBQ).



For the first time in 2016, the Minnesota Student Survey included a question about gender identity, which reads, “Do you consider yourself transgender, genderqueer, genderfluid, or unsure about your gender identity?” Transgender, genderqueer, and genderfluid students and those unsure of their gender identity (TGGU) comprise 2.7% of the student population.



TGGU students may (and do) identify with any sexual orientation: 18.4% identify as heterosexual, 41.4% as bisexual, 15.9% as gay or lesbian, and 24.3% as questioning. Therefore, students described as “male bisexuals” will include students who are transgender, cisgender, or any other gender identity. Likewise, “female TGGU students” include female-identified individuals who may be bisexual, heterosexual, or any other sexual orientation. For this reason, data about LGBTQ students and data about TGGU students will be presented separately.



Although the MSS was administered to 5th, 8th, 9th, and 11th graders in 2013 and 2016, only 9th and 11th graders were asked about their sexual orientation. Therefore, MSS data included in this report are only for 9th and 11th graders, unless otherwise noted.

Because data on LGBTQ students are now available for two survey years, comparison data—while short of describing a trend—may provide some context. Comparisons are included where available.

MINNESOTA POPULATION: ADULTS

The Minnesota Survey of Adult Substance Use (MNSASU) included sexual orientation as part of its survey for the first time in 2014-2015. Of the 18,893 adults in Minnesota surveyed by telephone, 1.4% identified as gay or lesbian, 1.9% identified as bisexual, 0.5% responded with “other,” and 2.4% chose “don’t know” or refused to answer. Because the sample sizes were small, most data used here aggregate lesbians, gay men, and bisexuals. Disaggregated data are more likely to be unreliable, and differences may not be as great as they seem. In this report’s graphs, statistically significant differences between gays/lesbians or bisexuals and heterosexuals are noted with an asterisk (*), and statistically significant differences between

gays/lesbians and bisexuals are noted with the caret (^). Additionally, MNSASU data are sometimes presented against heterosexual males (HM) and heterosexual females (HF) for better comparisons.

It is important to note that the population of Minnesotans identifying as bisexual on the MNSASU tend to skew young and female; whereas 46.2% of heterosexual respondents are aged 18-44, 73.1% of bisexual respondents are in that age category. Additionally, 66.3% of bisexual respondents are female, while 50.5% of heterosexuals are.

In the College Student Health Survey (CSHS) Report prepared by the University of Minnesota’s Boynton Health Service, from the years 2007 to 2011, 1.9% of students identified as gay or lesbian, 3.0% identified as bisexual, and 1.8% were unsure of their sexual orientation. Of those gay or lesbian students, 2.6% identified as transgender, as did 1.7% of bisexual students.

The Voices of Health Survey (VOH) is administered by the Rainbow Health Initiative in Minnesota. Because this survey uses a convenience sample aimed at sexual minorities, only 1% of their sample in 2015 identified as heterosexual. Of the sexual minorities, 27% identified as lesbian, 33% as gay, 21% as bisexual, 16% as queer, 4% as pansexual, and 1% as another sexual orientation. Because of survey and publication variations over time, mental health data are from the 2013 survey, alcohol use data are from 2014, and tobacco use data are from 2015.

Data from the National Survey on Drug Use and Health (NSDUH) are used here for comparisons between sexual minorities and the general population. The NSDUH does not include sexual orientation in its demographic questions.

There are some important limitations and data gaps to note. Although this information is for the LGBTQ population, the questions on the MSS and MNSASU do not have a transgender response option. In surveys where there is an option, there are often too few individuals to accurately present statistics for transgender people. County and city level data on LGBTQ people are often not available due to small numbers and/or low survey response rate, if collected at all. Further, rates may fluctuate greatly due to small numbers. Because of these issues and differences in survey instruments, the acronyms used to describe the populations in this report will differ, depending on the survey population (i.e. LGB vs. LGBTQ).



KEY FINDINGS

Youth and Adults: Populations at Risk

Overall, lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth and adults face great health disparities. Minnesota's LGBTQ and transgender, genderqueer, genderfluid, and unsure (TGGU) students are consistently more likely to report higher levels of drug, tobacco, and alcohol use; more depression and emotional distress; less parental and community support; and more exposure to bullying.

POSITIVE FINDINGS

- ✦ Past 30-day alcohol, cigarette, marijuana, and prescription drug use rates dropped for LGBTQ students between 2013 and 2016 (2016 MSS)
- ✦ Gay and lesbian respondents were slightly less likely than heterosexuals to report past-month binge drinking (2014-2015 MNSASU)
- ✦ LGB students are more likely to perceive harm from binge drinking than their heterosexual counterparts (2016 MSS)
- ✦ While LGBTQ 9th and 11th grade students are much more likely to use alcohol, the rates of past 30-day alcohol use for adult students are relatively similar for bisexual, gay or lesbian, and heterosexual respondents (2007-2011 CSHS)

AREAS FOR IMPROVEMENT

- ✦ Bisexual females and gay males are more likely than other groups to report past 30-day alcohol use (2016 MSS)
- ✦ Bisexual, gay and lesbian, and questioning students are 2 to 3 times more likely to report past 30-day cigarette smoking than the average (2016 MSS)
- ✦ LGB and TGGU students are also more likely to report e-cigarette use (2016 MSS)
- ✦ Smoking rates for adult LGB students were also higher than their heterosexual peers (2007-2011 CSHS)
- ✦ LGBTQ and TGGU students are up to twice as likely as the state average to report past-month marijuana use (2016 MSS)
- ✦ This pattern holds true for adult students, with 23.6% of bisexual and 16.8% of gay and lesbian students reporting past 30-day marijuana use, compared to heterosexual use of 10.3% (2007-2011 CSHS)
- ✦ LGBTQ and TGGU students are up to 3 times as likely to report any past 30-day prescription misuse (2016 MSS)
- ✦ LGBTQ and TGGU students are much more likely to report suicidal ideation, ranging from 51.6% of female TGGU students, to 14.8% of questioning males (2016 MSS)

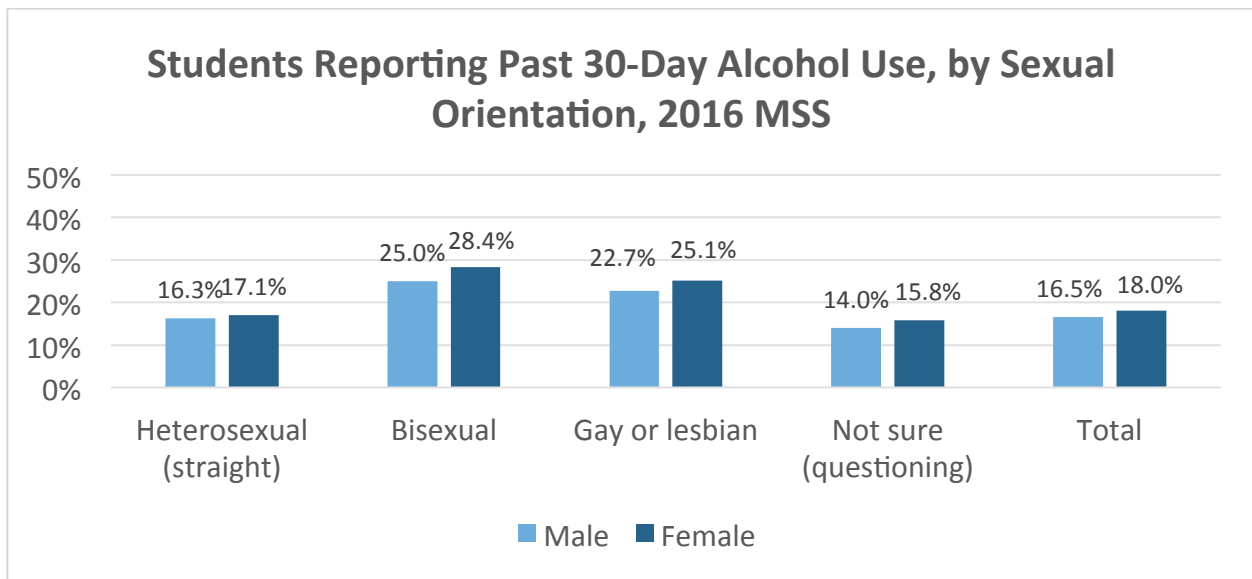


ALCOHOL

Youth and Adults: Use Rates and Perceptions of Harm

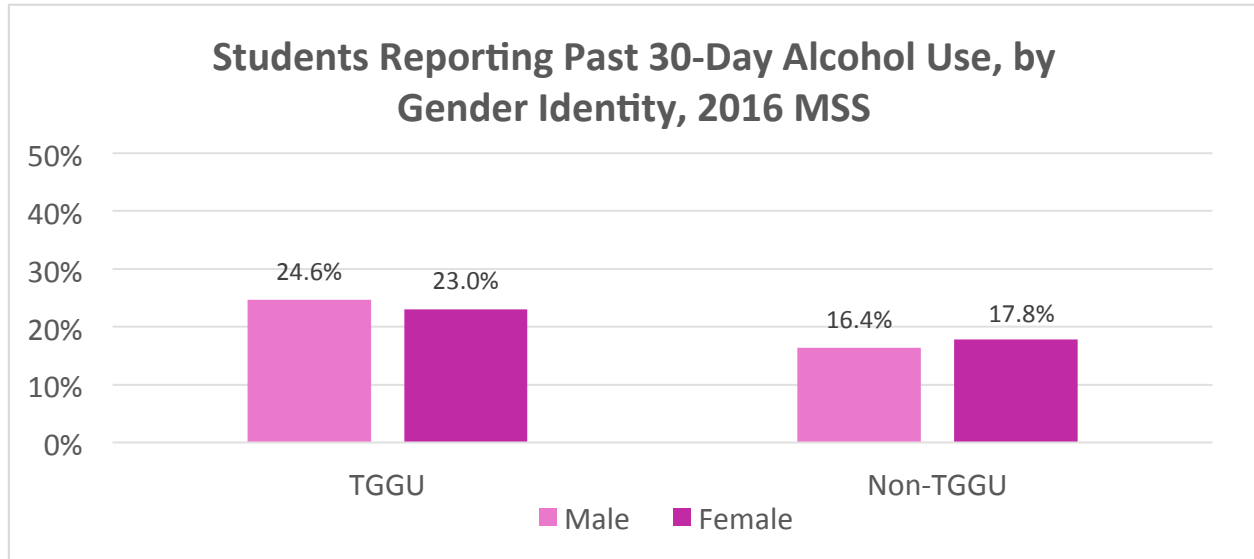
YOUTH USE

Current alcohol use is measured by the Minnesota Student Survey as students reporting any use of alcohol in the past 30 days. In 2016, of surveyed 9th and 11th grade students, 27.6% of bisexual students, 24.1% of gay or lesbian students, and 15.1% of questioning students reported current alcohol use, as compared to the average of 17.3%.



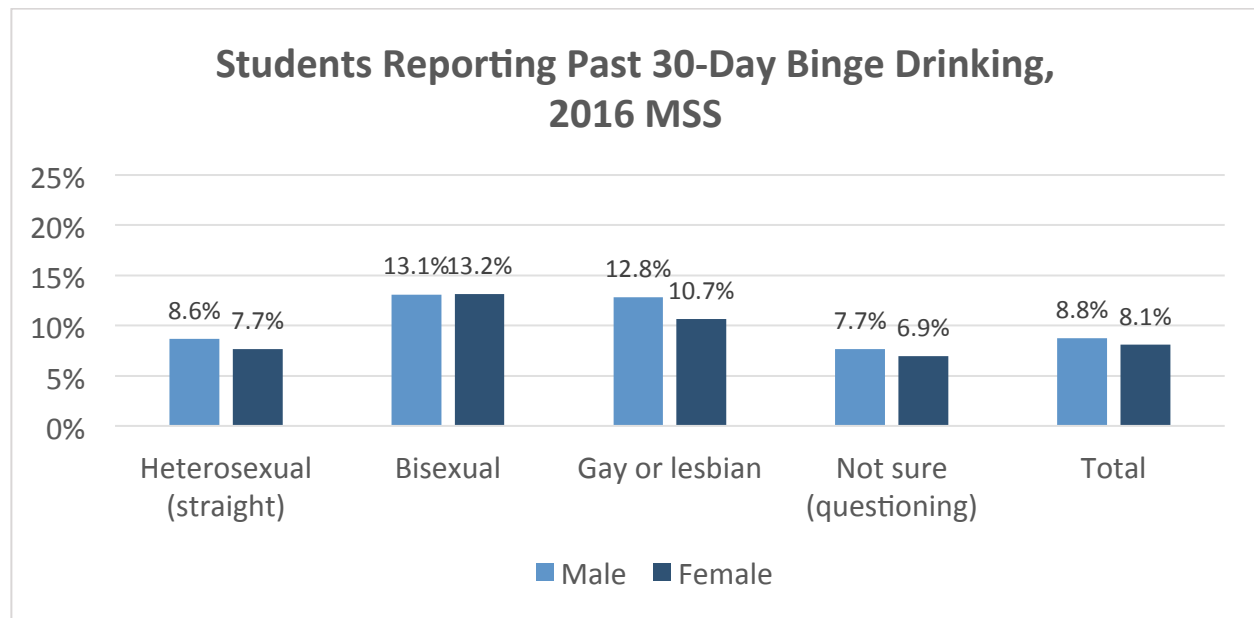
Bisexual students in 11th grade reported current alcohol use at the highest rates, with 29.6% of males and 33.0% of females reporting use, while the average rate for all 11th graders was 24.7%. Heterosexual and questioning 9th graders reported the lowest rates, with just under 10% for males and about 11% for females.

Students identifying as transgender, genderqueer, gender-fluid, or unsure of their gender (TGGU) are also more likely than non-TGGU students to report past 30-day alcohol use: 23.4% vs. 17.1%. TGGU students in 11th grade are most likely to use, at 31.1% for male students, and 27.1% for female.

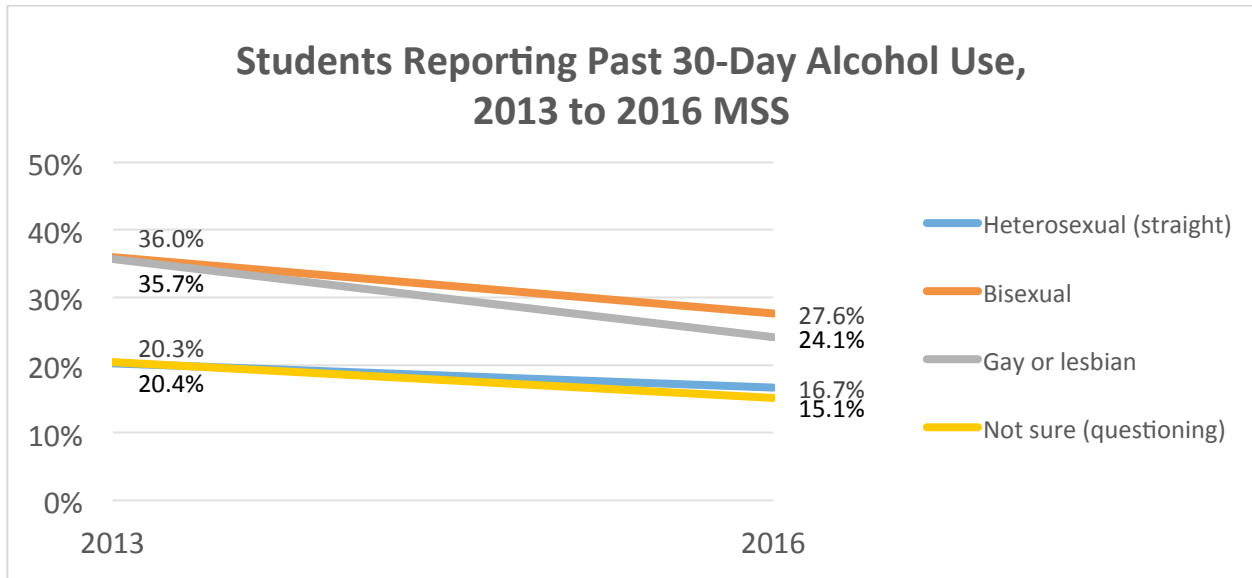


Binge drinking is measured by the Minnesota Student Survey as students reporting having five or more drinks in a row on one occasion within the past 30 days. Overall, in 2016, 11th grade bisexual and gay or lesbian students again had the highest rates of binge drinking, with 15.6% of male and 16.8% of female bisexuals, and 16.4% of gay students and 13.7% of lesbians reporting past 30-day binge drinking. The lowest rates were reported by heterosexual 9th graders, with 4.3% of males and 4.0% of females reporting use. The average, across grade and orientation, was 8.4%.

Gay males were slightly more likely to binge drink than lesbians, while bisexual females were as likely as their bisexual male counterparts to binge drink. Overall, GLBQ youth are much more likely to use alcohol than their heterosexual peers.

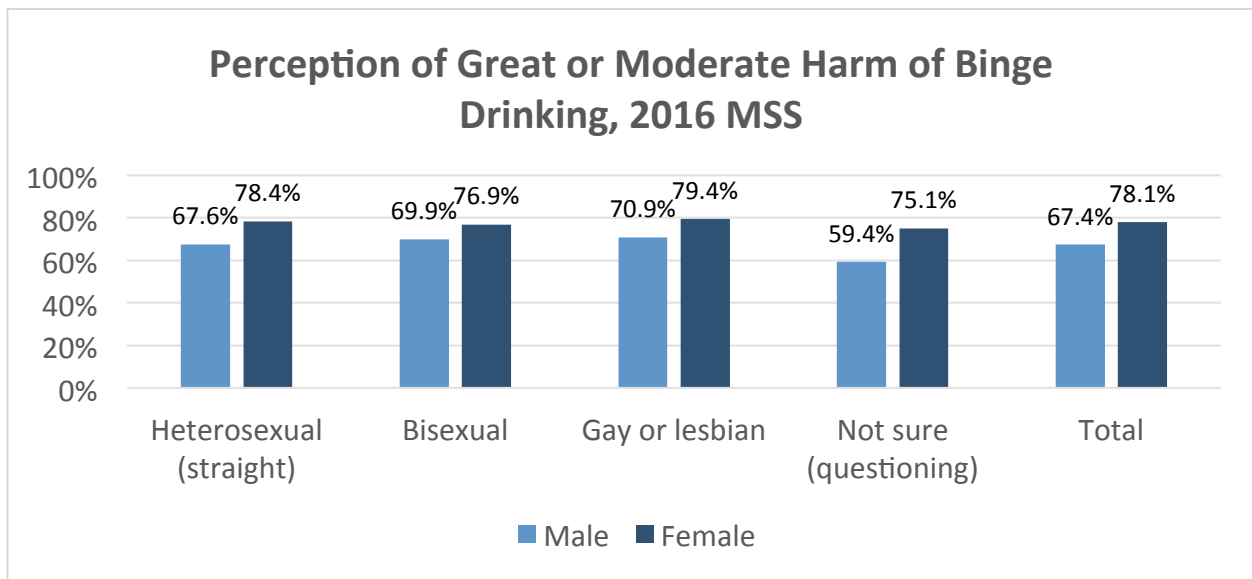


However, alcohol use rates were lower in all groups in 2016 than in 2013. The statewide past 30-day alcohol use rate for 9th and 11th graders was 17% lower in 2016, dropping from 20.9% to 17.3%. Use decreased for bisexuals by 23%, by 32% for gay and lesbian students, and by 26% for questioning students.



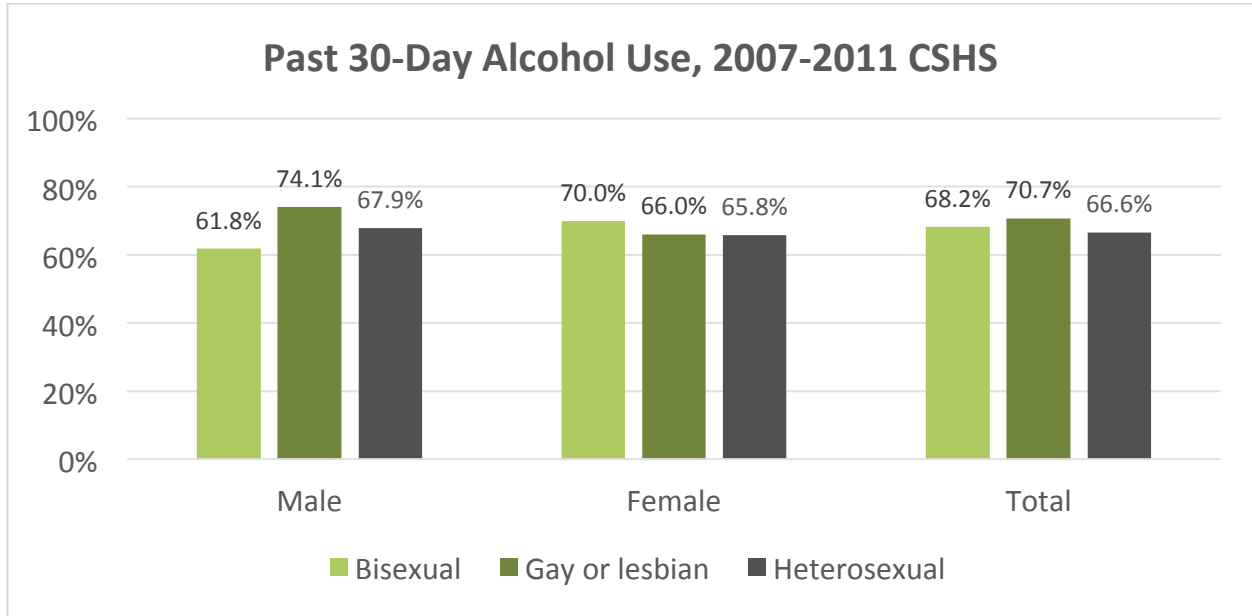
YOUTH PERCEPTION OF HARM

Bisexual and gay and lesbian 9th, and 11th grade students were somewhat more likely to report in 2016 that they believe people put themselves at great or moderate risk of harm by frequently binge drinking: 75.5% for both bisexual and gay/lesbian students, vs. an average of 72.8% across orientations. For all groups, girls were more likely to report a higher perception of harm.

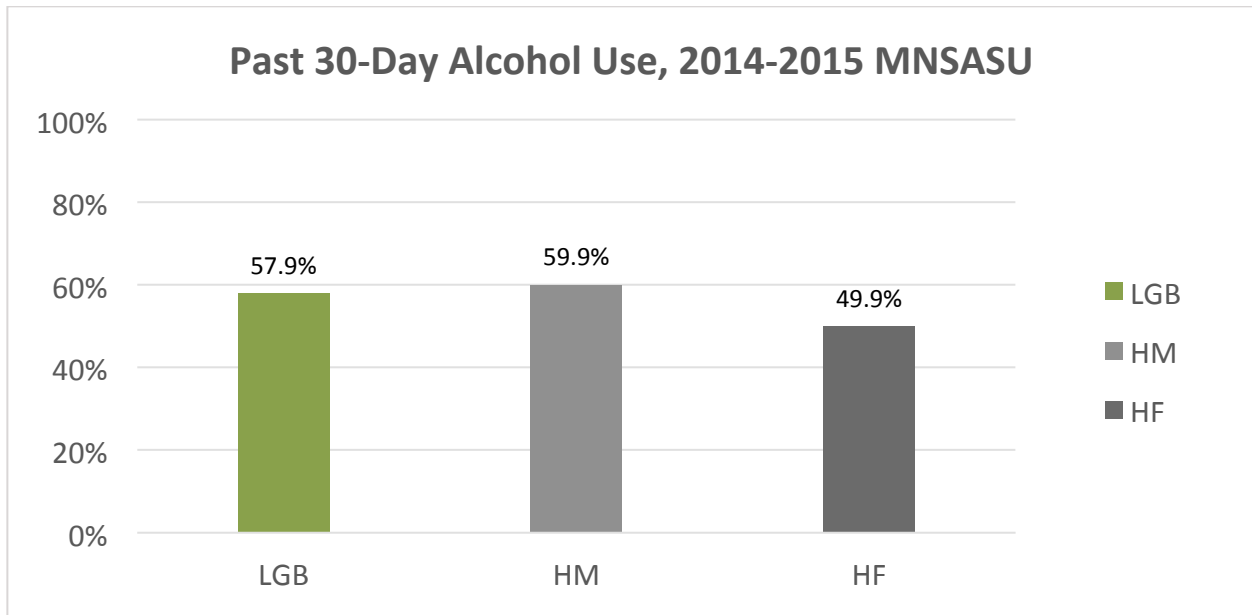


ADULT USE

Current alcohol use is measured by the College Student Health Survey (CSHS) as any alcohol use in the past 30 days. In their survey, gay males were almost 10% more likely to report alcohol use, but rates were very similar for gay men and lesbians, bisexuals, and heterosexuals.

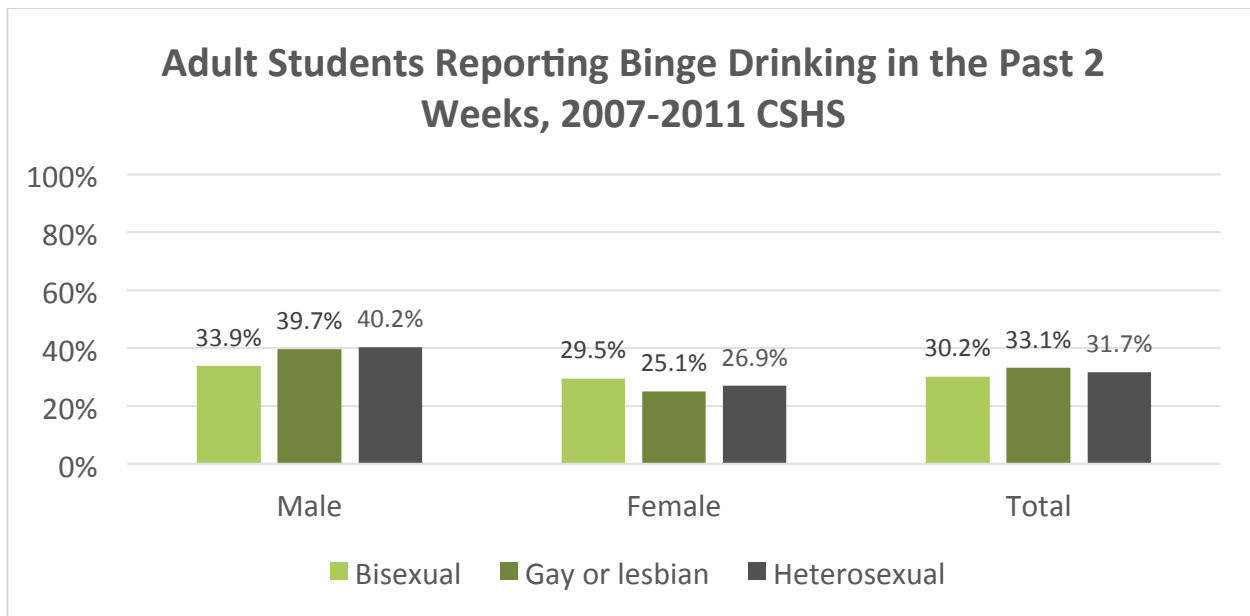


The MNSASU also defines current drinking as any alcohol in the past 30 days. While rates of current alcohol use for LGB people were higher than that of heterosexual women, they were lower than the rate of heterosexual men.



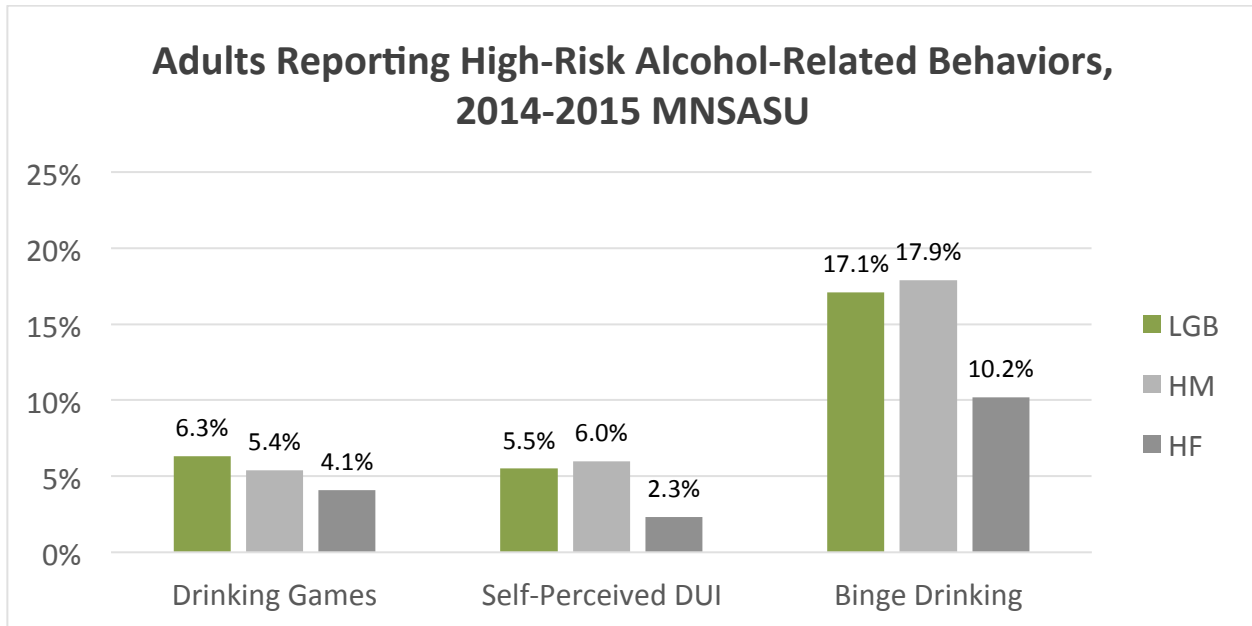
According to the National Survey on Drug Use and Health (NSDUH), the rate of past 30-day alcohol use for adults in Minnesota aged 18 to 25 years old was 64.7% in 2014, and 63.6% for adults aged 26 years and over.

Binge drinking is measured by both the CSHS and the Voices of Health (VOH) survey as having five or more drinks in a row on one occasion within the past two weeks. From 2007 to 2011, CSHS found that male heterosexuals were most likely to report binge drinking, at 40.2%, while gay women were least likely, at 25.1%. Men, across groups, were more likely to report bingeing than women.

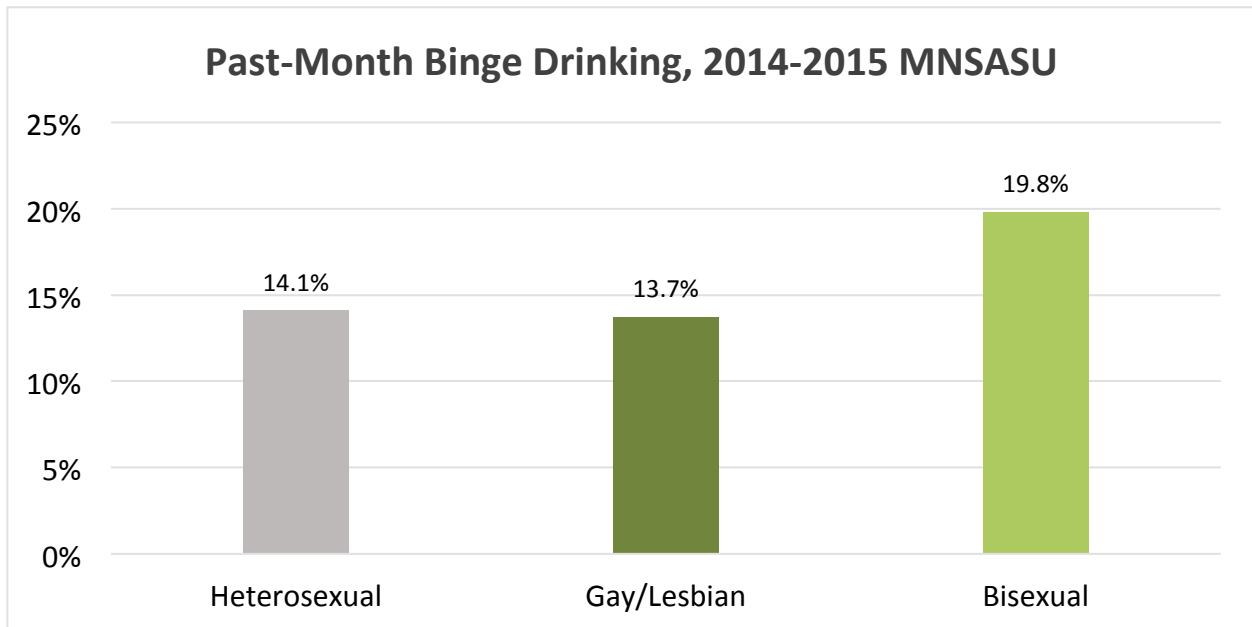


The 2014 Voices of Health survey of LGBTQ Minnesotans found that 38% of respondents binged on at least one occasion in the past two weeks. Of the respondents, 40% used alcohol but did not binge, while 21% drank no alcohol.

The MNSASU measures past 2-week binge drinking, but also measures other risky drinking behaviors: past-month participation in drinking games, and past-year self-perceived driving under the influence of alcohol. As a group, LGB respondents were more likely than heterosexuals to participate in drinking games. They were more likely than heterosexual women to report binge drinking and self-perceived DUI, but slightly less likely than heterosexual men to report either.

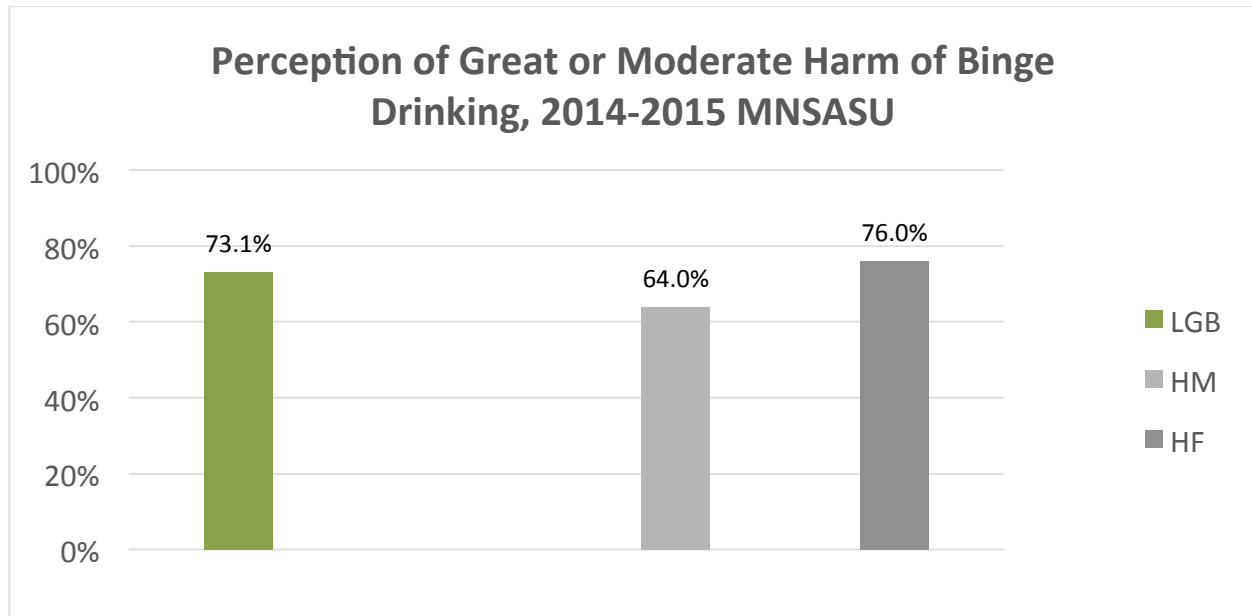


According to disaggregated data from the MNSASU, while gay and lesbian respondents were slightly less likely, bisexual respondents were 1.4 times as likely as heterosexuals to report past-month binge drinking.



ADULT PERCEPTION OF HARM

As with young people, perception of harm can act as a protective factor against some risky behaviors for adults. According to the MNSASU, GLB respondents were more likely than heterosexual men to report a perception of great or moderate harm from binge drinking, but less likely than heterosexual women.





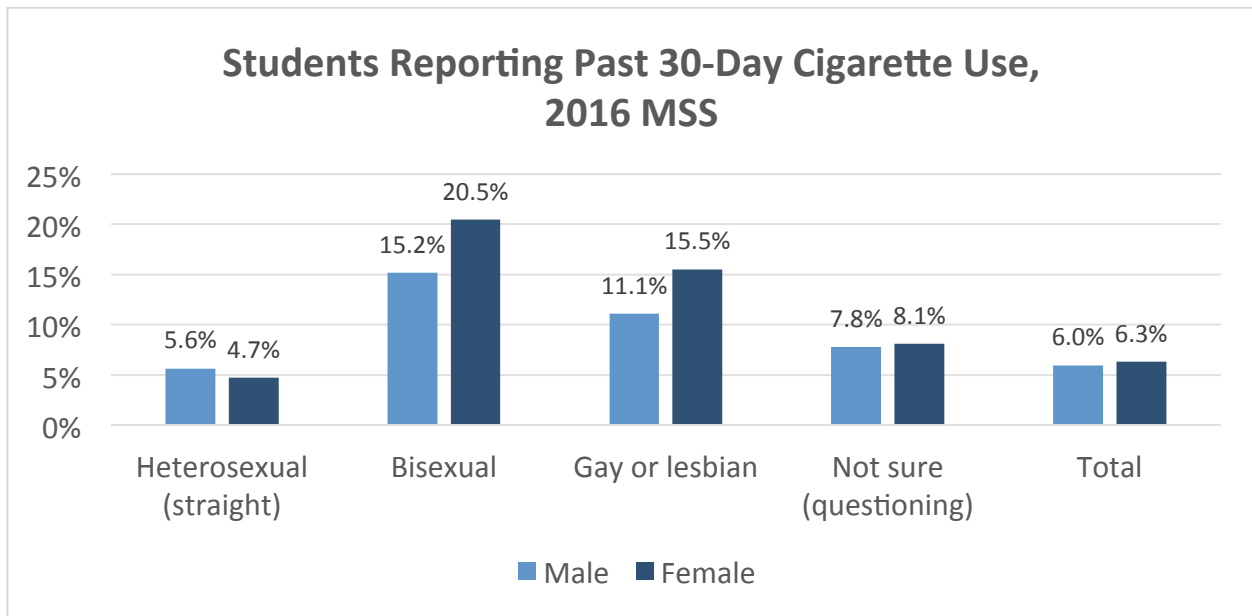
TOBACCO

Youth and Adults: Use Rates and Perceptions of Harm

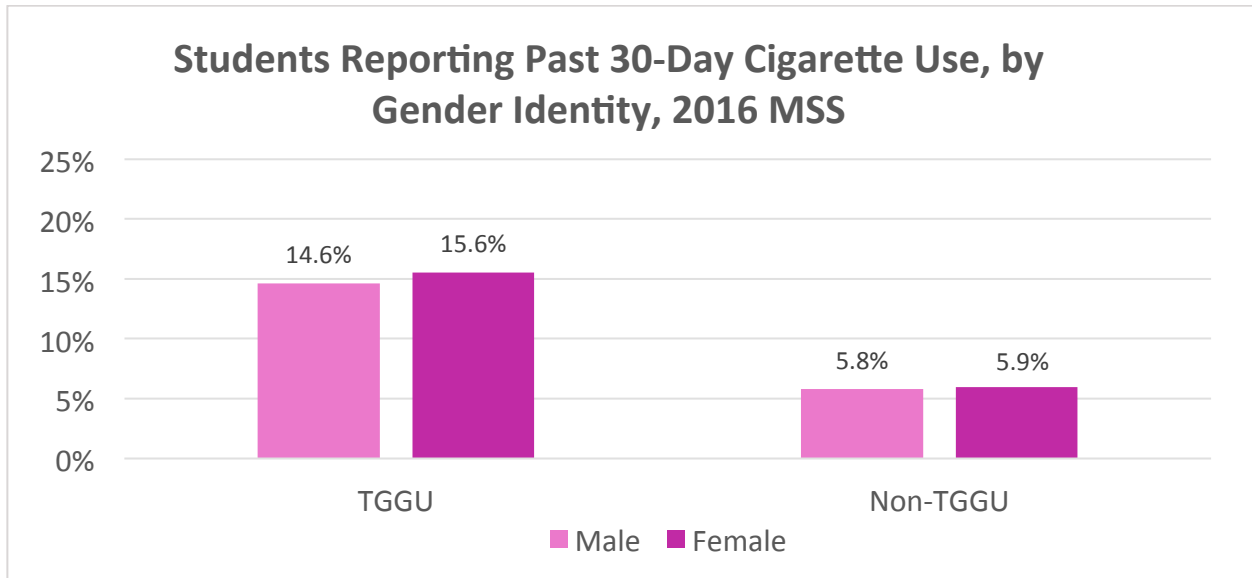
YOUTH USE

In 2016, the average rate of traditional cigarette smoking in the past 30 days for 9th and 11th graders was 6.1%. Bisexual students were over 3 times as likely to report smoking, at 19.4%, and reported smoking younger: 16.5% of bisexual 9th graders report smoking, compared to the 9th grade average of 4.3%. Gay and lesbian students also start earlier, and are ultimately about twice as likely to report smoking, at 13.5%. Questioning students are somewhat more likely to report cigarette use, at 7.9%.

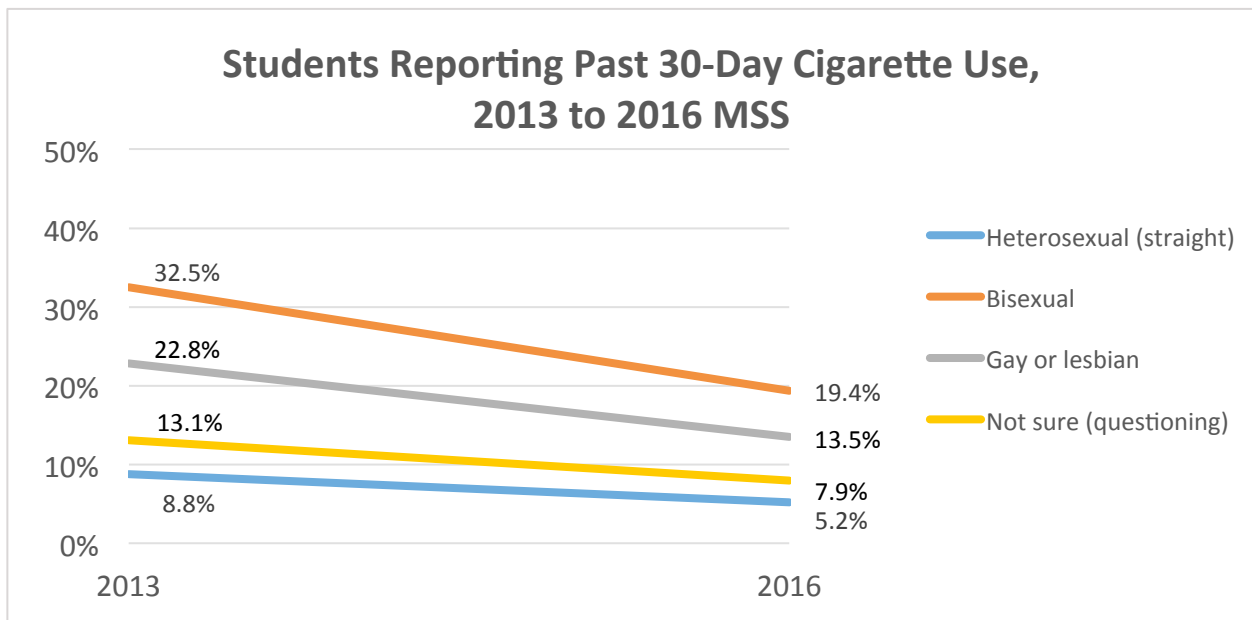
Among heterosexual students, males are slightly more likely to report smoking, but lesbians and female bisexual and questioning students are more likely than their male counterparts to smoke cigarettes.



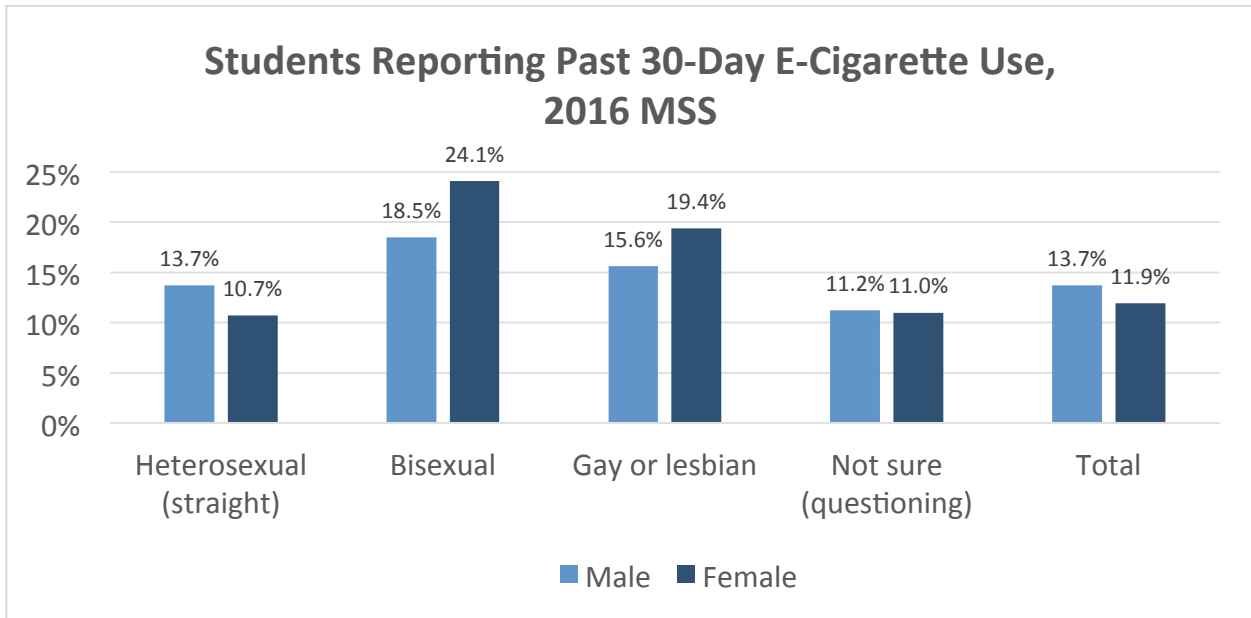
Female TGGU students are also slightly more likely to report cigarette use, compared to their male peers. Overall, TGGU are over 2.5 times as likely as non-TGGU students to use cigarettes, at 15.2% vs. 5.9%.



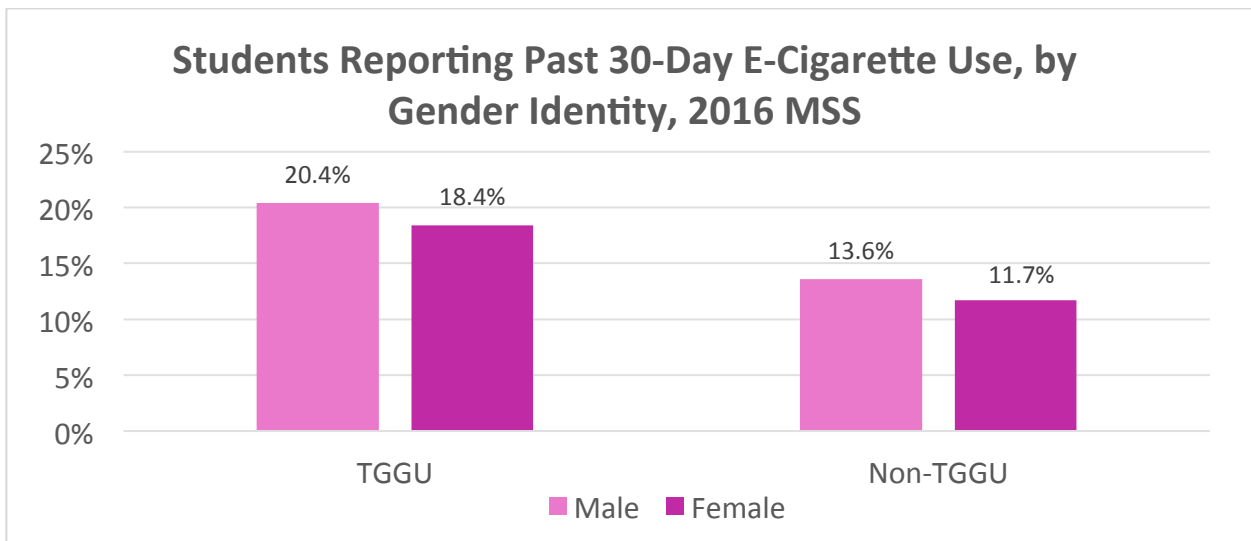
However, cigarette use among 9th graders in Minnesota has decreased consistently for nearly 20 years. Following this trend, cigarette use rates in 2016 were lower among LGBTQ students than they were in 2013. Rates decreased by about 40%, across the board.



While cigarette use has decreased, e-cigarette use has increased; overall, students are more than twice as likely to report e-cigarette use as traditional cigarette use. While LGBTQ students' use of e-cigarettes aren't twice that of cigarettes, their use rates are still much higher than the state average; bisexual students are nearly twice as likely to report use. Students in 11th grade have especially high rates: 27.3% of bisexuals, 19.3% of lesbians and gay students, and 16.8% of questioning 11th graders report past-month e-cigarette use.

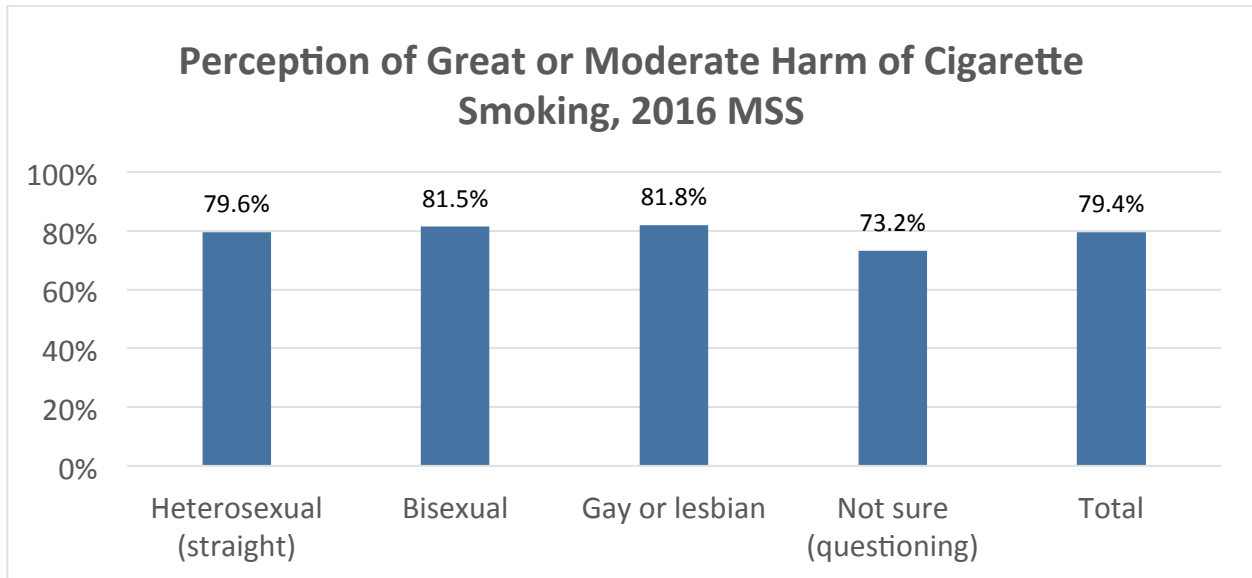


Likewise, TGGU students are more likely to report e-cigarette use: 18.9% of TGGU used in the past month, compared to 13.3% of non-TGGU students.



YOUTH PERCEPTION OF HARM

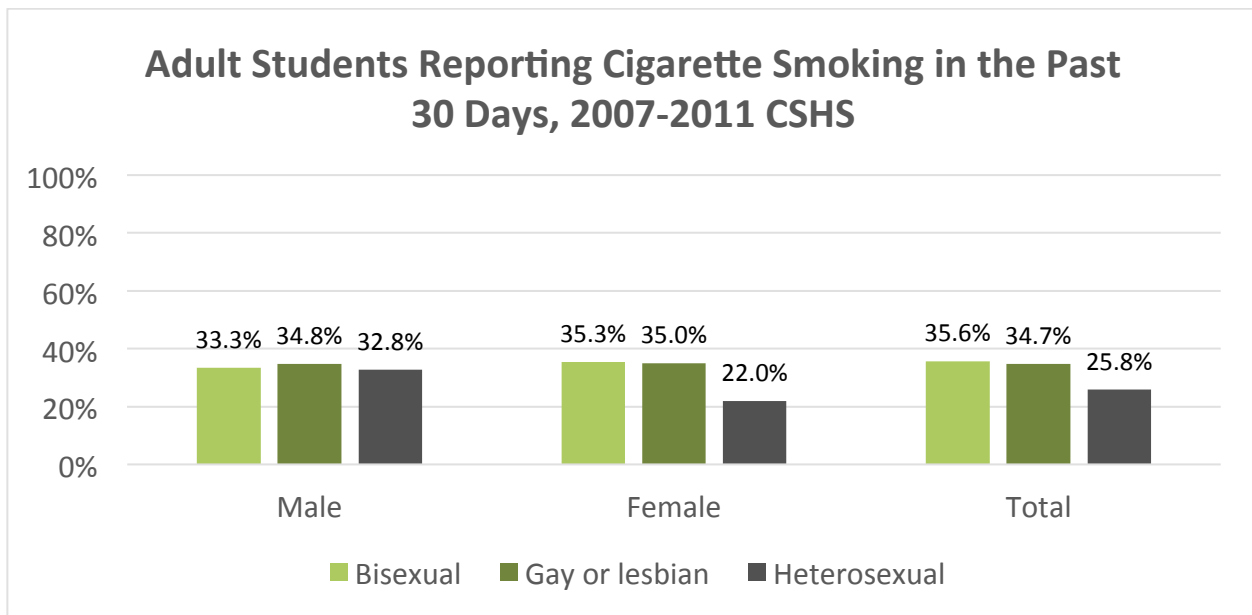
Bisexual and gay and lesbian 9th and 11th grade students were slightly more likely than the state average to report in 2016 that they believe people put themselves at great or moderate risk of harm by smoking one or more packs of cigarettes per day: 81.5% and 81.8%, respectively, vs. an average of 79.4%. Questioning students were the least likely to believe people put themselves at risk by smoking, at 73.2%. Generally, the rate of female students perceiving risk was about 3 percentage points higher than for males in the same group.



ADULT USE

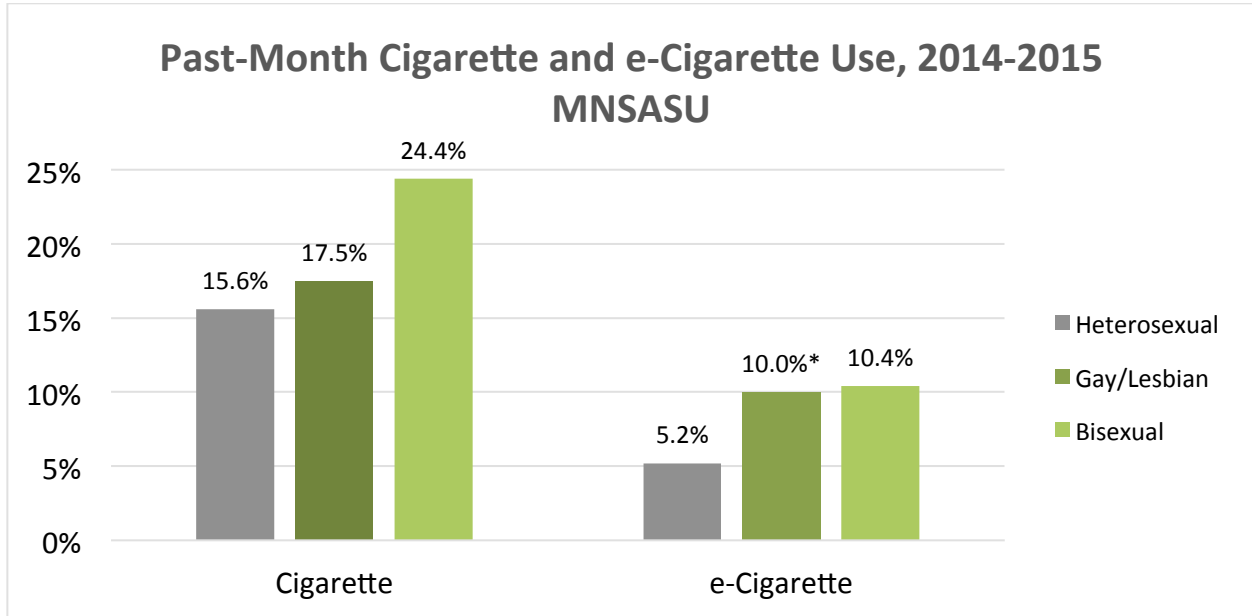
The 2013 VOH survey found that 20.5% of LGBTQ respondents characterized themselves as current smokers.

The CSHS survey of adult students reported current smoking rates of 35.6% for bisexuals, 34.7% for gay and lesbian students, and 25.8% for heterosexual students, from 2007 to 2011.



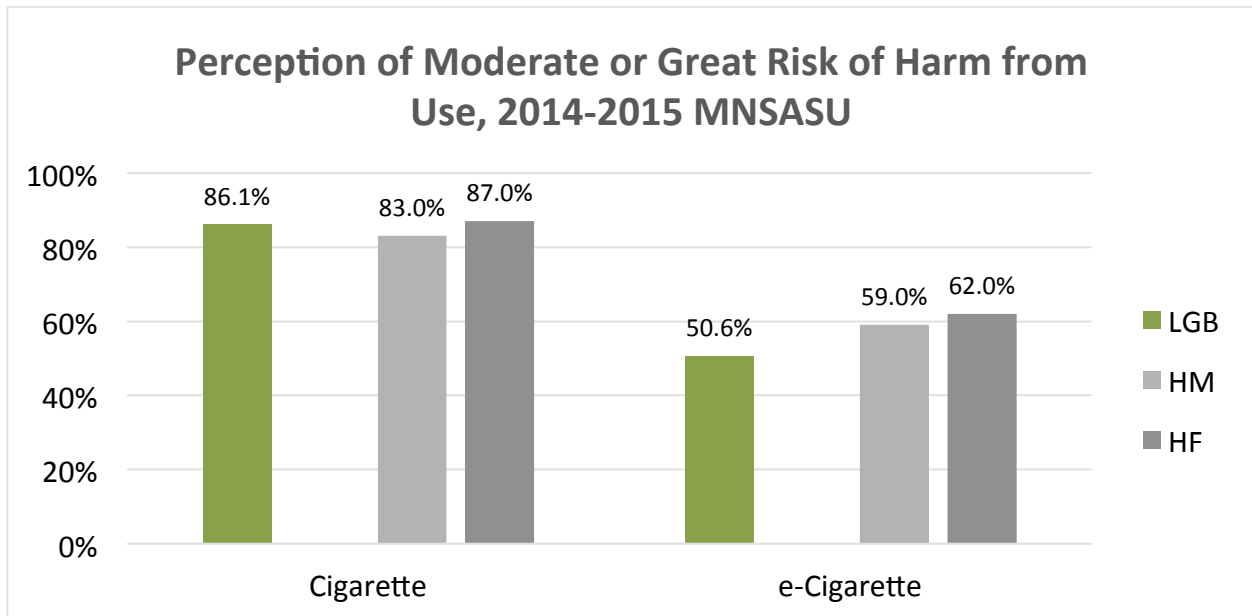
The MNSASU also measures cigarette use, and included e-cigarette use on the survey for the first time in 2014-2015. According to the survey, LGB respondents use both cigarettes and e-cigarettes at a greater rate than heterosexuals, although at lower rates than found by either the

VOH survey or the CSHS. Although bisexuals and lesbian and gay respondents reported about the same rates of cigarette use, bisexuals were about 1.4 times as likely to use e-cigarettes.



ADULT PERCEPTION OF HARM

The LGB respondents’ perception of risk of harm from using cigarettes is on par with heterosexual respondents. However, in line with use rates, LGB people are less likely to perceive e-cigarettes as harmful.



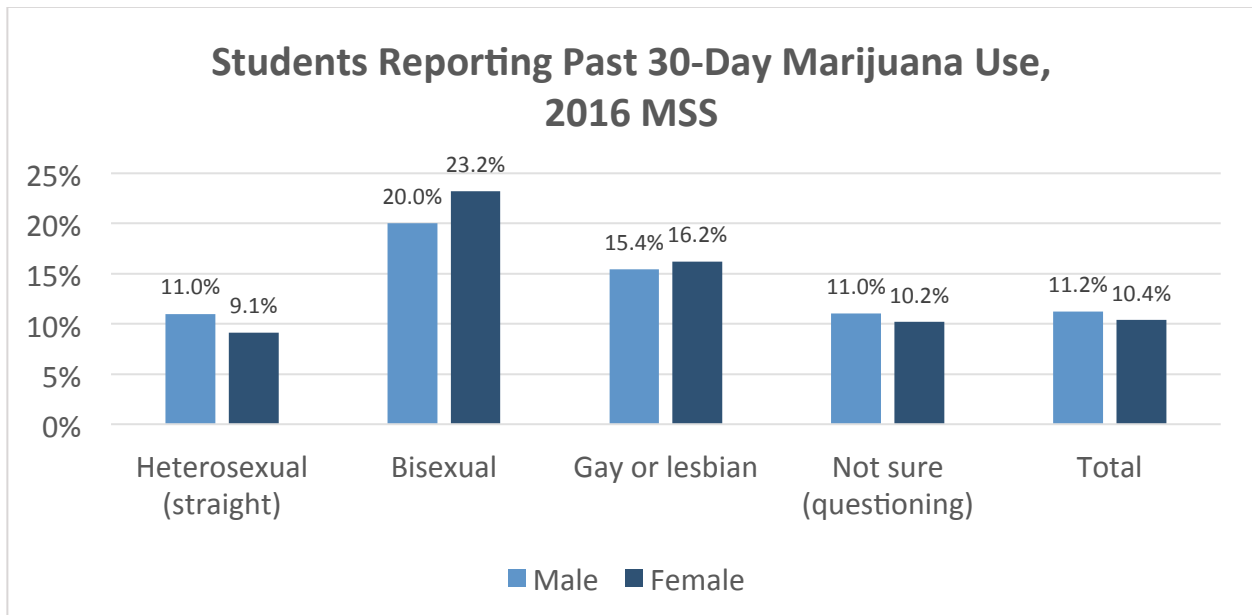


DRUGS

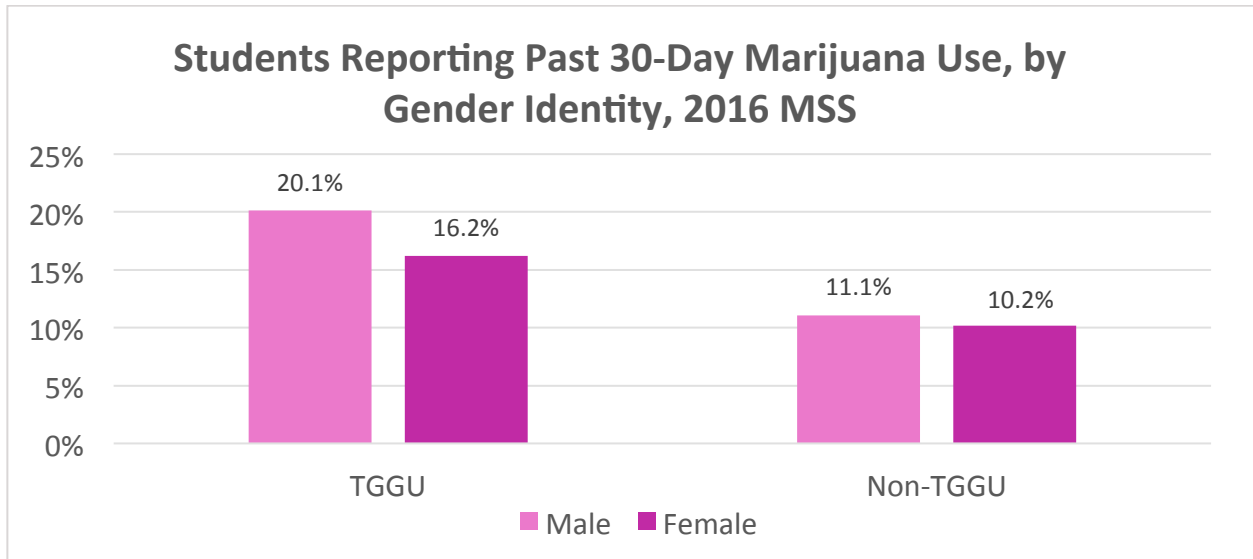
Youth and Adults: Use Rates and Perceptions of Harm

YOUTH USE

In 2016, 22.6% of bisexual and 15.9% of gay and lesbian 9th and 11th grade students reported any past 30-day marijuana use, as compared to the state average of 10.8%. Among students questioning their sexuality, 10.5% reported any past 30-day marijuana use.

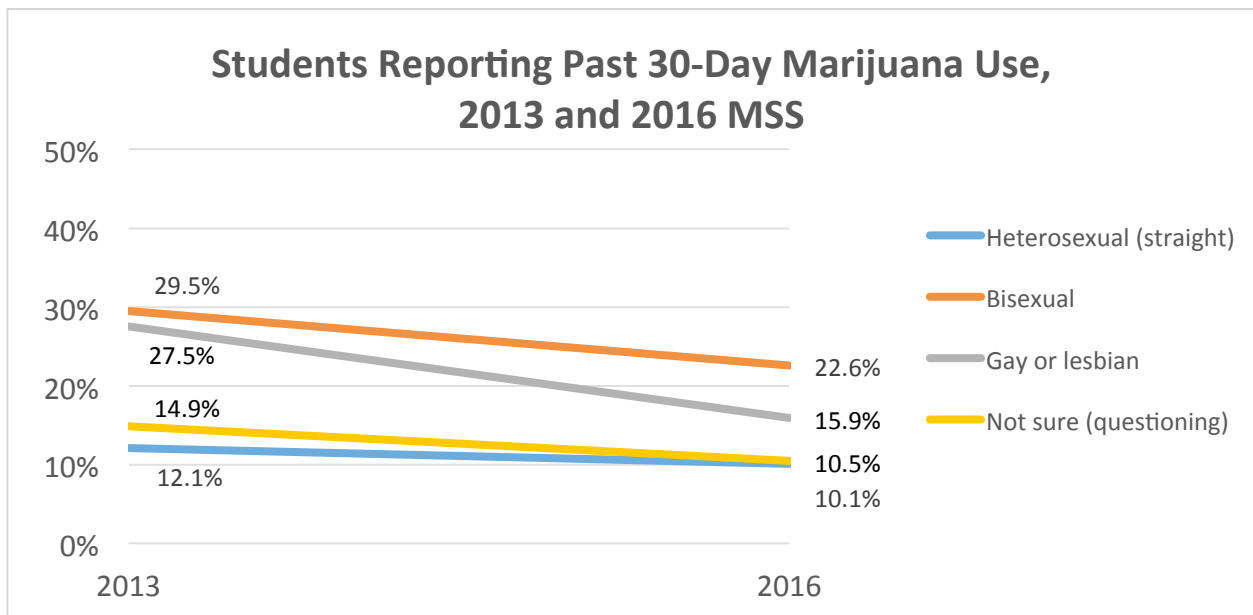


Lesbians and female bisexual students in 9th and 11th grade were somewhat more likely than males to report current marijuana use in 2016: 16.2% and 23.3% for female students, respectively, vs. 15.4% and 20.0% of gay and bisexual males. Use rates for 9th graders were higher than those for 11th graders, for all groups: 19.3% vs. 16.5% for bisexuals; 11.9% vs. 19.8% for gay and lesbian students; and 6.4% and 17.3% for questioning students.

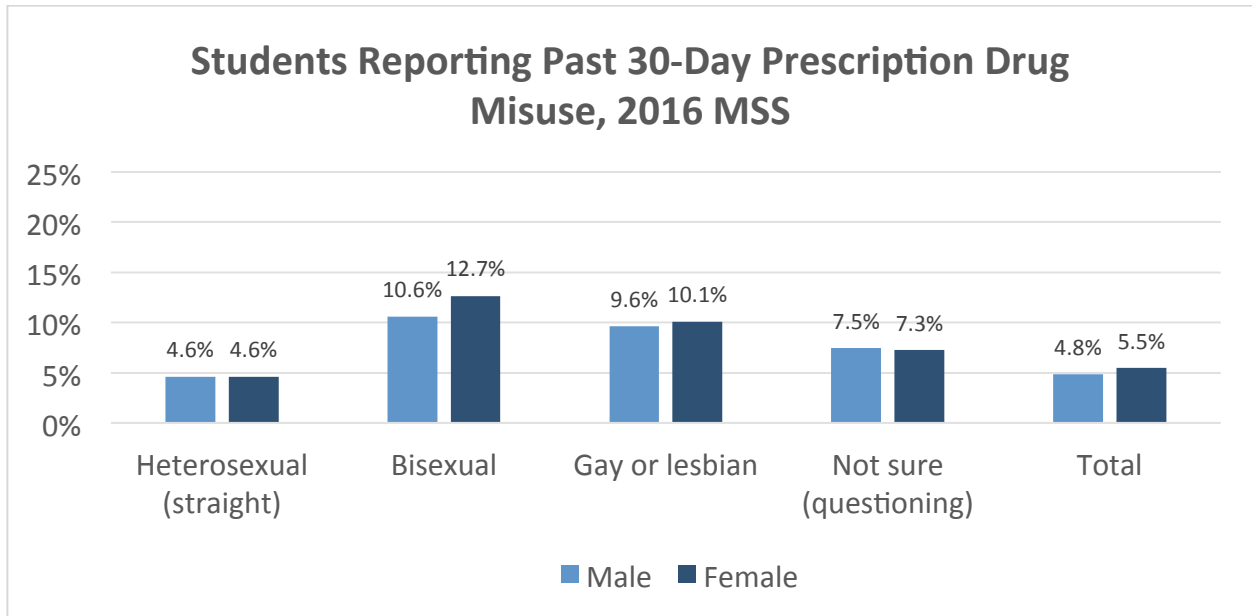


Male TGGU students were more likely than female to report past-month marijuana use, as with non-TGGU students. Male TGGU students were nearly twice as likely as non-TGGU students to have reported marijuana use.

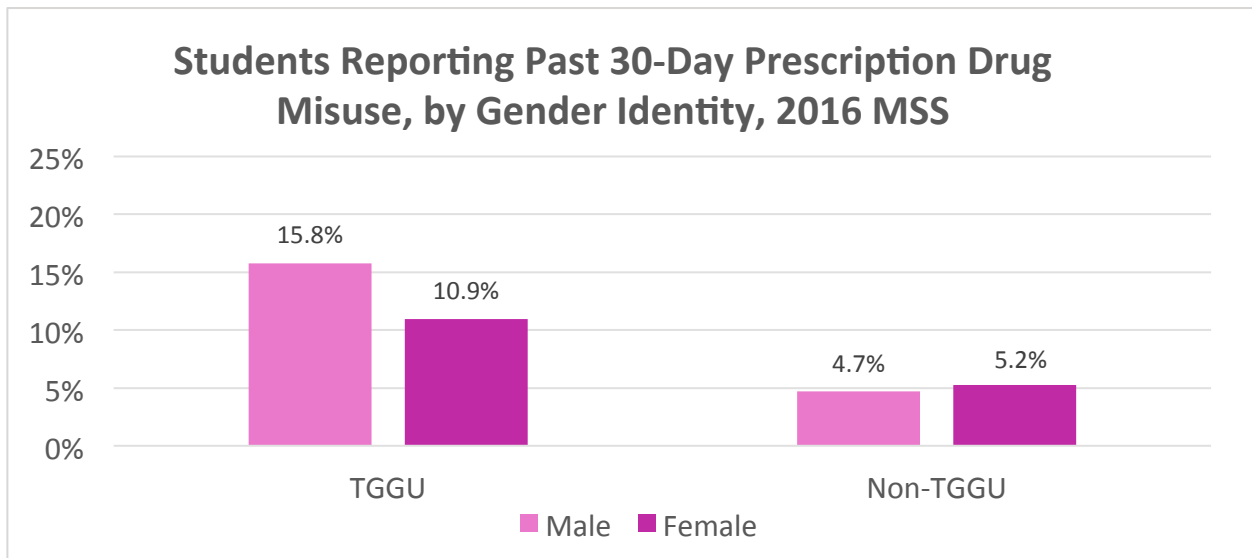
However, all groups reported lower use rates in 2016 than in 2013. The reduction was especially pronounced for lesbian and gay students, where the rate dropped by nearly 60%.



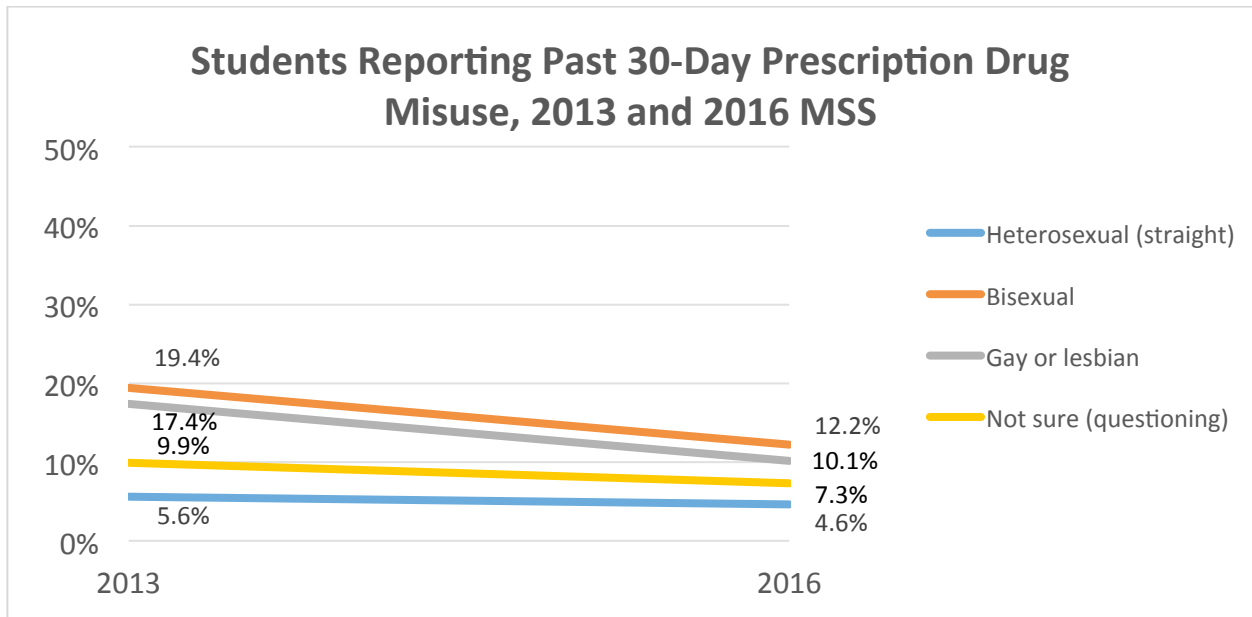
In 2016, 12.2% of bisexual and 10.1% of gay or lesbian 9th and 11th grade students reported any past 30-day use of prescription drugs not prescribed for them (taken only to get high) as compared to the state average of 5.2%. Among students questioning their sexual identity, 7.3% of 9th and 11th grade students reported any past 30-day prescription drug misuse.



The highest rates of past-month prescription drug misuse for all groups were reported by male TGGU students, at 15.8%, over 3 times the rate of non-TGGU students.

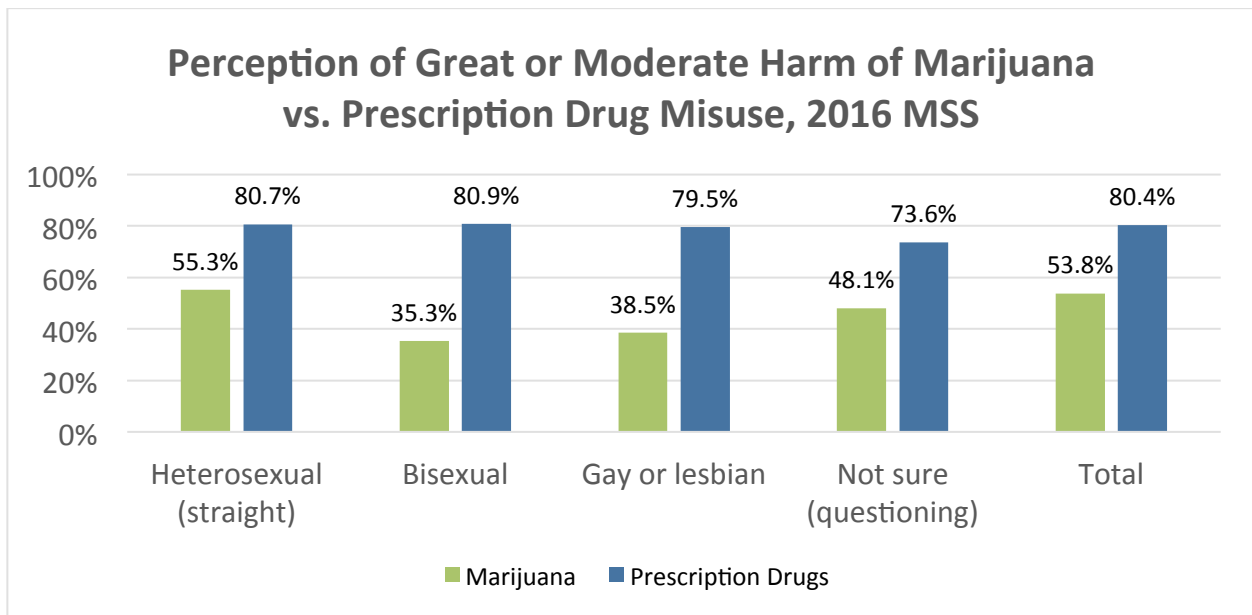


Reported misuse of prescription drugs was lower in all groups in 2016 than in 2013. Use by bisexual and gay and lesbian students decreased by about 40%, while questioning and heterosexual students saw small decreases.



YOUTH PERCEPTION OF HARM

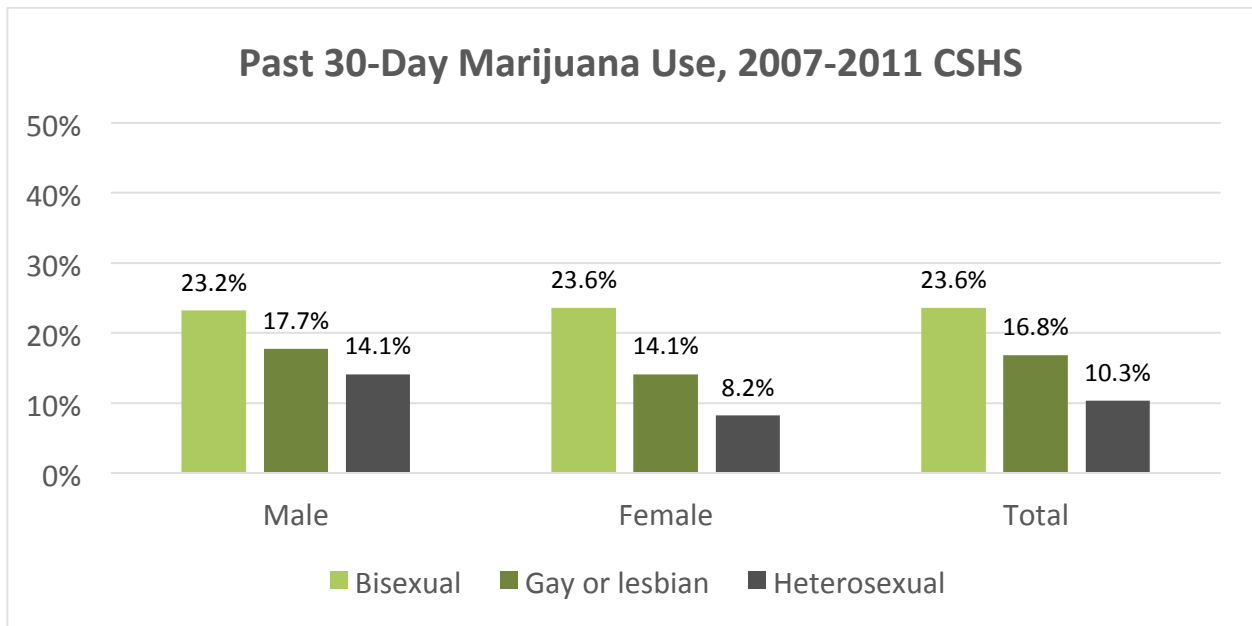
According to the Minnesota Student Survey, bisexual and gay or lesbian 9th and 11th grade students were much less likely to report in 2016 that they believe people put themselves at great or moderate risk of harm by smoking marijuana once or twice per week as compared to the state average: 35.3% and 38.5% for bisexual and gay or lesbian students, respectively, vs. 53.8% for the state average.



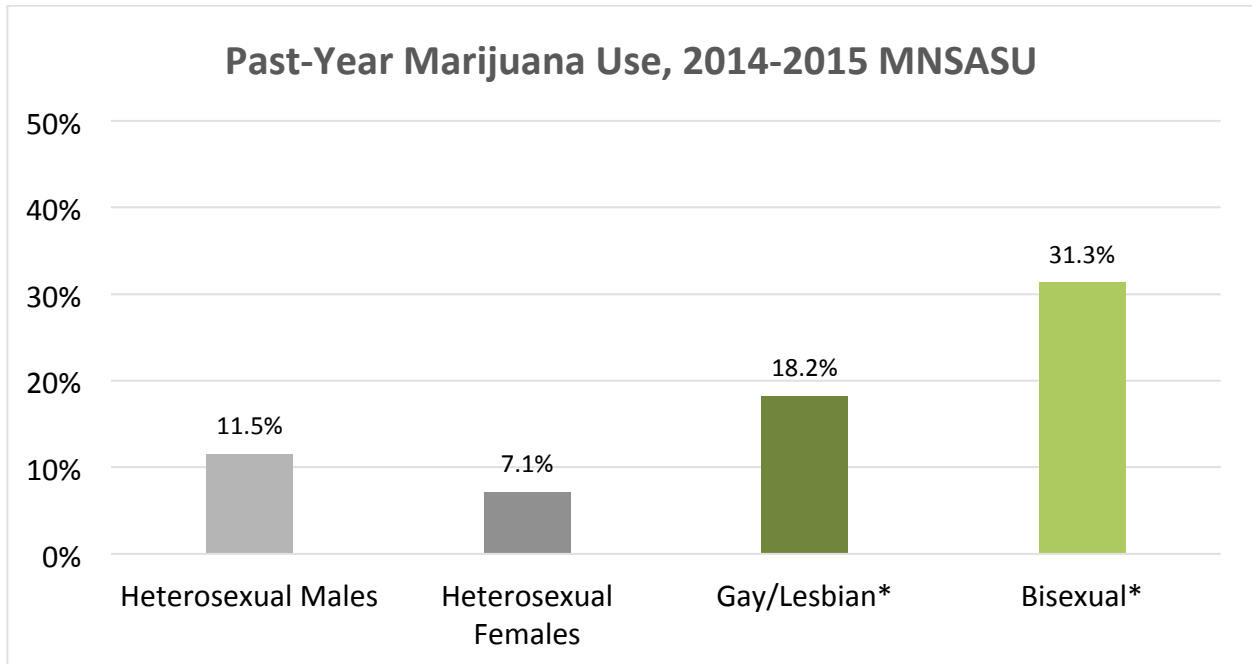
Bisexual students were about as likely as the average to report that they believe people put themselves at great or moderate risk of harm by using prescription drugs not prescribed for them: 80.9% vs. 80.4%. Questioning students were the least likely to perceive harm—only 73.6% reported risk—and gay and lesbian students were close, at 79.5%. The perception of great or moderate risk of harm was much higher for prescription drug misuse than for marijuana.

ADULT USE

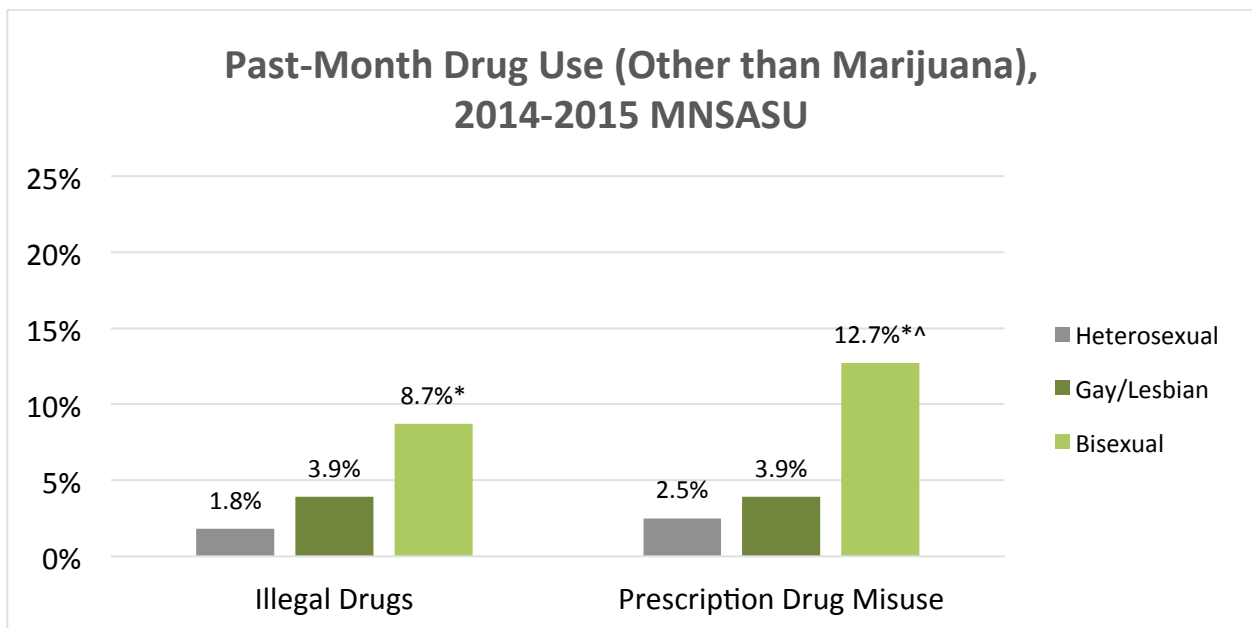
According to the CSHS, gay and lesbian adult students to report much higher use of past 30-day marijuana use than heterosexual students, at 16.8% vs. 10.3%, with bisexual students reporting the highest rates at a total of 23.6%.



The MNSASU measures both past-month and past-year marijuana use, but small sample sizes prevented a statistically valid portrayal of LGB past-month use. The past-year marijuana use rate for bisexual respondents was 3.5 times the rate for heterosexuals, at 8.9%. NSDUH found a slightly higher but similar average marijuana use rate in 2014: 12.3% for adults 18 and over.



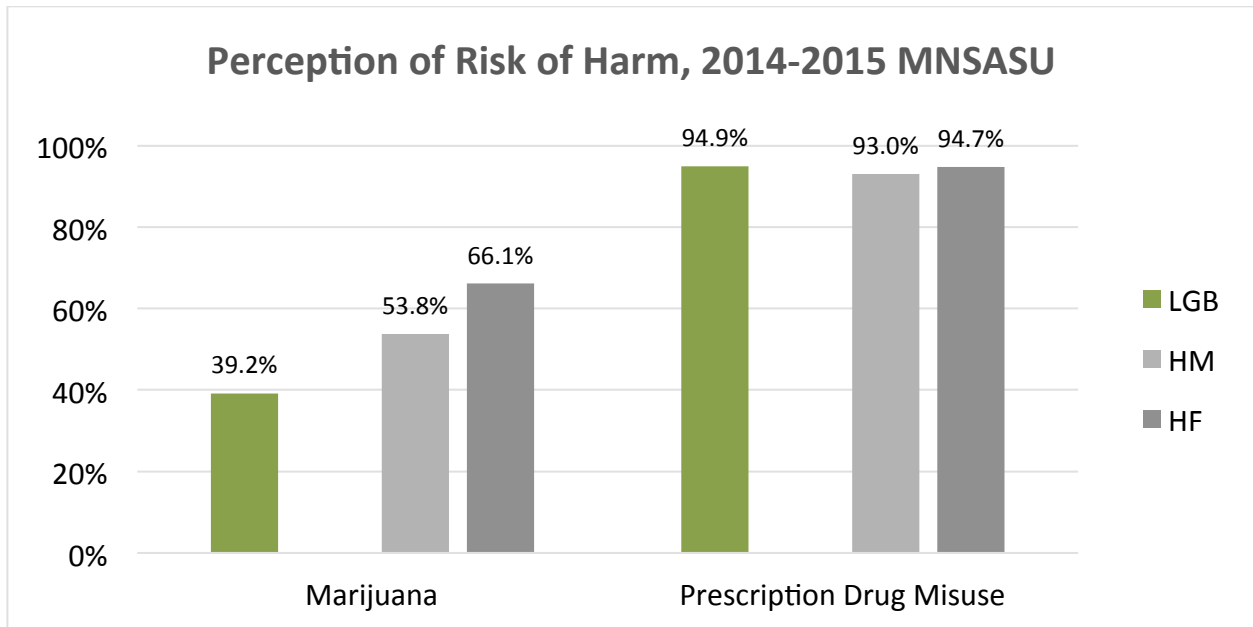
The MNSASU found other drug use rates were also higher for LGB respondents: while rates for lesbians and gays were somewhat higher, bisexual respondents were 4.8 and 5.1 times as likely as heterosexuals to report illegal drug use and prescription drug misuse, respectively. Again, the illicit drug use rate for heterosexuals is similar to that found by NSDUH: 2.8%.



ADULT PERCEPTION OF HARM

According to NSDUH, 22.2% of adults 18 and over perceive great risk of smoking marijuana once a month. The MNSASU reports that 60% of adults report moderate or great risk of smoking marijuana. However, they found much lower perceptions of harm of marijuana use in

the LGB population. Perceptions of harm of prescription drug use are similar for LGB and heterosexual respondents.



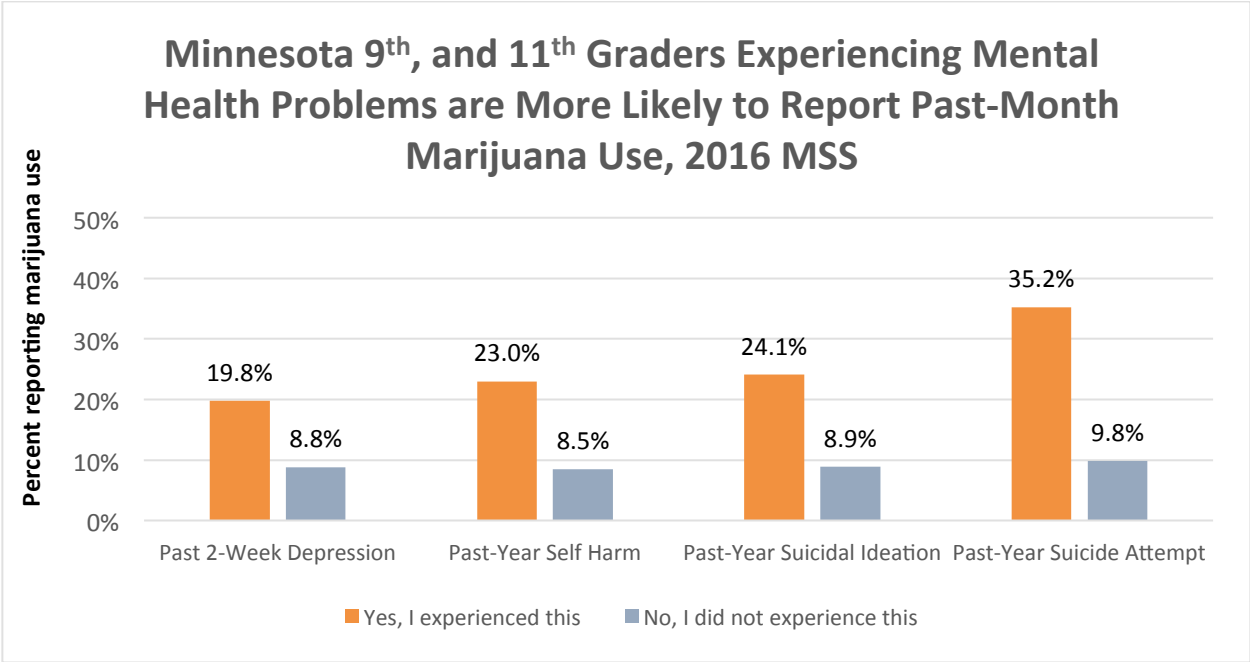


MENTAL HEALTH

Youth and Adults: Depression and Suicide

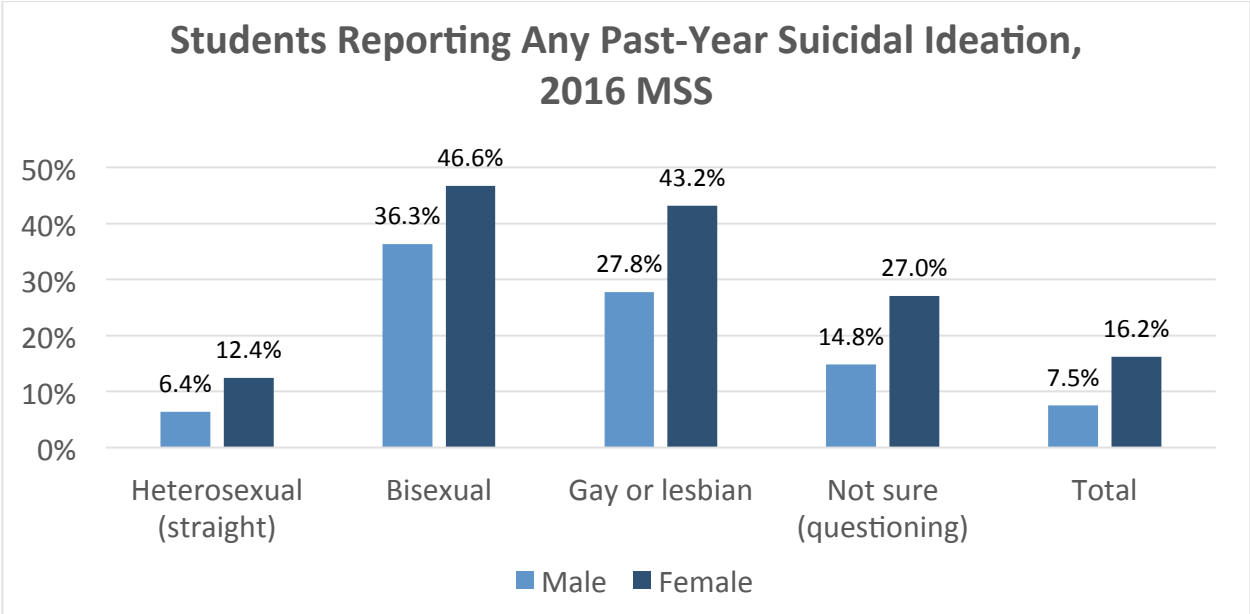
We know from national research literature that substance use is a risk factor for mental health problems, and, in turn, mental health problems are a risk factor for substance use. We also know that many Minnesotans suffer from co-occurring substance use and mental health disorders.

As an example, Minnesota students who reported feeling depressed in the past 2 weeks, suicidal thoughts or attempts 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 nearly 3 times as likely to report past 30-day marijuana use, and those who experienced a suicide attempt are over 3.5 times as likely to report marijuana use.

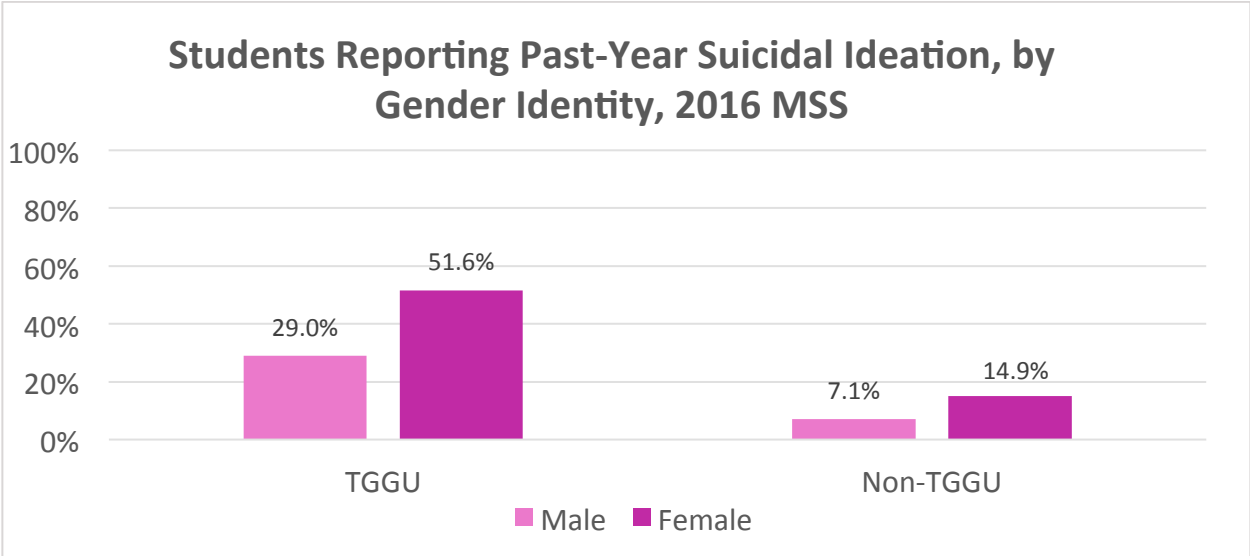


YOUTH SUICIDAL IDEATION

Minnesota Student Survey findings from 2016 show that bisexual and gay or lesbian 9th and 11th grade students were much more likely than the state average to report past-year suicidal ideation: 44.6% and 36.5% for bisexual and gay and lesbian students, respectively, vs. 11.9% for the state average. Female students, on average, were twice as likely as male students to report suicidal ideation. Bisexual female students reported rates at more than 4 times the state average (at 46.6%) and lesbian students at over 3 times the average (at 43.2%).



Female TGGU students are even more at risk: 51.6% have reported having suicidal thoughts in the past year. Both male and female TGGU students are more than 3.5 times as likely as non-TGGU students to report suicidal ideation.

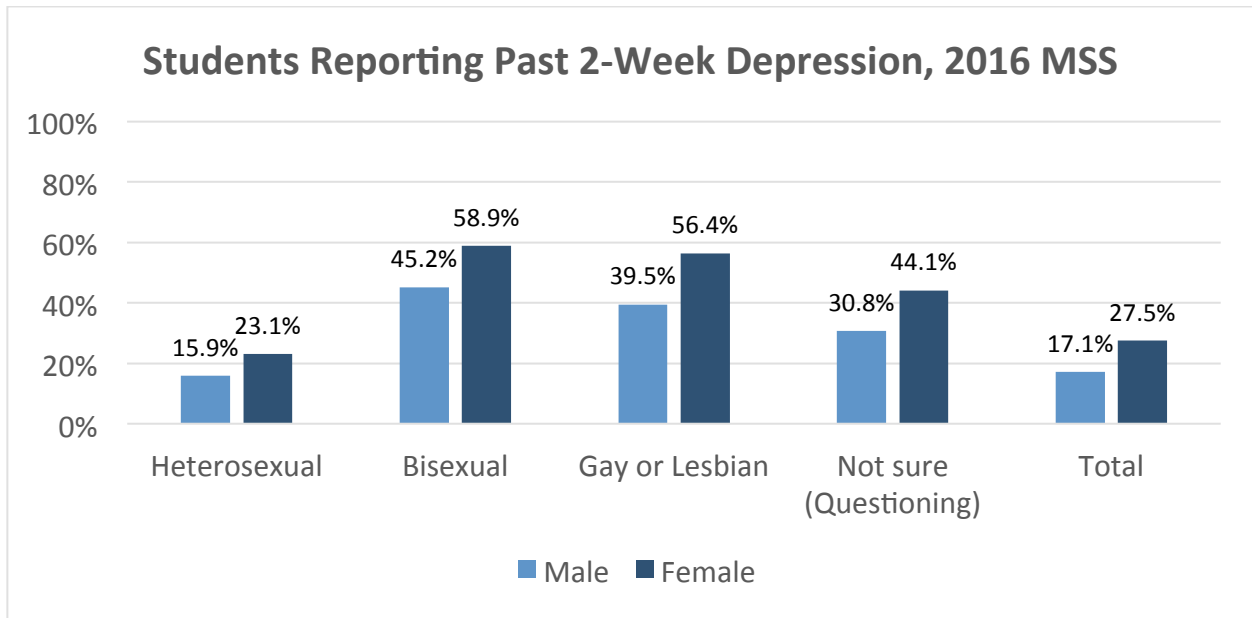


As well as questions about suicide, the 2016 Minnesota Student Survey asks two main questions about students' mental health, taken from the Patient Health Questionnaire-2 (PHQ-2)¹ version of the Primary Care Evaluation of Mental Disorders depression screener:

- Over the last 2 weeks, how often have you been bothered by little interest or pleasure in doing things?
- Over the last 2 weeks, how often have you been bothered by feeling down, depressed, or hopeless?

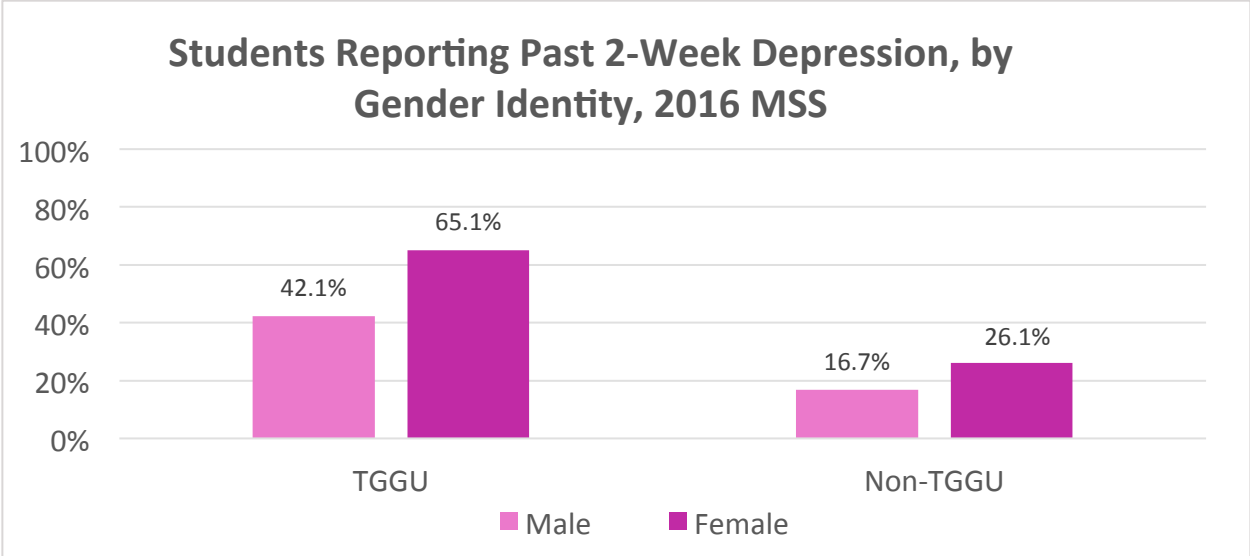
For both, the response options include *Not at all*, *Several days*, *More than half the days*, and *Nearly every day*. When coded together, scores range from 0 to 6; any response of a 3 or higher is considered a positive screen for a depressive disorder.

Bisexual gay and lesbian, and questioning students all have higher rates of positive screens for depression. In each subgroup, female students are more likely than male to report depressive symptoms.



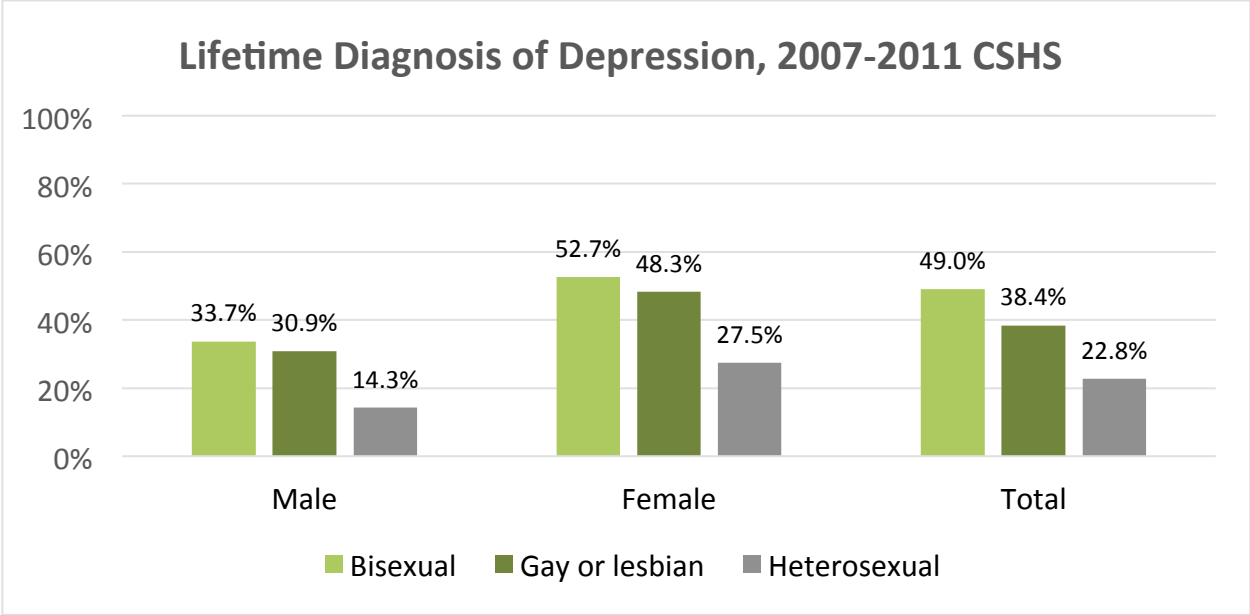
Rates of depressive symptoms are even higher for female TGGU students: 65.1% met the criteria for a depressive disorder, according to the screening tool.

¹ Kroenke, K., Spitzer, R.L., Williams, J.B. (2003). The Patient Health Questionnaire-2: validity of a two-item depression screener. *Medical Care*, 41:1284–92.



ADULT MENTAL HEALTH

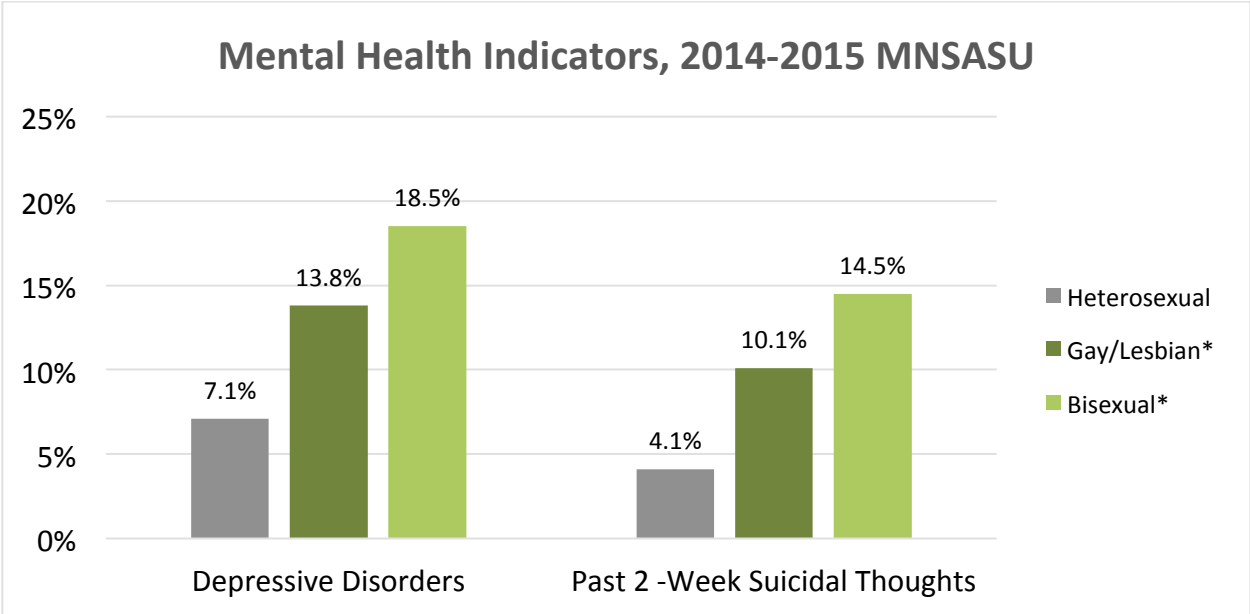
According to the CSHS survey, bisexual adult students were most likely to report a diagnosis of depression during their lifetimes, followed by gay and lesbian students. Female students were more likely than male students to report a depression diagnosis.



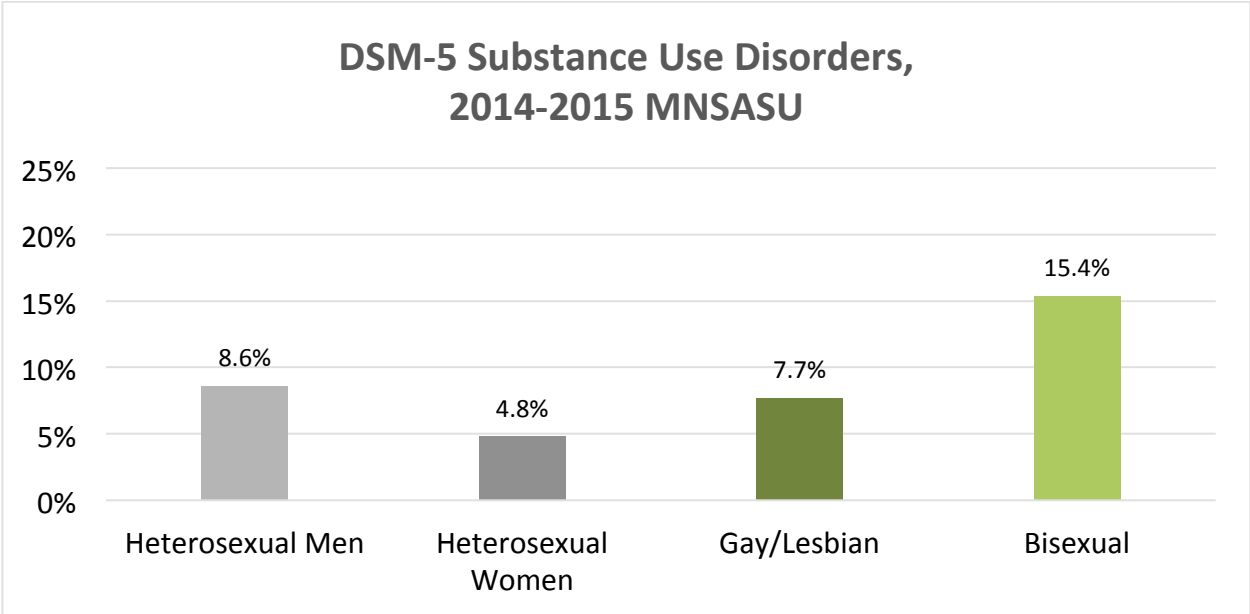
The 2013 VOH survey found that 42.6% of LGBTQ respondents reported current depression, while 36.7% reported anxiety.

The MNSASU measured rates of at least moderate symptoms of depression and thoughts of suicide in the past 2 weeks. LGB respondents were more than twice as likely as heterosexuals

to report past 2-week depressive symptoms and suicidal thoughts; bisexual respondents were the most likely to report either, at 2.6 and 3.5 times the rates of heterosexuals for depressive disorders and suicidal thoughts, respectively.



The MNSASU also measured indications of substance use disorders for alcohol or other drugs, according to DSM-5 criteria. As a whole, LGB respondents were nearly 1.5 times as likely as heterosexual males to report substance use disorders (12.1% vs. 8.6%), and 2.5 as likely as heterosexual females (at 4.8%). Bisexual respondents made up much of the difference, at twice the rate of gay and lesbian respondents.





RISK + PROTECTIVE FACTORS

Youth: ACEs, Bullying, and Feeling Safe and Supported

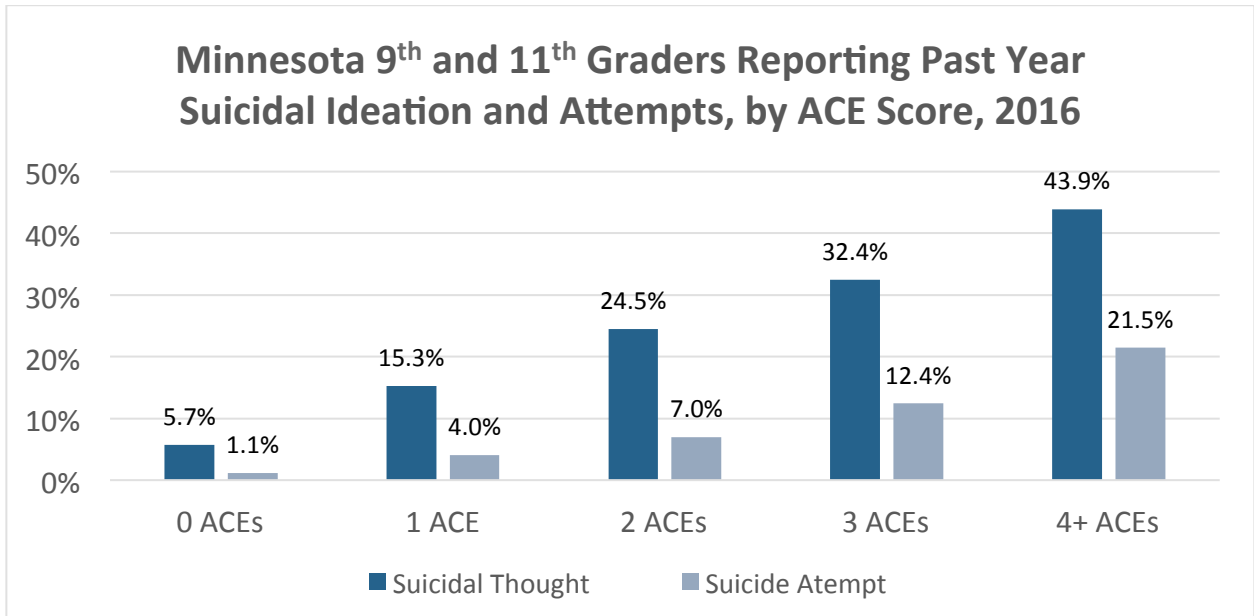
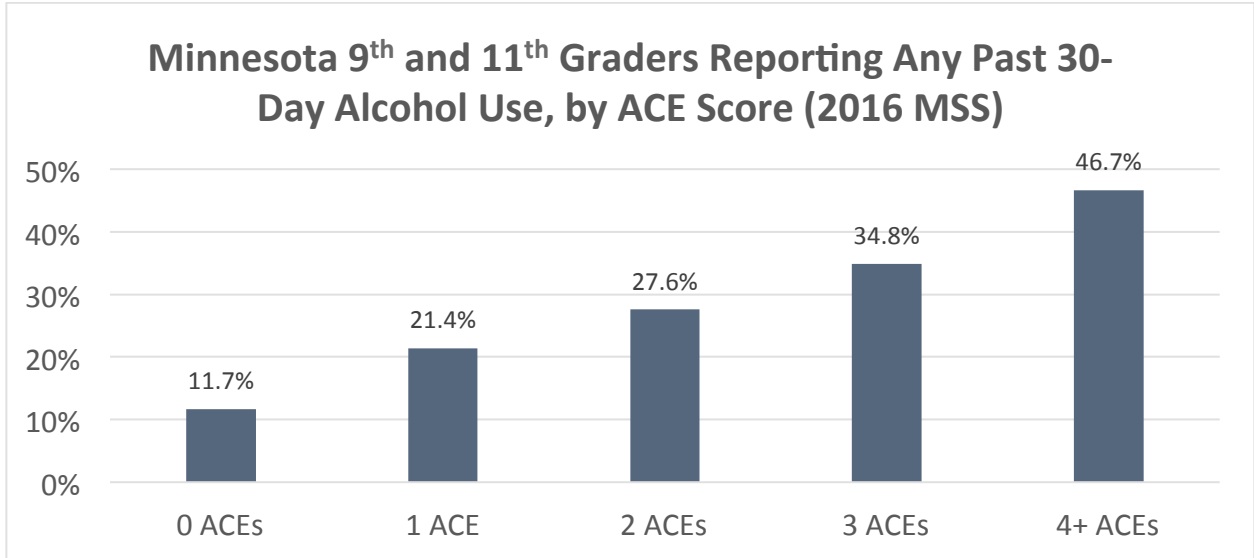
Risk factors are characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of problem outcomes; protective factors are characteristics associated with a lower likelihood of problem outcomes or that reduces the negative 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)

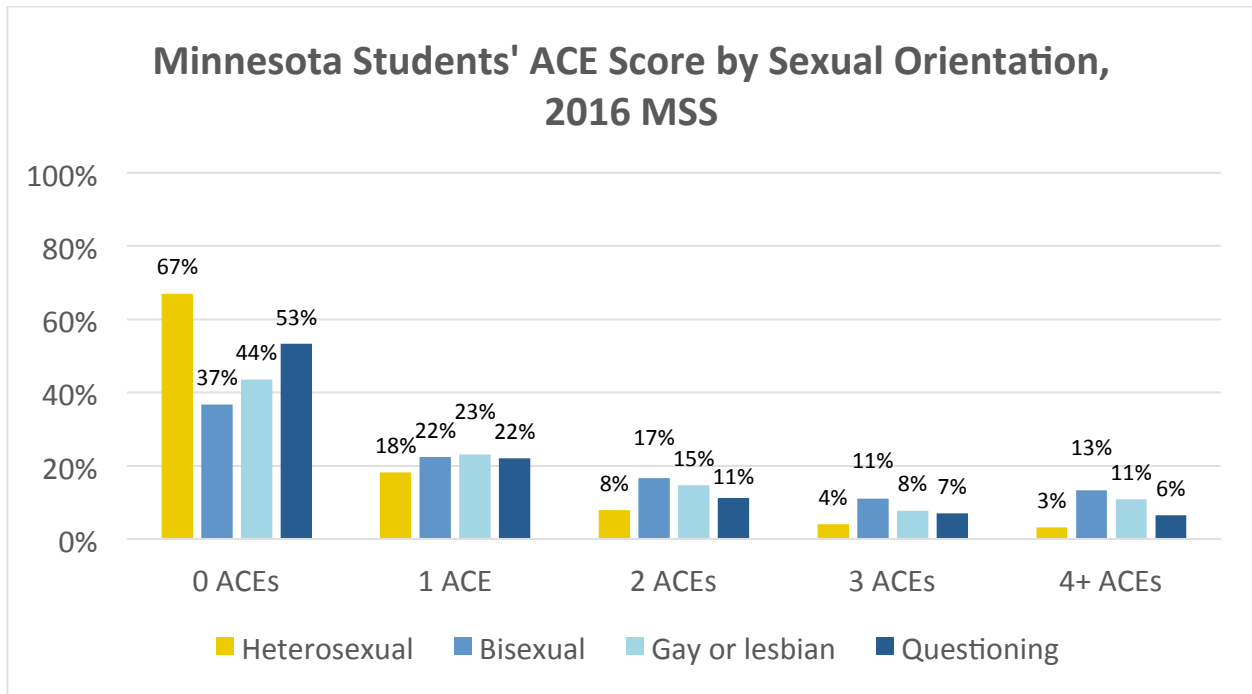
The Adverse Childhood Experiences (ACE) Study was a collaboration between the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente's Health Appraisal Clinic in San Diego. The study found that childhood experiences of abuse, neglect, and family dysfunction are linked to leading causes of illness, poor quality of 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 0 to 7, 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

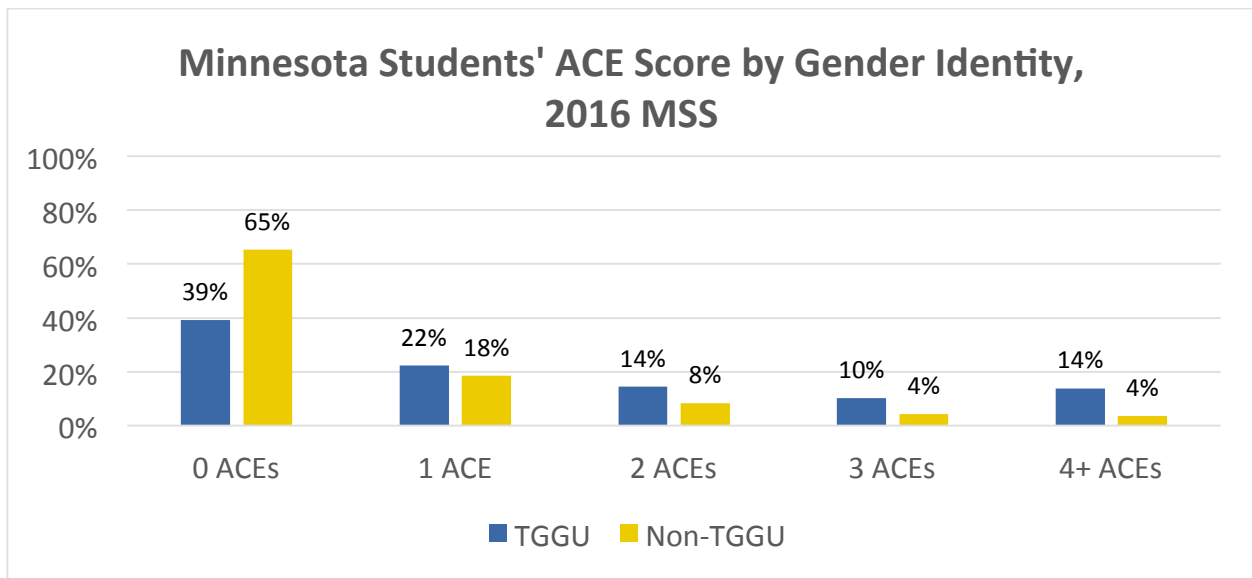
Past 30-day alcohol use increases incrementally with ACE score, as do past year suicidal ideation and attempts. While not shown here, each increase in ACE score is also associated with increased marijuana use, increased cigarette smoking, lower grades, lower feelings of safety at school, home or in the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



Among students responding to the 2016 Minnesota Student Survey, bisexual students were the least likely to report an ACE score of 0 (36.7%), followed by gay or lesbian students (43.6%), and then questioning students (53.2%). Overall, 64.6% of students reported an ACE score of 0.



Bisexual students were also more likely to report an ACE score of 4 or more (at 13.3%), followed again by gay or lesbian students at 10.9%, and questioning students, at 6.5%. The average for all students reporting an ACE score of 4 or more was 3.8%.



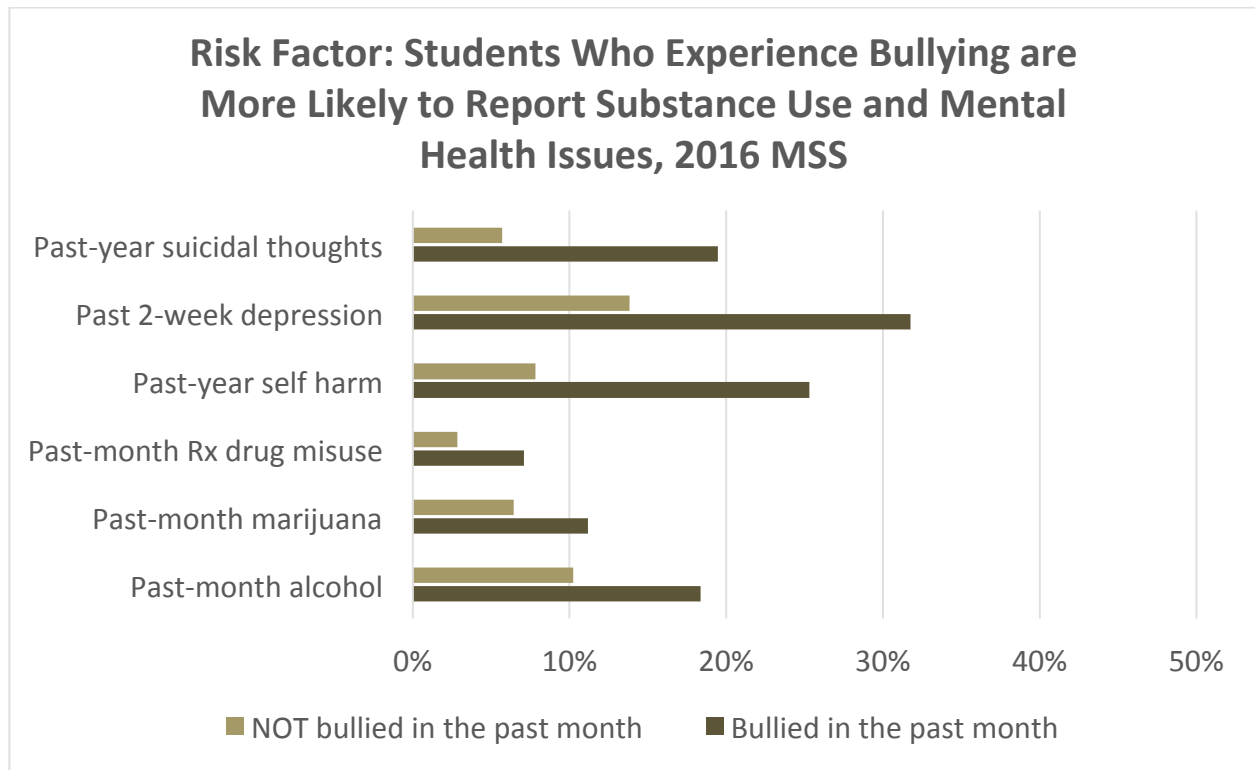
The number of ACEs was also high for TGGU students. The number of TGGU students with no ACEs was 40% lower than that of non-TGGU students. And while the overall number of TGGU students with 4+ ACEs is relatively small (13.8%), it's nearly 4 times that of non-TGGU students.

BULLYING

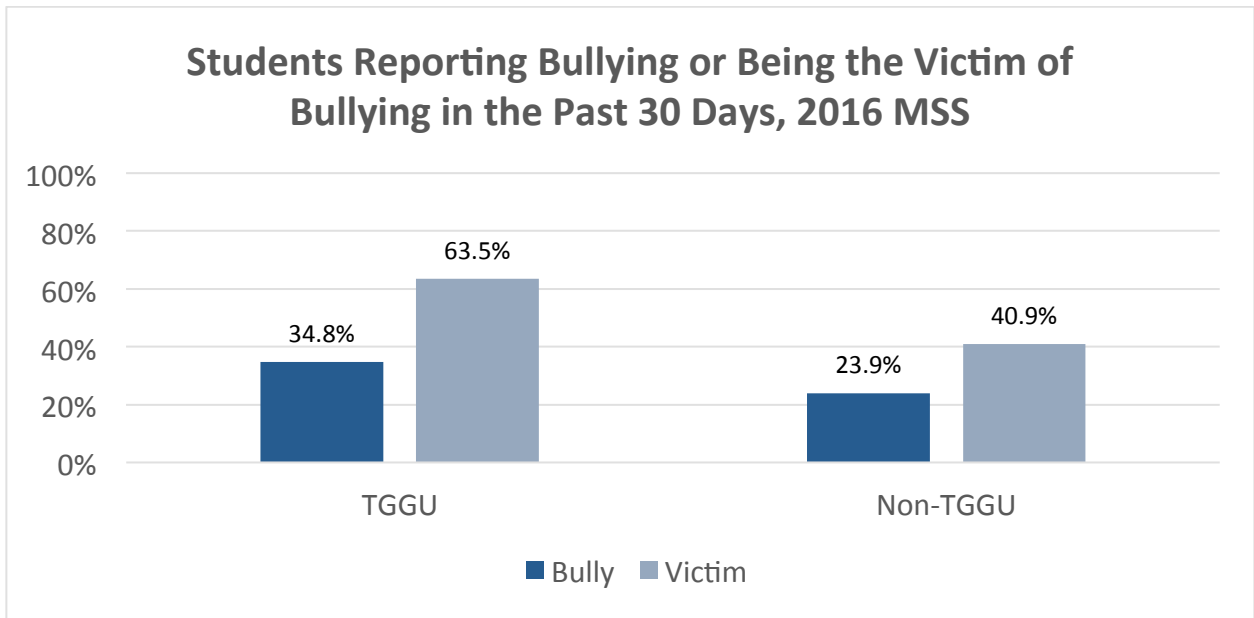
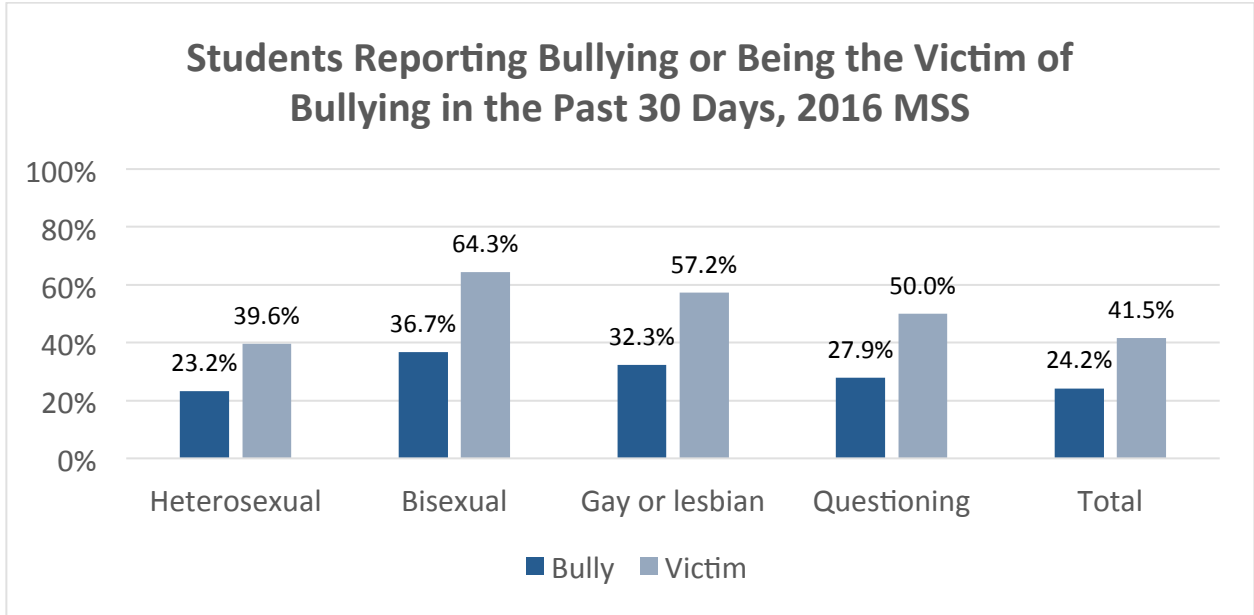
The 2016 Minnesota Student Survey included a number of measures of bullying and harassment. One way to measure exposure to bullying behavior (being a “victim”) is to assess the percentage of students reporting any times in the past 30 days other students at school:

- 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

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.

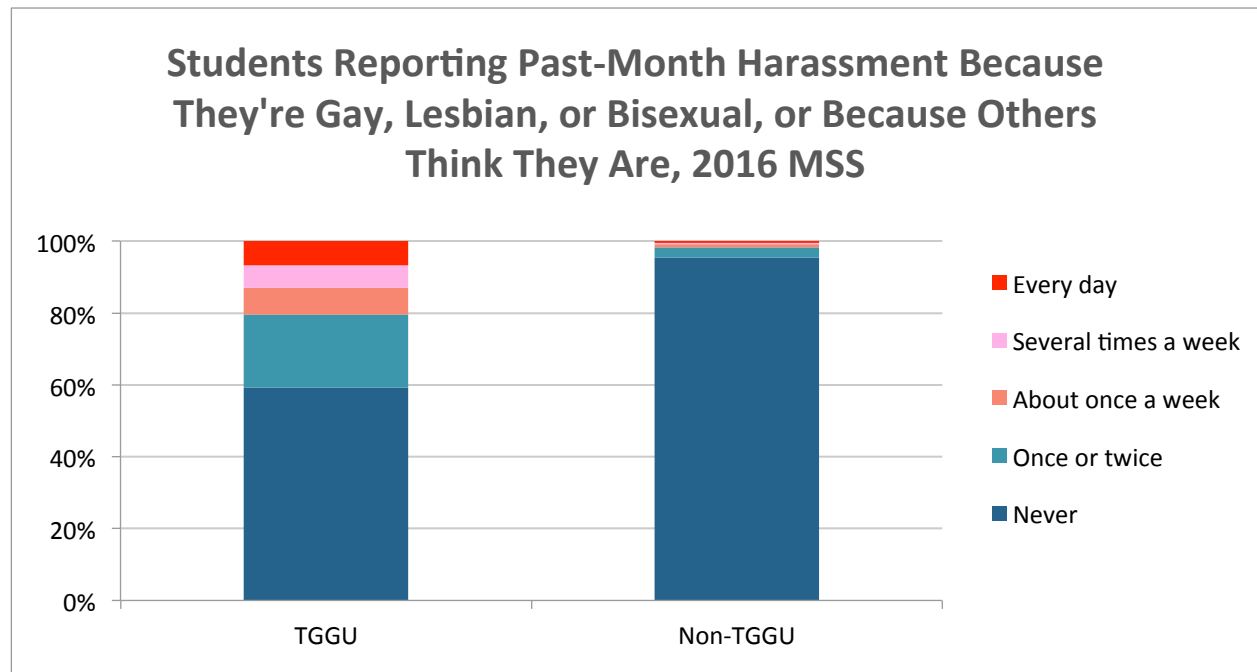
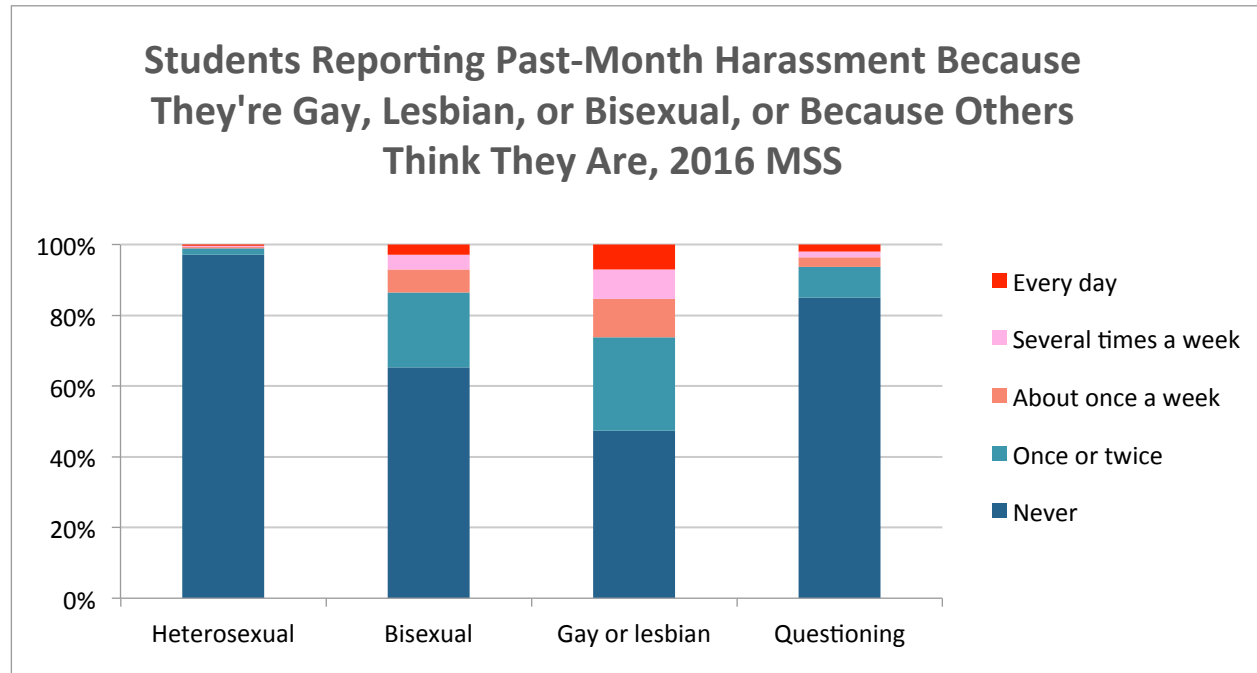


Compared to the state average, bisexual and gay and lesbian students were more likely to report being a victim only in the past 30 days (at 64.3% and 57.2%, respectively, vs. 41.5% for the average), and also more likely to report being a bully only in the past 30 days (36.7% and 32.3%, respectively, vs. 24.2% for the average)

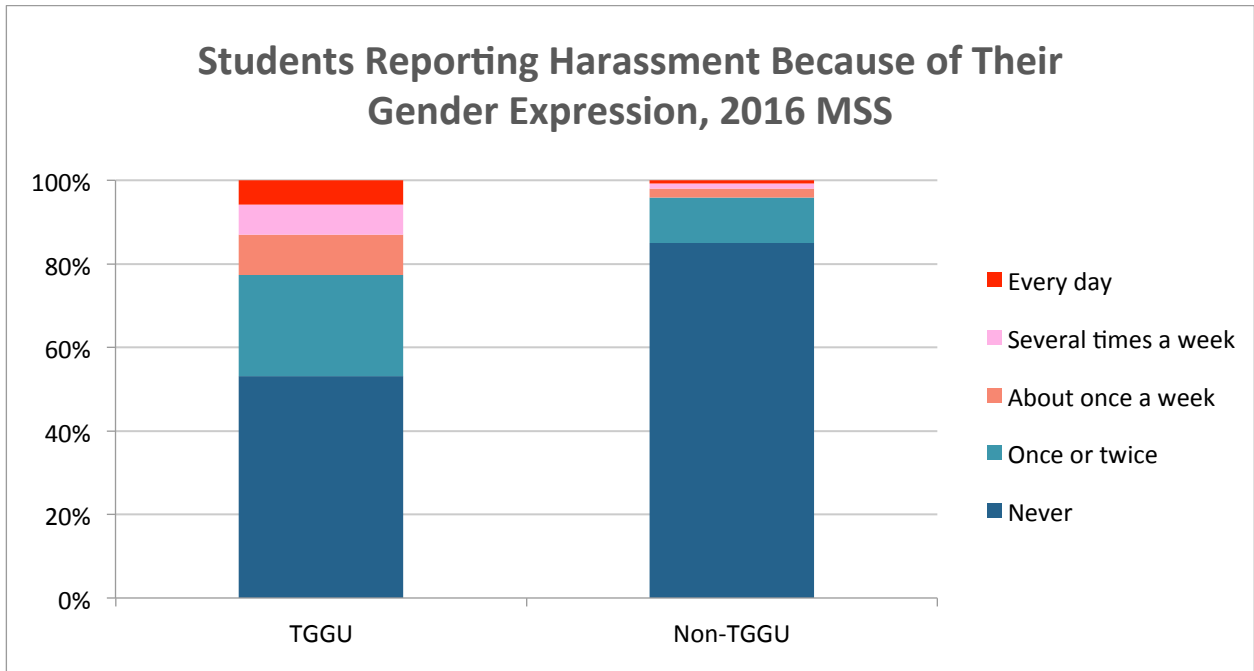
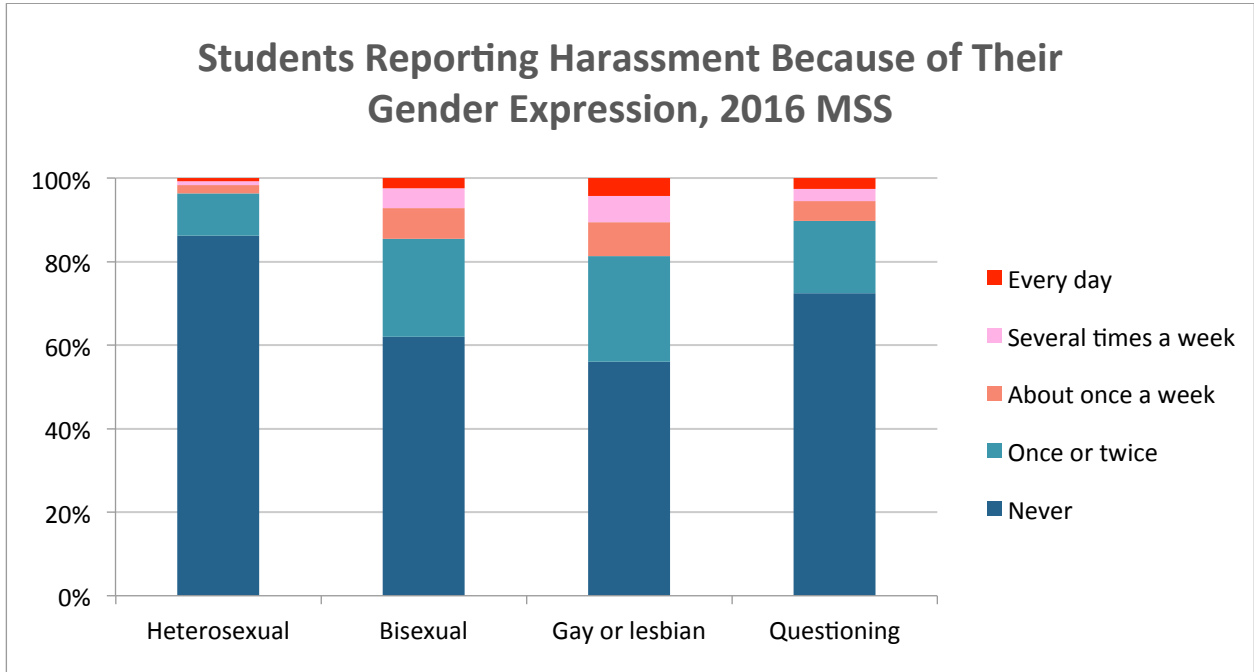


TGGU are also more likely than non-TGGU students to be both victims and bullies themselves.

LGBQ students, as well as TGGU students, are, perhaps unsurprisingly, more likely to be bullied more often either because of their status as sexual or gender minorities, or the bullies' perception thereof. Over 50% of gay or lesbian students report being harassed at least once in the past month, with 7% reporting harassment every day. TGGU students are bullied about as often: almost 40% report at least monthly harassment, and 6.8% report daily harassment.

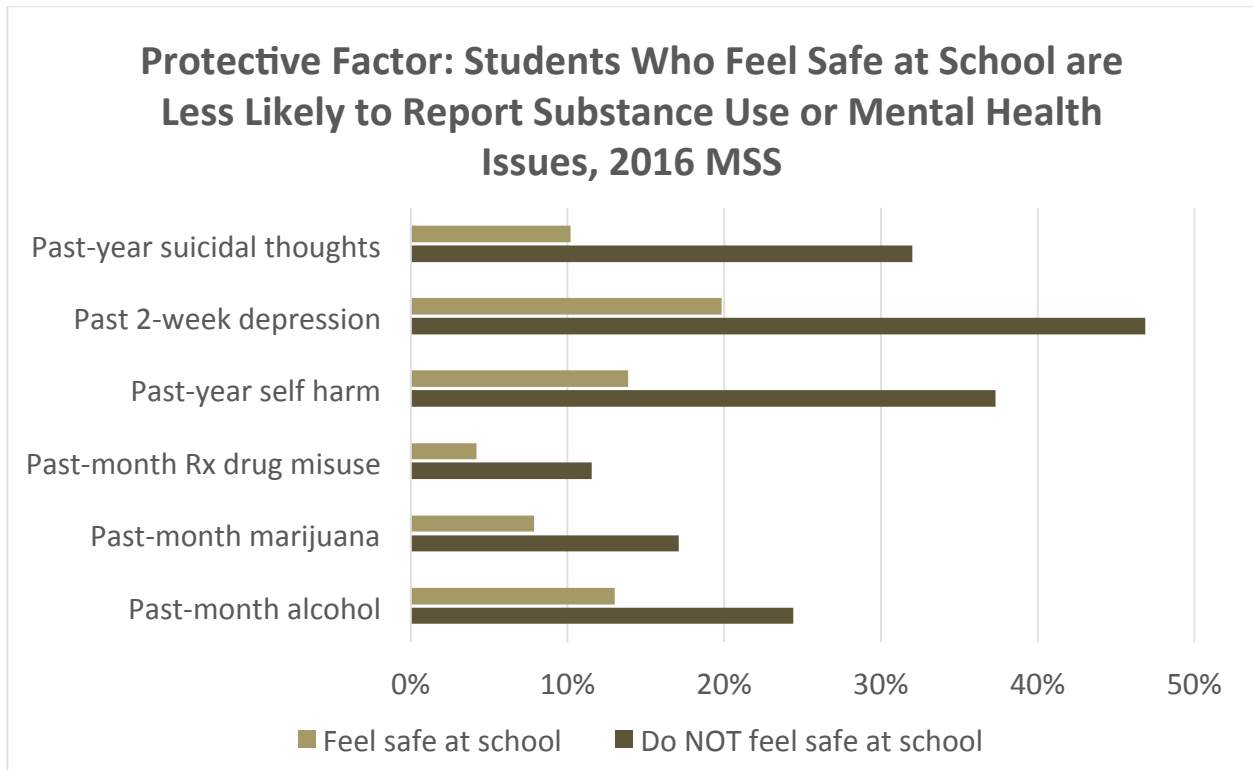


LGBQ students are slightly less likely to be bullied for their gender expression than for being a sexual minority; however, TGGU students are slightly more likely.

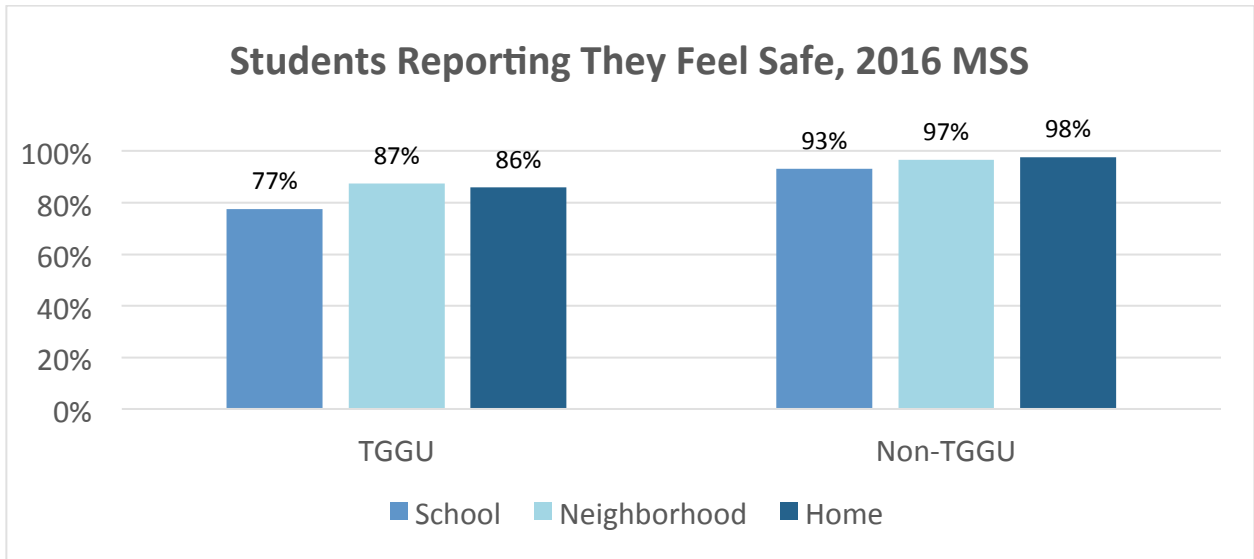
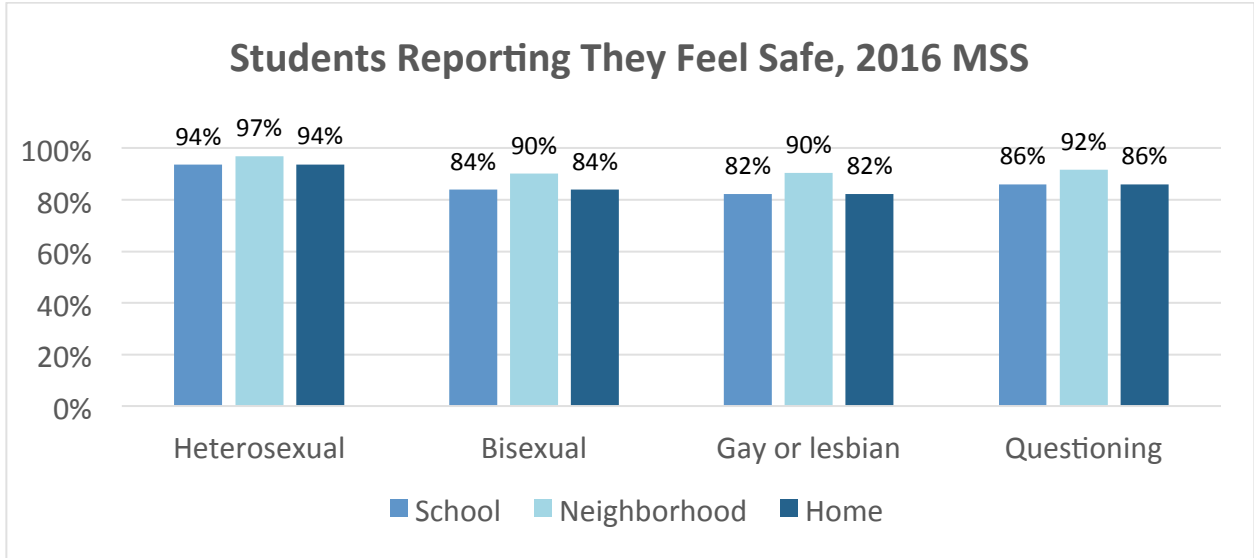


SAFETY

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 Minnesota Student Survey, bisexual, gay and lesbian, and questioning students are more likely than the state average to report not feeling safe at school.

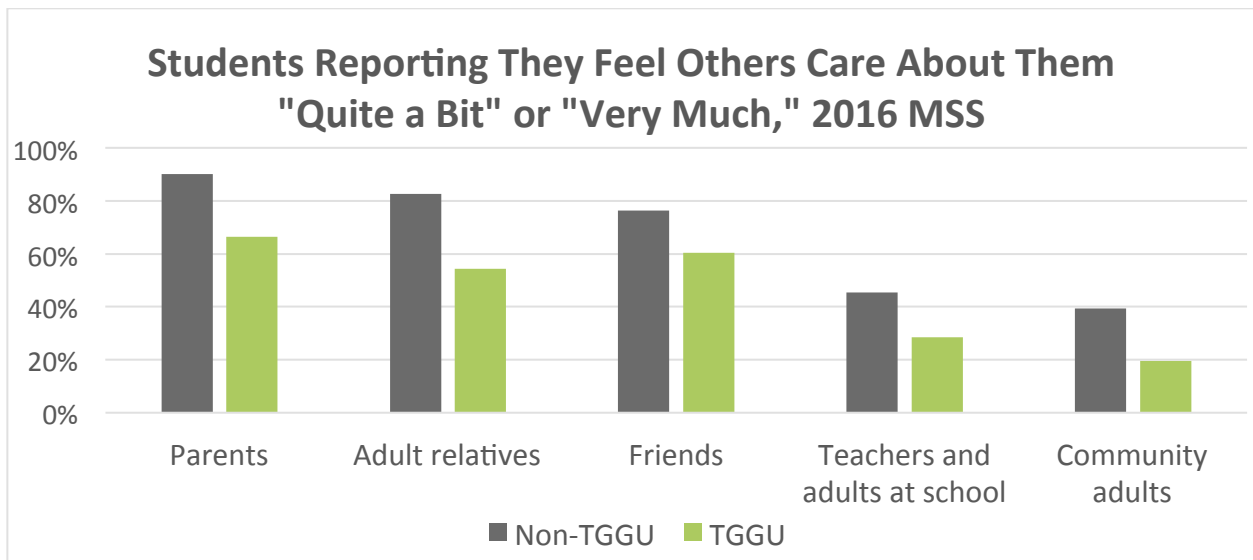
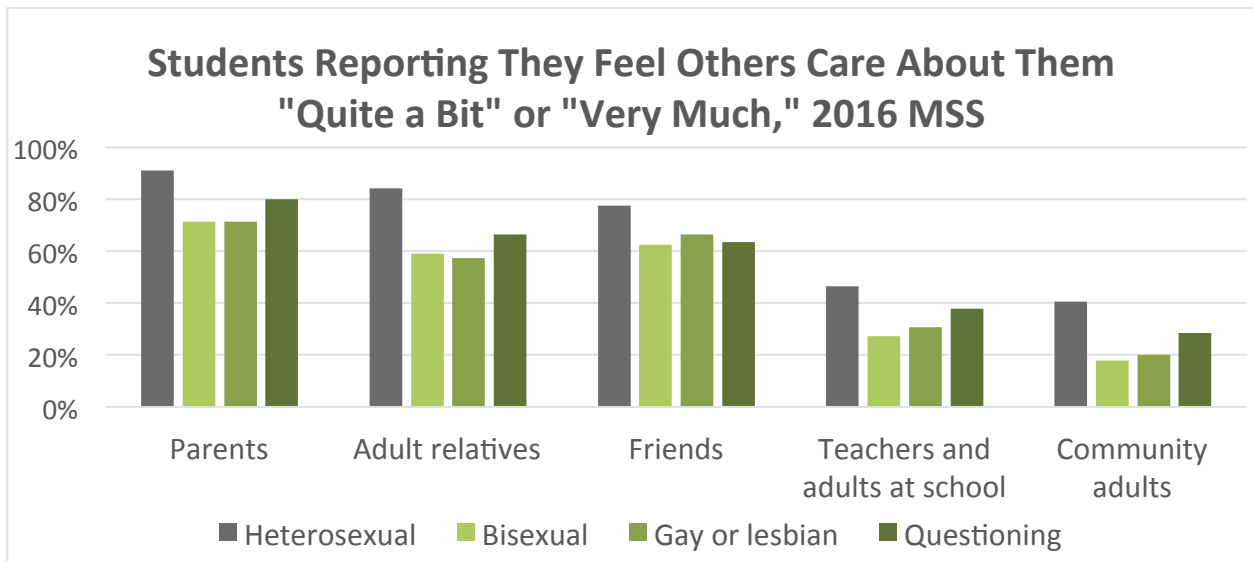


Youth who feel safe in their neighborhoods are also less likely to report past month substance use or past year mental health problems. In 2016, sexual and gender minority students were less likely to say they “strongly agree” or “agree” that they feel safe in their neighborhoods, compared to the state average.



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 2016, sexual and gender minority students were consistently less likely than the state average to report feeling that others care about them very much. With the exception of adult relatives and parents, bisexual students reported the lowest levels of reporting that others care about them, with gay and lesbian students reporting second-lowest levels, and questioning students third-lowest.





DATA SOURCES

CDC COMPRESSED MORTALITY 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 2015. 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>

2007-2011 COLLEGE STUDENT HEALTH SURVEY: MINNESOTA POSTSECONDARY LESBIAN, GAY, AND BISEXUAL STUDENTS

The University of Minnesota's Boynton Health Service designed the College Student Health Survey (CSHS) to examine the health of their students. Topics included in the survey are health insurance and health care utilization, mental health, alcohol and drug use, tobacco use, personal safety, financial health, nutrition and physical activity, and sexual health. The University and partner institutions have administered the survey since 1995, using random sampling of students from over 40 two- and four-year postsecondary institutions in Minnesota. The report developed for LGB students encompasses data for the years 2007 to 2011 and is based on responses from 1,303 self-identified gay, lesbian and bisexual students.

https://www.bhs.umn.edu/surveys/survey-results/2007-2011_LGB_CSHSReport.pdf

GALLUP POLL SPECIAL REPORT

The data on the national and state populations of LGBT people were collected through the telephone-based Gallup Daily tracking survey administered by Gallup between June 1 and December 30, 2012.

<http://www.gallup.com/poll/160517/lgbt-percentage-highest-lowest-north-dakota.aspx>

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. Questions regarding sexual orientation were included for the first time in 2013, and those questions were only asked of 9th and 11th graders. A question about gender identity was added to the 2016 survey.

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

<http://education.state.mn.us/MDE/StuSuc/SafeSch/MNStudentSurvey/index.html>

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

NATIONAL SURVEY ON DRUG USE AND HEALTH (NSDUH)

The National Survey on Drug Use and Health (NSDUH) is administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) since 1992; before then, it was administered by the National Institute on Drug Abuse (NIDA). The survey has measured prevalence of drug and alcohol use among those aged 12 years and older, since 1974. Both national and state-level data are available.

<https://www.whitehouse.gov/ondcp/national-survey-on-drug-use-and-health>

VOICES OF HEALTH: A SURVEY OF LGBTQ HEALTH IN MINNESOTA (2014 RESULTS)

The Rainbow Health Initiative is a community-based non-profit organization specializing in health issues of Minnesota’s LGBTQ communities. Their Voices of Health (VOH) survey is performed annually, using convenience sampling at Pride festivals and community events in metropolitan areas, and from online questionnaires. Their survey, of 1,351 LGBTQ persons, is the only survey included in this report to specifically identify transgender respondents.

http://www.rainbowhealth.org/files/4714/2419/5548/2014_Voices_of_Health_Data_Release_Report.pdf