

The Health of Adolescents—2016

Early Results from the 2016 Minnesota Student Survey

The Minnesota Student Survey, an anonymous survey conducted every three years, is a major source of information about the thoughts and experiences of Minnesota’s young people. Eighty-five percent (85%) of Minnesota school districts participated in the 2016 survey, and nearly 169,000 students in regular public schools took the survey. This fact sheet provides a sampling of some of the results related to the health of adolescents.

Summary

Many of the trends revealed by the 2016 survey appear to be moving in the right direction, but some are not. Fewer students report engaging in unhealthy behavior. However, some indicators of emotional health problems appear to be increasing. In addition, social and economic conditions continue to shape the health of young people. American Indian, African American, and Hispanic students; low-income students; gay, lesbian and bisexual students; and students experiencing homelessness and food shortages are more likely to have worse outcomes for several health indicators.

Tobacco Use

Use of conventional tobacco products such as cigarettes, cigars, cigarillos, little cigars, and chewing tobacco continues to fall. In 2016, 8.4 percent of 11th grade students smoked cigarettes in the past 30 days, down 31% from 12.2 percent in 2013. (Figures 1 and 2) These are the lowest levels of teen smoking ever reported on the survey.

However, use of electronic cigarettes by young people has emerged as a major health concern. Among 11th grade students, 17.1 percent reported using electronic cigarettes or vaping devices in the past 30 days, twice as many as those who smoked regular cigarettes. (Figure 3)

Indoor Tanning

The use of indoor tanning devices such as sunbeds and tanning booths fell dramatically following passage of legislation that banned the use of these devices by persons under 18. This legislation was prompted by concerns over the growth of melanoma, a dangerous skin cancer. Among 11th grade White females, use of indoor tanning devices in the past year fell from 33.0 percent in 2013 to 8.7 percent in 2016. (Figure 4)

Alcohol and Marijuana Use

Alcohol use continued to decline among middle and high school students. In 2016, 24.6 percent of 11th grade students reported drinking alcoholic beverages in the past 30 days, down from 27.7 percent in 2013. (Figures 5 and 6)

After several years of no change, marijuana use among 9th grade student in the past 30 days fell from 9.4 percent in 2013 to 6.8 percent in 2016. Marijuana use fell slightly among 11th grade students, from 16.6 percent in 2013 to 15.7 percent in 2016. (Figures 7 and 8)

Illicit Drugs

Aside from alcohol and marijuana, the most commonly used drugs were prescription ADHD drugs and prescription painkillers.

- 5.0 percent of 11th grade students reported misusing ADHD or ADD¹ drugs like Ritalin during the past year, and
- 4.8 percent of 11th grade students reported misusing prescription painkillers like OxyContin.

Misusing these drugs means that students used somebody else's prescription drugs or took the drugs only to get high.

Mental and Emotional Health

The results of the survey raise concerns about increasing mental and emotional health issues facing young people.

- About one in five students showed signs of depression in the previous two weeks, according to screening questions added to the survey in 2016. The percentage showing signs of depression ranged from 20.9 percent in 8th grade to 23.0 percent in 11th grade.
- The percentage of 9th grade students who reported long-term mental health, behavioral or emotional problems (lasting six months or more) rose from 12.5 percent in 2013 to 17.3 percent in 2016. Similar increases were seen in other grades. (Figures 9 and 10)
- The percentage of 11th grade students who received mental or emotional health treatment in the past year rose from 8.8 percent in 2013 to 13.2 percent in 2016.
- The percentage of 11th graders who said they seriously considered committing suicide in the past year increased from 9.7 percent in 2013 to 12.0 percent in 2016.

Healthy Weight

The proportion of 9th grade students who are obese increased from 9.1 percent in 2013 to 10.2 percent in 2016. (Figures 11 and 12) The obesity rate also increased in grades 8 and 11 by similar amounts. The increase in the obesity rate was slightly greater for females than males and points to disparities in different population groups.

Sexual Behavior

Fewer students reported that they have engaged in sexual intercourse. The percentage of 11th grade students who have engaged in sexual intercourse fell slightly from 37.5 percent in 2013 to 35.3 percent in 2016, and the percentage of 9th grade students fell from 15.0 to 11.4 percent. (Figures 13 and 14) These declines continue a long-term trend that has contributed in part to the drop in Minnesota's teen pregnancy rate over the last 20 years. However, the percentage of sexually active students who used condoms during their last sexual intercourse declined by 3 to 4 percentage points, indicating an increased vulnerability to sexually transmitted infections.

¹ ADHD means Attention Deficit and Hyperactivity Disorder; ADD means Attention Deficit Disorder.

Health Equity

Social, economic and historical biases and inequities work through several mechanisms to affect health and well-being. One of those mechanisms is the creation of chronic toxic stress that can seriously affect a variety of health conditions. Another mechanism is limited access to quality care and social support, and fewer opportunities for healthy eating and physical activity. For several health indicators described in this report, American Indian, Black and Hispanic students; low-income students; gay, lesbian or bisexual students; and students experiencing severe economic hardship (homelessness, food shortages) have less positive health outcomes. Figures 2, 6, 8, 10, 12, and 14 describe some of these disparities.

For example, 16.5 percent of American Indian 9th grade students reported a height and weight that meets the definition of obesity, compared to 9.5 percent of White students. (Figure 12) Students who described themselves as bisexual, gay or lesbian were four times as likely as heterosexual students to report having a long-term mental, behavioral or emotional health problem. Students facing severe economic hardship, such as having to skip meals or being homeless, were twice as likely as other students to have long-term mental, behavioral or emotional health problems. (Figure 10)

Where to Find MSS data

More complete data and reports from the Minnesota Student Survey can be found on the websites of the:

- [Minnesota Department of Health \(http://www.health.state.mn.us/divs/chs/mss/\)](http://www.health.state.mn.us/divs/chs/mss/), and the
- [Minnesota Department of Education \(http://w20.education.state.mn.us/MDEAnalytics/Data.jsp\)](http://w20.education.state.mn.us/MDEAnalytics/Data.jsp).

About the Minnesota Student Survey (MSS)

The Minnesota Student Survey is an anonymous survey conducted every three years in grades 5, 8, 9, and 11.² The survey is coordinated by the Minnesota Departments of Education, Health, Human Services, and Public Safety. Different versions of the survey are used depending on grade level. Results reported here are for regular public schools, including charter schools. Results for alternative schools and juvenile corrections facilities are reported separately. In 2016, 85 percent of school districts participated in the survey for at least one grade level. Of all students enrolled in regular public schools in Minnesota in 2016, 66 percent of 5th graders, 73 percent of 8th graders, 71 percent of 9th graders, and 61 percent of 11th graders provided surveys. The total number of surveys was nearly 169,000.

Notes for Figures 2, 6, 8, 10, 12, and 14

“Low income” means students who receive free or reduced-price lunch at school. This requires a family income of less than 185 percent of the poverty level.

“Econ hardship” means students who have experienced homelessness in the past 12 months or have had to skip meals in the past 30 days because the family did not have enough money to buy food.

“Bi/gay/lesbian” means students who describe themselves as bisexual, gay, or lesbian.

² The grades surveyed by the MSS was changed in 2013, so there is no trend data for grades 5, 8, and 11 prior to 2013.

Figure 1. Percent of students who smoked cigarettes in the past 30 days, by grade: 2001-2016.

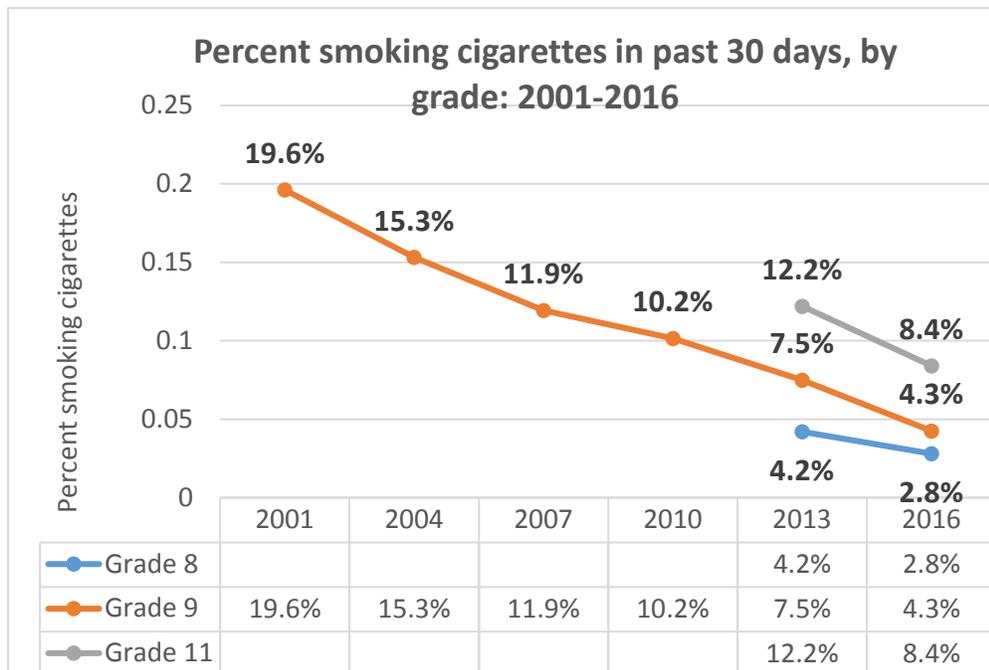


Figure 2. Percent of 11th grade students who smoked regular cigarettes in the past 30 days, by population groups, 2016.

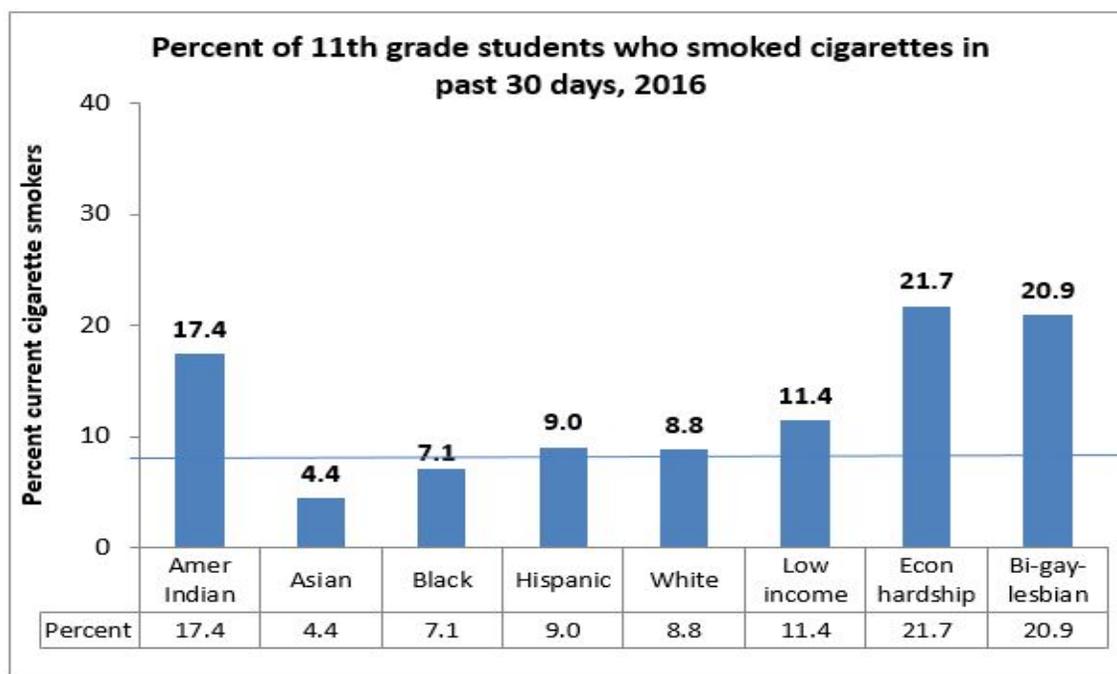


Figure 3. Percent of 11th grade students using various forms of tobacco in the past 30 days, 2016.

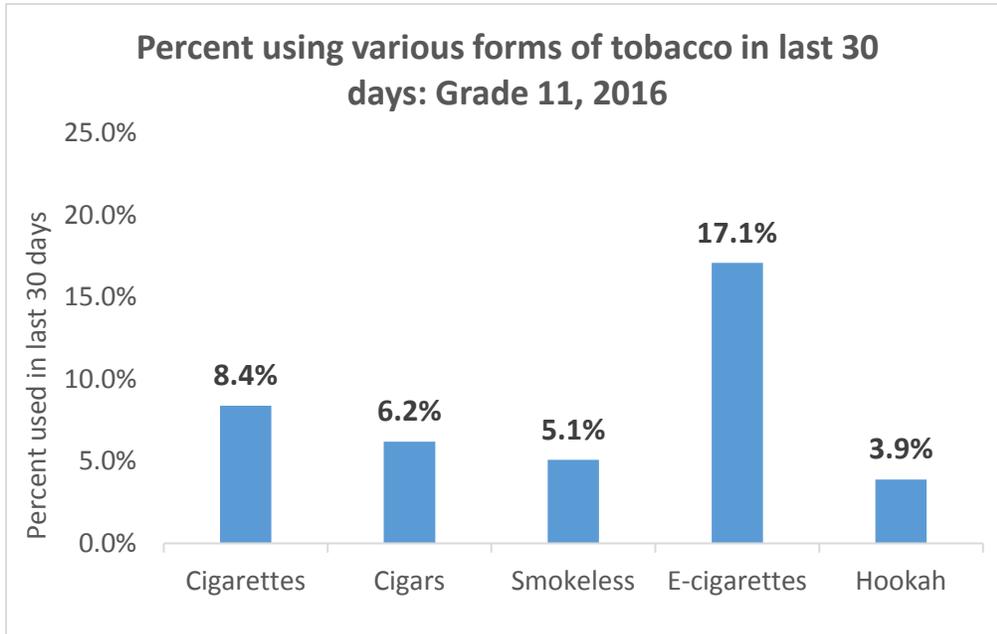


Figure 4. Percent of White females using indoor tanning devices in the past year, by grade and year.

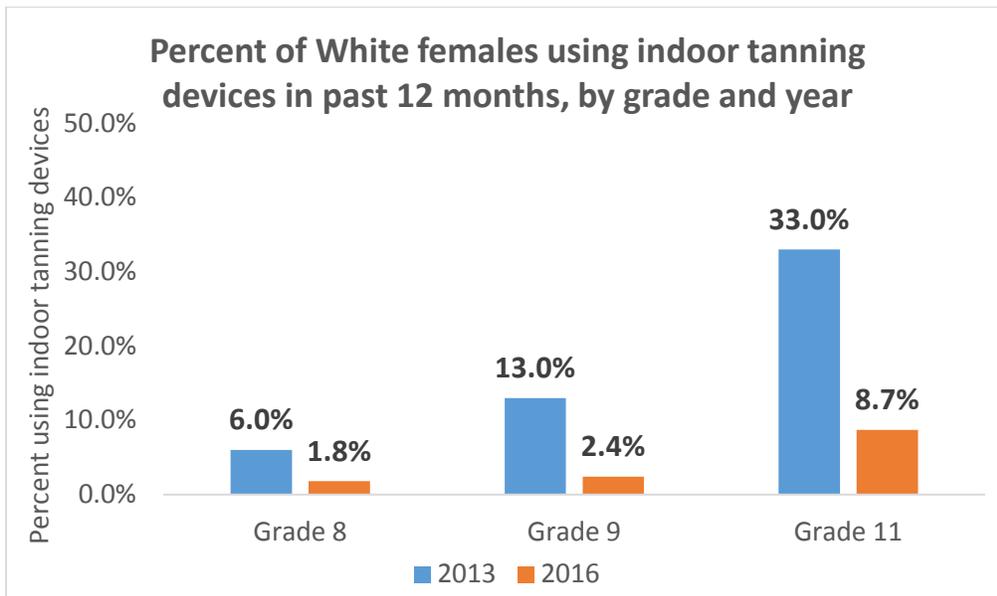


Figure 5. Percent of students who drank alcoholic beverages in the past 30 days, by grade: 1998-2016.

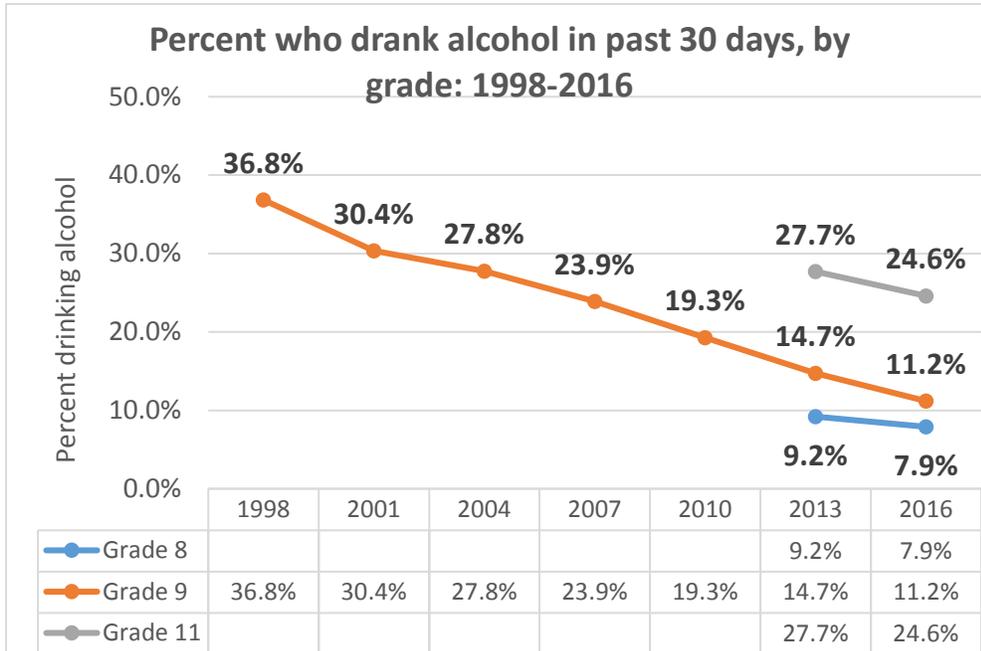
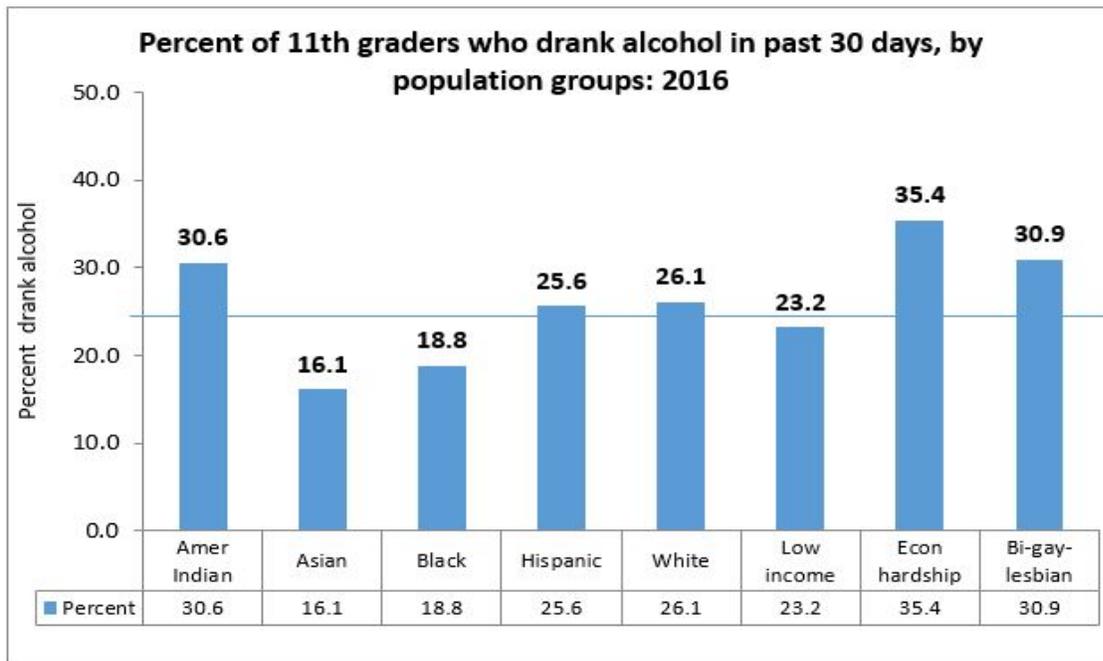


Figure 6. Percent of 11th grade students who drank alcoholic beverages in the past 30 days, by populations groups, 2016.



Straight line is statewide rate of 24.6%.

Figure 7. Percent of students who used marijuana or hashish in the past 30 days, by grade: 1998-2016.

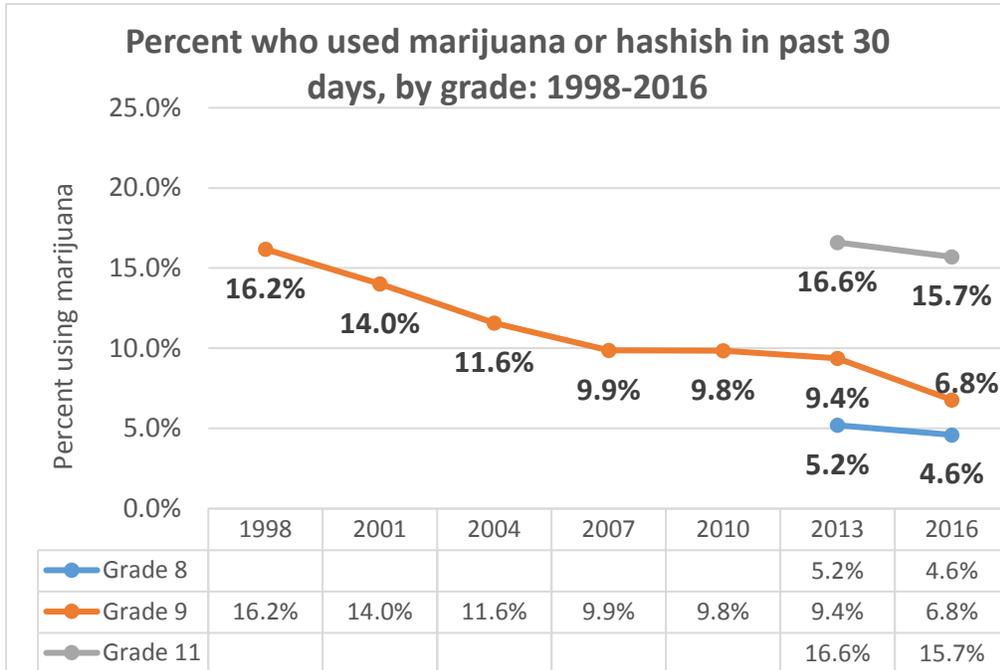
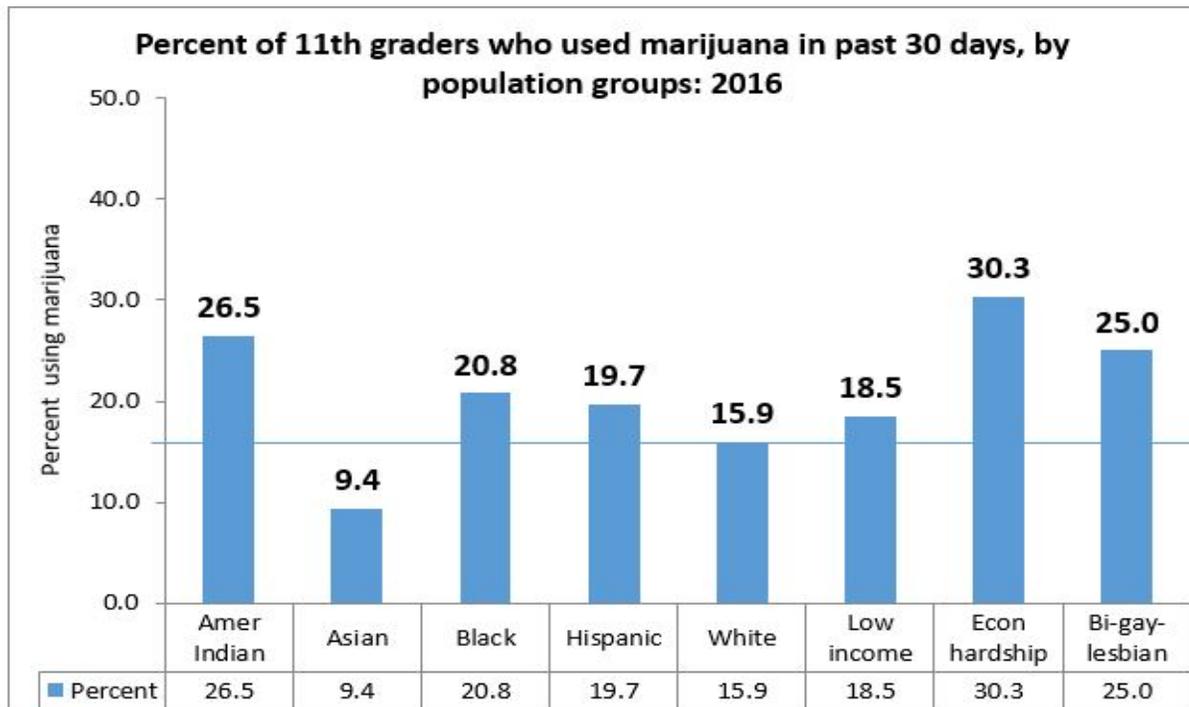


Figure 8. Percent of 11th grade students using marijuana in the past 30 days, by population groups, 2016.



Straight line is statewide rate of 15.7 percent.

Figure 9. Percent of students reporting they have a long-term mental health, behavioral or emotional problem, by grade and year.

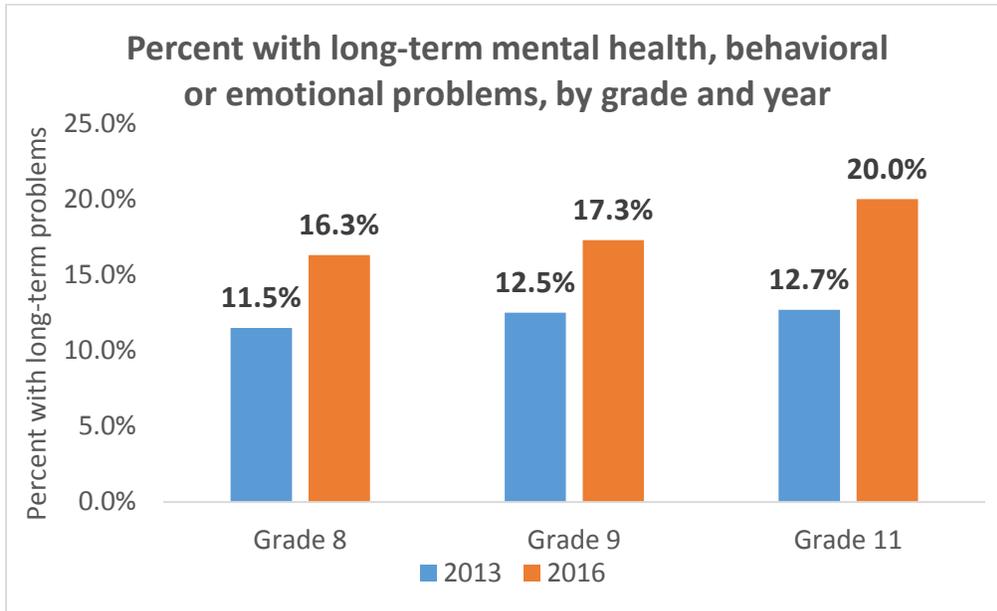
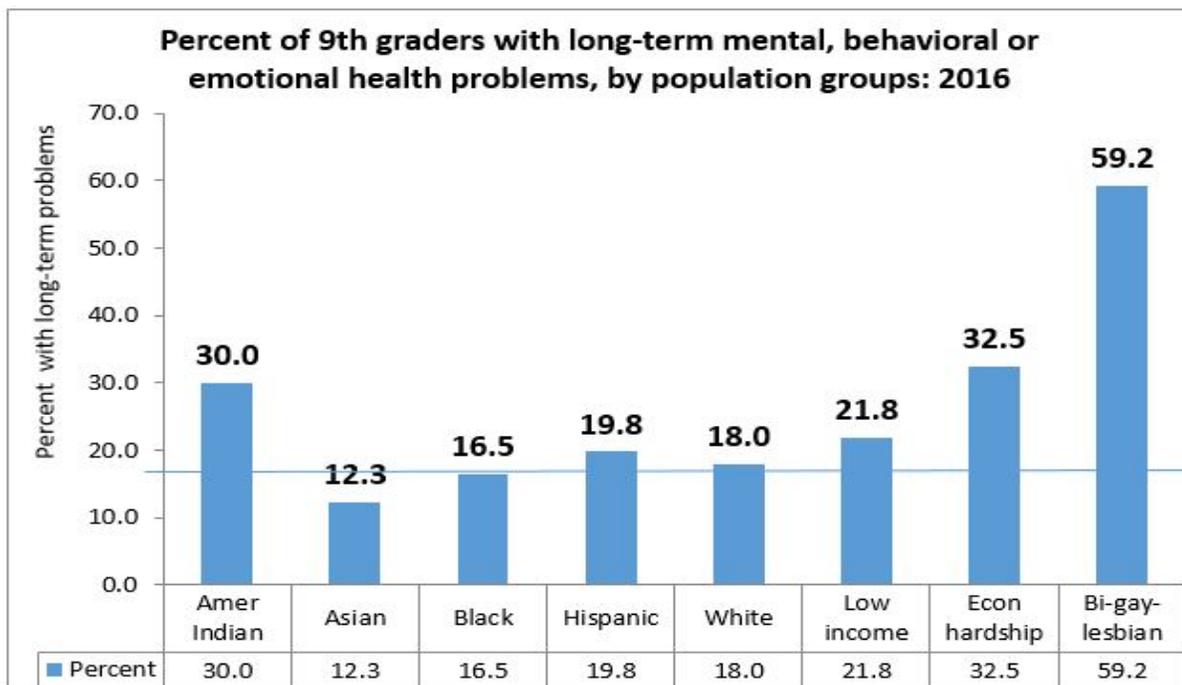


Figure 10. Percent of 9th grade students who reported having long-term (six months or more) mental health, behavioral or emotional problems, by population groups, 2016.



Straight line is statewide rate of 17.3 percent.

Figure 11. Percent of 9th grade students who are obese, according to self-reported height and weight, 2007-2016.

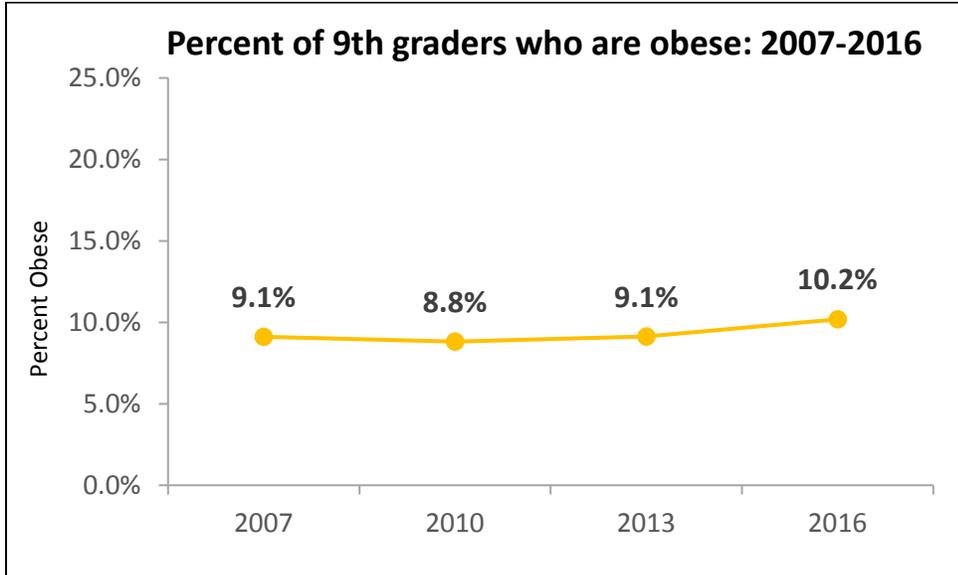
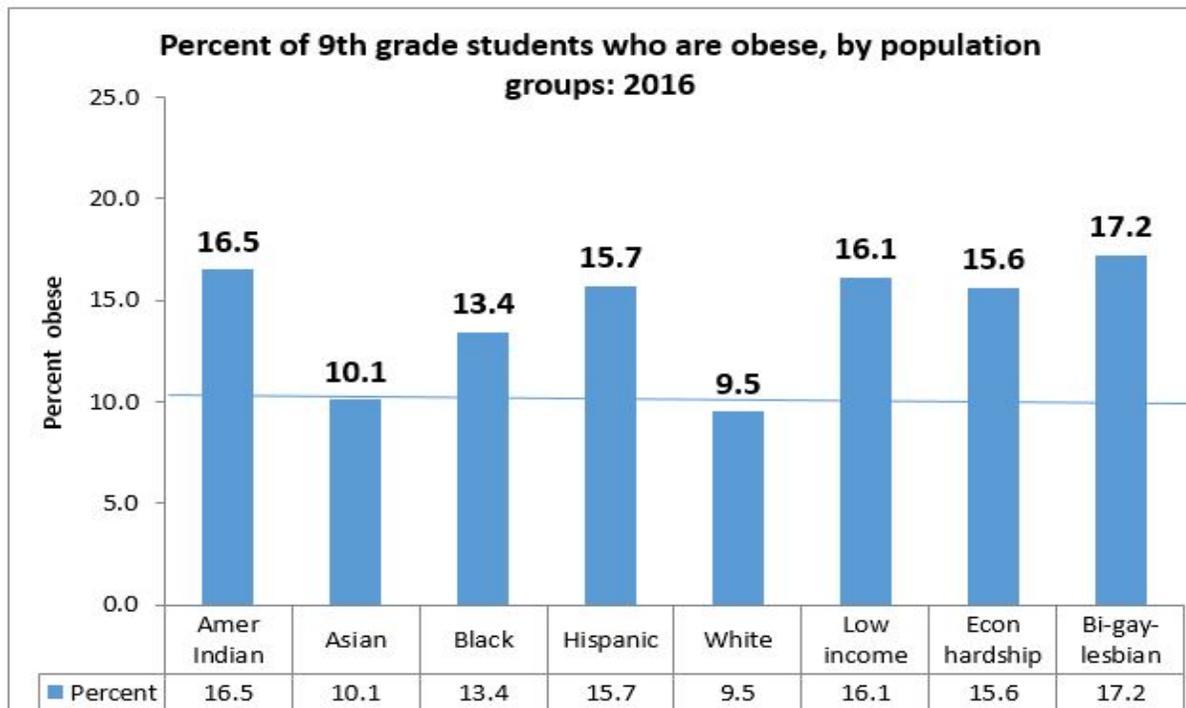


Figure 12. Percent of 9th grade students who are obese, according to self-reported high and weight, by population groups, 2016.



Straight line is statewide rate of 10.2 percent.

Figure 13. Percent of students who have ever engaged in sexual intercourse, by grade: 1992-2016.

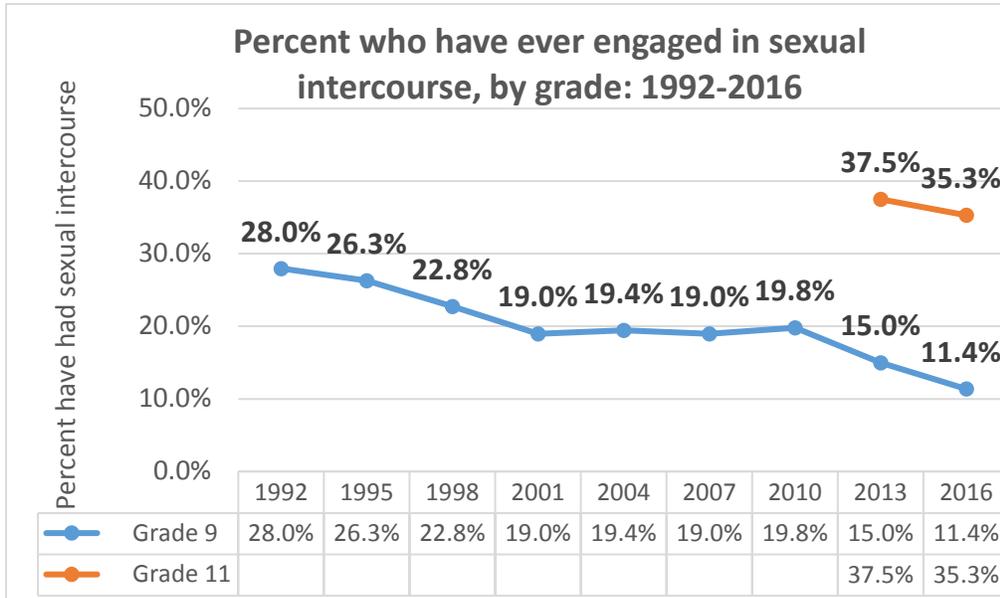
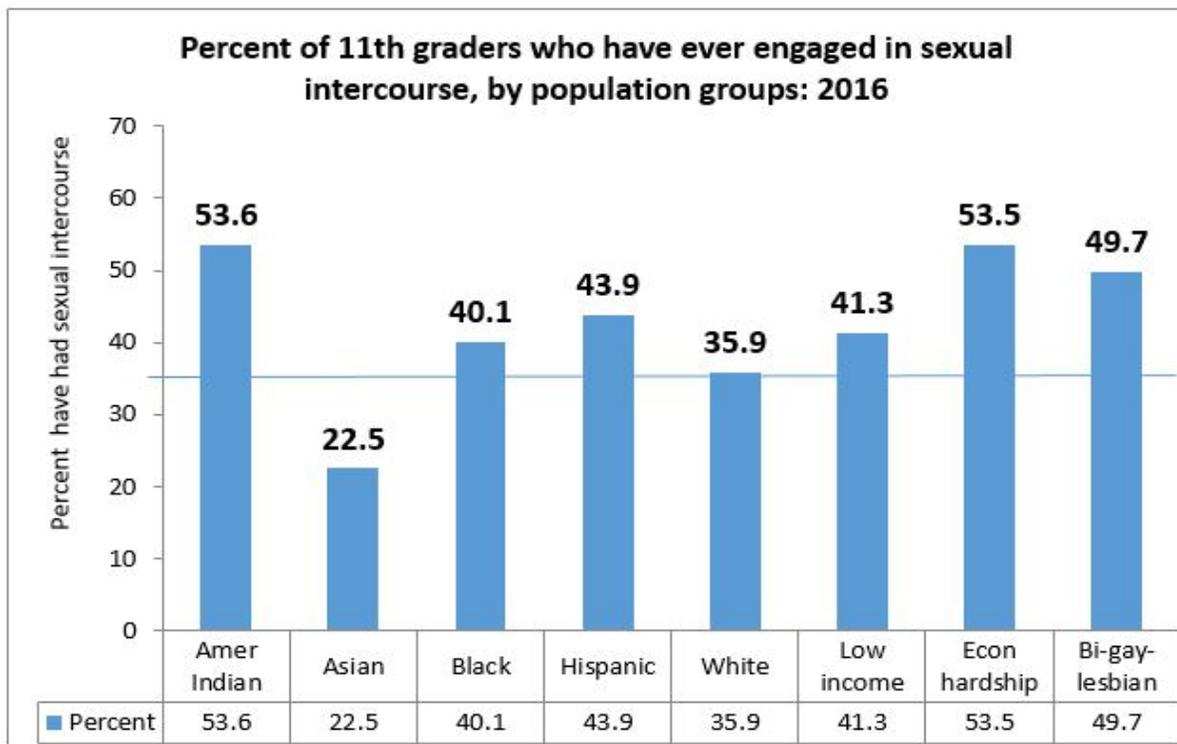


Figure 14. Percent of 11th grade students who have ever engaged in sexual intercourse, by population groups, 2016.



Straight line is statewide rate of 35.3 percent.

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