

Cheryl Dinolfo
County Executive



Michael D. Mendoza, MD, MPH, MS
Commissioner of Public Health

2019 Monroe County Youth Risk Behavior Survey Report

Prepared by the Monroe County Department of Public Health
111 Westfall Road
Rochester, NY 14620

For questions about this report, please contact Anne Kern via email at akern@monroecounty.gov or by phone at (585)-753-5332

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Executive Summary

The Youth Risk Behavior Survey (YRBS), designed and validated by the US Centers for Disease Control and Prevention (CDC), has been conducted nationally and in several states and localities since 1990. During the 2018-2019 school year, the Monroe County Department of Public Health (MCDPH) conducted the YRBS in public high schools for the 13th time since 1992. Two suburban school districts opted out of the survey this year, so MCDPH over-sampled in the remaining suburban districts. A random sample of public high school students was developed with a projected 5% margin of error and an 80% response rate. A total of 1828 surveys were selected for the sample. All surveys were administered through an online platform.

Highlights of the 2019 Monroe County YRBS

% of students who reported the following:

Adverse Childhood Experiences (ACEs/Trauma)

- 66% experienced one or more adverse childhood experiences
- 24% experienced three or more adverse childhood experiences

Violence/Bullying

- 13% carried a weapon in the past month
- 20% engaged in a physical fight in the past year
- 8% did not go to school on one or more days in the past month because they felt unsafe

Social Media-Bullying and Safety Issues

- 17% were electronically bullied in the past year
- 17% ever sent a nude or semi-nude picture/video of themselves or someone else

Mental Health

- 32% felt so sad and hopeless almost every day for two or more weeks in a row that they stopped doing their usual activities, in the past year
- 38% have serious difficulty concentrating, remembering or making decisions because of mental or emotional challenges
- 8% attempted suicide in the past year

Tobacco/E-Cigarettes

- 4% smoked cigarettes in the past month
- 23% used an e-cigarette or vape product in the past month

Alcohol Use

- 21% drank one or more drinks of alcohol in the past month
- 10% engaged in binge drinking in the past month (four or more drinks in a row within a couple of hours)

Marijuana Use

- 30% ever used marijuana
- 19% used marijuana in the past month
- 53% of those who used marijuana in the past month, vaporized it

Use of Other Drugs

- 3% ever used heroin
- 14% ever took prescription medicines not prescribed by their doctor or took them differently than their doctor's directions (including pain, sedative, and/or stimulants)
- 6% ever used over-the-counter drugs to get high
- 12% reported that during the past year, they were offered, sold, or given any drugs or *prescription medicines*, on school property or on the way to/from school (not counting their medicine given to them by the school nurse)

Distracted Driving/Driving Under the Influence

- 30% of drivers texted, used social media, or emailed while driving in the past month
- 15% rode in a car with a driver who had been drinking alcohol in the past month
- 16% rode in a car with a driver who had been using marijuana, pills or other drugs in the past month

Sexual Risks

- 31% ever engaged in sexual intercourse
- 21% engaged in sexual intercourse in the past three months (sexually active)
- 6% of sexually active females reported using LARC (an IUD or implant) and their partner used a condom the last time they had sex
- 47% of sexually active females reported their partner used a condom the last time they had sex
- 61% of sexually active males reported they used a condom the last time they had sex

Physical Activity

- 22% engaged in one hour or more of physical activity daily during the past week
- 18% did not engage in one hour of physical activity on any days in the past week
- 47% spend an average of five or more hours on a typical school day watching TV, playing video games or using the computer/smartphone for non-school work related activities

Sleeping Habits

- 45% get six hours or less of sleep on a typical school night

Assets

- 62% agree or strongly agree with the statement "I get a lot of encouragement at my school"
- 57% agree or strongly agree with the statement "In my community I feel like I matter to people"
- 84% know of one or more adults (other than their parents) they can go to and discuss important questions about their life

Improving Trends

Between 2007 and 2019 there were declines in the proportion of students who reported:

- Carrying a weapon
- Engaging in physical fighting
- They were electronically bullied
- Smoking cigarettes, cigars
- Drinking alcohol
- Ever using marijuana
- Using over the counter drugs to get high, ecstasy and synthetic drugs
- Drinking and driving
- Engaging in sexual intercourse

Between 2015 and 2019, there was an increase in the proportion of sexually active females reporting their health care provider discussed implants as a pregnancy prevention method.

Between 2007 and 2019, there was an increase in the proportion of students who reported engaging in one hour of physical activity on all days in the past week.

Worsening Trends

Between 2007 and 2019 there were increases in the proportion of students who reported:

- Not going to school on one or more days in the past month because they felt unsafe
- Feeling sad or hopeless for two or more weeks in a row that they stopped doing their usual activities
- Seriously considering suicide
- Spending 3+ and 5+ hours per day engaging in screen time(i.e. TV, video games, computer, smartphone)

Between 2015 and 2019 there were increases in the proportion of students who reported:

- Using e-cigarettes/vape products
- That their health care provider did not discuss with them pregnancy prevention methods at their last checkup.

Between 2007 and 2019 there was a decrease in the proportion of sexually active students who reported a condom was used during the last time they had sex.

Discussion

We at the Department of Public Health want to call attention to findings in the 2019 Monroe County YBRS that are especially noteworthy:

Mental Health Challenges

The worsening trends of students reporting mental health challenges in Monroe County is concerning. In 2019, 32% of students reported depression symptoms (up from 21% in 2007) and 14% reported they considered suicide in the past year (up from 12% in 2007). Research indicates that experiencing adverse childhood events (ACEs), also called trauma, before the age of 18, without intervention and support,

increases the likelihood of experiencing mental health challenges, using substances, and engaging in sexual risk behaviors.¹ To properly address these ongoing trauma symptoms, our community must look at the root causes, including but not limited to individual and community violence, poverty, incarceration, and substance use disorder.

Risks of Social Media Use

Research also demonstrates a growing link between social media and poor mental health. In Monroe County, the proportion of youth reporting spending three or more hours on an average school day playing video or computer games, or using a computer or smartphone for something that is not school work, increased from 58% in 2007 to 72% in 2019. The proportion reporting spending five or more hours on these activities increased from 31% to 47%. These trends are notable given recent studies that show youth who spend the most time on social media platforms have higher rates of reported depression and perceived social isolation compared to those who spend the least amount of time.^{2,3}

Moreover, youth who are victims of cyberbullying report increased depressive symptoms, anxiety, loneliness, and suicidal behavior.⁴ While the rate of youth who reported being a victim of cyberbullying declined between 2007 and 2019 (20% to 17%), Monroe County still considers the rate affected to be too high. New York State's Dignity for All Student's Act (The Dignity Act), which took effect on July 1, 2012, seeks to provide NYS public school students with a safe, supportive environment free from bullying, discrimination, intimidation, taunting, and harassment on school property, a school bus and/or at a school function. It also includes incidents occurring off school property, that create or would foreseeably create, a risk of substantial disruption within the school environment.⁵ The Dignity Act required school districts to: (1) modify their codes of conduct so that bullying/harassment are prohibited; (2) train school staff on bullying/harassment; and (3) to provide students with instruction intended to discourage bullying/harassment.⁶ We support the work schools have done to implement the Dignity for All Act and the declining trends may be due to the work done thus far.

Substance Use

Concerning data also shows use of nicotine (e-cigarettes/vape products), marijuana and alcohol is prevalent among youth in Monroe County. Between 2015 and 2019, the proportion of students who reported ever using an e-cigarette/vape product increased from 31% to 35%. During the same period, the proportion who reported using an e-cigarette/vape product in the last 30 days increased from 20% to 23%. While alcohol and marijuana use have declined somewhat, about one in five teens in Monroe County still report using these substances in the past month. It is notable that more than one-half of students who are using marijuana are vaping it. A recent study in adults showed that vaporizing cannabis produced more powerful effects than smoking it. These effects included impaired reaction time, decreased cognitive abilities, and higher concentrations of THC in blood.⁷ Similarly, use of any of these substances during adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control. Early use of these drugs can also prime the brain for addiction.

¹ <https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html>, accessed August 209, 2019

² Lin, LY. et. all. "Association Between Social Medial Use and Depression Among U.S. Young Adults." *Depression and Anxiety*. 2016 Apr;33(4):323-31.

³ Primack BA, et. al. "Social Media Use and Perceived Social Isolation Among Young Adults in the U.S." *American Journal of Preventive Medicine*. 2017 Jul;53(1):1-8.

⁴ Nixon, CL. "Current perspectives: the impact of cyberbullying on adolescent health." *Adolescent Health, Medicine and Therapeutics*. 2014 Aug 1;5:143-58

⁵ http://www.gvboces.org/NYS_SSS.cfm?subpage=1079793

⁶ <https://ag.ny.gov/press-release/ag-schneiderman-and-state-education-commissioner-elia-release-guidance-and-model>

⁷ Spindle TR, Cone EJ, Schlienz NJ, et al. Acute Effects of Smoked and Vaporized Cannabis in Healthy Adults Who Infrequently Use Cannabis: A Crossover Trial. *JAMA Netw Open*. Published online November 30, 2018;1(7):e184841. doi:10.1001/jamanetworkopen.2018.4841

The U.S. Surgeon General has declared the use of electronic nicotine delivery devices among youth an epidemic. Recently, the CDC and FDA began investigating Severe Pulmonary Disease Associated with Using E-Cigarette Products. In early September 2019, the CDC and FDA recommended that e-cigarette products should not be used by youth, young adults, pregnant women, as well as adults who do not currently use tobacco products.⁸ Nicotine and e-cigarettes can contain harmful ingredients that are inhaled deep into the lungs, including flavorants that have been linked to serious lung disease, volatile organic compounds, and heavy metals such as nickel, tin, and lead.⁹

Distracted Driving

Distracted driving among youth continues to be a concern in Monroe County, with one in three adolescent drivers reporting using a mobile device while driving in the past month. The National Highway Traffic Safety Administration (NHTSA) reports over 3,000 American lives lost in 2017 as a result of various distractions while driving.¹⁰ Although the technology is available to temporarily disable notifications while a mobile device is connected to a motor vehicle, this technology is not available in all cars, and because these measures must be initiated by the user they can be easily circumvented. Until more robust solutions are available, community-wide strategies are critical.

Conclusions

Monroe County is committed to addressing the various concerns facing our youth based on the findings of the 2019 YRBS. A complete community response is necessary to properly and comprehensively reverse some of the worsening trends and continue ameliorating the improving ones. In regards to mental health trauma, expanding mental health support and improving access to counseling or therapy can help children and youth process their past trauma; however, these interventions alone will not address the aforementioned root causes of these symptoms. Because these influences are complex and inherently difficult to address, it is important for parents and community members to recognize symptoms of mental health challenges and encourage youth to seek help when appropriate. We recommend health and community agencies seek training in trauma informed care, suicide prevention, and Youth Mental Health First Aid in order to empower everyone in our community to intervene in the life of young person who is struggling. Information about training opportunities can be found on the following websites: [Monroe County Children's System of Care](#), [Partners for Suicide Prevention](#) and [Youth Mental Health First Aid](#).¹¹

Larger scale responses to the substance use trends in Monroe County will potentially reduce rates of use. In July 2019, NYS passed the T21 law that increases the legal age for sales of all tobacco products, including e-cigarettes to age 21. A 2015 Institute of Medicine Report used models to predict a 12% decrease in smoking prevalence over time as a result of increasing the legal age to 21.¹² Long term effects of this law will hopefully be seen in future surveys. Meanwhile, further preventive efforts are warranted such as limiting the sale of these products near schools, reducing predatory marketing strategies that target children and youth, and increasing the availability of chemical dependency treatment programs that will address nicotine dependence among youth.

⁸ <https://emergency.cdc.gov/han/han00421.asp>

⁹ US Department of Health and Human Services. E-cigarette Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2016.

¹⁰ National Highway Traffic Safety Administration. Distracted driving. <https://www.nhtsa.gov/risky-driving/distracted-driving>

¹¹ For more information on Youth Mental Health First Aid, contact Andrea Catalfano (585-753-2637, AndreaCatalfano@monroecounty.gov) or Melissa Cushman (585-753-2618, MCushman@monroecounty.gov)

¹² Bonnie RJ, Stratton K, Kwan LY. Public health implications of raising the minimum age of legal access to tobacco products. Washington, DC: Institute of Medicine of the National Academies; 2015. <http://iom.nationalacademies.org/Reports/2015/TobaccoMinimumAgeReport.aspx>

Additionally, open and honest communication about substance use is a powerful tool in preventing further progression in addiction. Conversations about stressors, healthy coping, and the dangers of substance use will hopefully encourage adolescents to reduce use. This is a complicated disease which is a local and national concern; however, understanding its origins and how addiction happens can lead to early identification and intervention. We recommend youth and adults watch the locally produced video called [How Addiction Happens](#) and visit the [Monroe County Opioid Information and Resources website](#) to learn about addiction.

We also support productive conversations between youths and adults, both inside and outside of school, about healthier social media use given the connection between this behavior and poor mental health. The [American Academy of Pediatrics](#) recommends various approaches to safe and healthy media use. Some of these tactics include family, pediatrician, and community involvement. Overall awareness, discussion, and informed use are key influences toward reducing the risks of adolescent media use and the subsequent harmful effects.

Finally, adolescent distracted driving continues to be a concern locally and throughout the US. In NYS, current laws prohibit drivers from using a cell phone in hand while driving and specifically prohibits texting while driving.¹⁴ Monroe County and the [American Academy of Pediatrics](#) recommend parental and adult modeling of safe driving practices to encourage adolescent mindfulness while behind the wheel. Specific laws targeting youth restrictions on cell phone use have not proven to be as effective as all-age requirements.¹³ As such, it is up to all community adults to advocate and reinforce safe driving practices, especially in the audience of adolescents.

Monroe County recognizes the various concerns facing our adolescents and the complexities of addressing these problems. Continued community partnerships to enhance existing and productive solutions as well as initiating new interventions will hopefully show additional improvements in future survey data.

¹³ State Advocacy FOCUS, American Academy of Pediatrics, 2018 <https://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Distracted%20Driving.pdf>

Introduction

Background

The Monroe County Youth Risk Behavior Survey (YRBS) was conducted in public high schools during the 2018-2019 school year. This local survey has been completed thirteen times since 1992. The Youth Risk Behavior Survey, designed and validated by the US Centers for Disease Control and Prevention (CDC), has been conducted nationally and in several states and localities since 1990. The goals of the survey are: (1) to assess health risk behaviors among high school students, (2) to monitor changes in these behaviors over time, and (3) to broadly evaluate the impact of preventive programs.

Local survey results assess the health risks of public high school students in Monroe County. Schools, service providers, and health planners use these data as a base on which to develop interventions to reduce behaviors contributing to disease, injury, and premature death in the young adult population.

Methodology

In 2018-2019, two suburban districts opted not to participate in the survey. As a result, we over-sampled in the remaining suburban districts. Based on enrollment within each school, the Monroe County Department of Public Health (MCDPH) developed a random sample of students with a projected 5% margin of error and an 80% response rate. A total of 1828 surveys were selected for the sample.

All participating districts attempted to survey all of their students so that they can use their own data to describe the level of risk behaviors within their district. Every district administered the surveys using a confidential computer based survey platform. The final sample closely reflects the gender and grade distribution of enrollment in public high schools in Monroe County, so weighting of the sample was not done.

This report is organized by topic area. For each topic area, a data table is provided that contains the question number from the survey, the proportion of students who reported the risk or asset rounded to the nearest whole number, along with the 95% confidence interval (LCL- lower confidence level and UCL- upper confidence level).

Changes in rates overtime were identified when there was a statistically significant trend between 2007 and 2019. It should be noted that surveys were completed in 2007, 2009, 2011, 2015, 2017 and 2019. The survey was not conducted in 2013. Questions were noted with an asterisk (*) when trend data were not analyzed because the question was not included in three consecutive surveys.

Data were also analyzed to identify differences by gender, race and Latino origin. Differences were noted to be statistically significant if the p value for the z test was less than .05.

Limitations of the Data

There are several limitations to these data. The results do not include students who have dropped out of school or students who were absent the day of survey administration. Research has shown that students who dropout or are frequently absent are more likely to engage in health-risk behaviors compared to other students.¹⁴

Data are based on self-report, thus students may under-report illegal behavior like alcohol or drug use. Additionally, it is not clear how the results were affected by the fact that two suburban school districts did not participate.

¹⁴ 37. Pirie PL, Murray DM, Luepker RV. Smoking prevalence in a cohort of adolescents, including absentees, dropouts, and transfers. Am J Public Health 1988;78:176-8.

Results published in this report are based on responses to each individual question and do not include internal reliability checks. Nationally, the CDC sets survey responses to missing when the responses are not consistently answered. For example, students who report having sexual intercourse in the past 30 days must also report ever having had sexual intercourse, or the responses to these questions are set to “missing.” Locally, we checked twenty-five key questions for internal reliability and there were small differences, (about 1 percentage point) which did not influence the results.

Trends should be interpreted with caution. The survey was not conducted in 2013, and it is not clear what the impact of the lapse had on the trends. Additionally, we cannot assess the impact of the changing modes of survey administration. The table below shows the number of school districts that participated in the survey by year and mode of administration

Number of School Districts in Monroe County that Administered the YRBS by Mode of Administration and Year							
	2007	2009	2011	2013	2015	2017	2019
Paper	18	15	7	0	1	0	0
Online Computer Platform	0	3	9	0	15	15	16

Demographic Characteristics of Respondents

The demographic characteristics of the sample are shown in the following tables.

Gender	#	%
Female	915	50%
Male	866	48%
Other	41	2%
Total	1822	
Did not answer	6	

Age	#	%
13 or younger	15	1%
14 years old	267	15%
15 years old	478	26%
16 years old	469	26%
17 years old	406	22%
18 years old or older	188	10%
Total	1823	
Did not answer	5	

Students that selected “Latino” were counted only in this category, regardless of which race they selected. Students that selected a single race and “not-Latino” were counted in the race category they selected. Those that selected multiple races and “not Latino” were counted in the “Other races/more than one race” category.

Race/Ethnicity	#	%
Latino	281	15%
White, not Latino	1002	55%
Black, not Latino	303	17%
Other races, and multiple races, not Latino	233	13%
Total	1819	
Unknown	9	

Adverse Childhood Experiences (Trauma)

Students were asked a series of 11 questions about potentially traumatic experiences during their life. Research has demonstrated that experiencing adverse events before the age of 18, without intervention and support, increases the likelihood of engaging in risky behaviors, as well as increases the likelihood of poor mental and physical health outcomes in later years.¹⁵ The accumulation of multiple adverse childhood experiences (ACE) compounds these risks.

Question #	Students Reported:	% (rounded)	LCL	UCL
Q29*	Often or repeatedly a parent or adult in their home swore at them, insulted them or put them down (verbal abuse)	13	11.6	14.8
Q30*	Often or repeatedly a parent or adult in their home hit, beat, kicked or physically hurt them in any way (physical abuse)	3	2.0	3.5
Q32*	Often or repeatedly parents or adults in their home hit, beat, kicked or beat each other up	2	1.4	2.7
Q31*	Often or repeatedly, their family has not had enough money to buy food or pay for housing	5	4.1	6.2
Q33*	Ever lived with anyone who was an alcoholic, problem drinker, used illegal street drugs, took prescription drugs to get high, or was a problem gambler	20	18.0	21.7
Q34*	Ever lived with anyone who was depressed, mentally ill or suicidal	26	24.1	28.2
Q35*	Ever had anyone in their household go to jail or prison	17	15.1	18.5
Q36*	Ever witnessed someone get shot, stabbed or beaten in their neighborhood	15	13.7	17.0
Q37*	They were ever forced to do any of the following: have sexual intercourse, touch someone sexually, or be touched by someone sexually	10	8.7	11.4
Q38*	They disagree or strongly disagree with the statement, "my family gives me the help and support I need"	6	5.1	7.3
Q39*	They currently do not live with both parents	42	40.0	44.3

* Trend data not available as not all school districts asked all ACES questions in 2015.

We added up the total number of reported events for each student, and then calculated percentages by the number of experiences. If a student left a question blank, and the sum of the remaining questions equaled zero, their responses were set to missing.

Sixty-six percent (66%) of students reported one or more adverse experiences and twenty-four (24%) reported three or more.

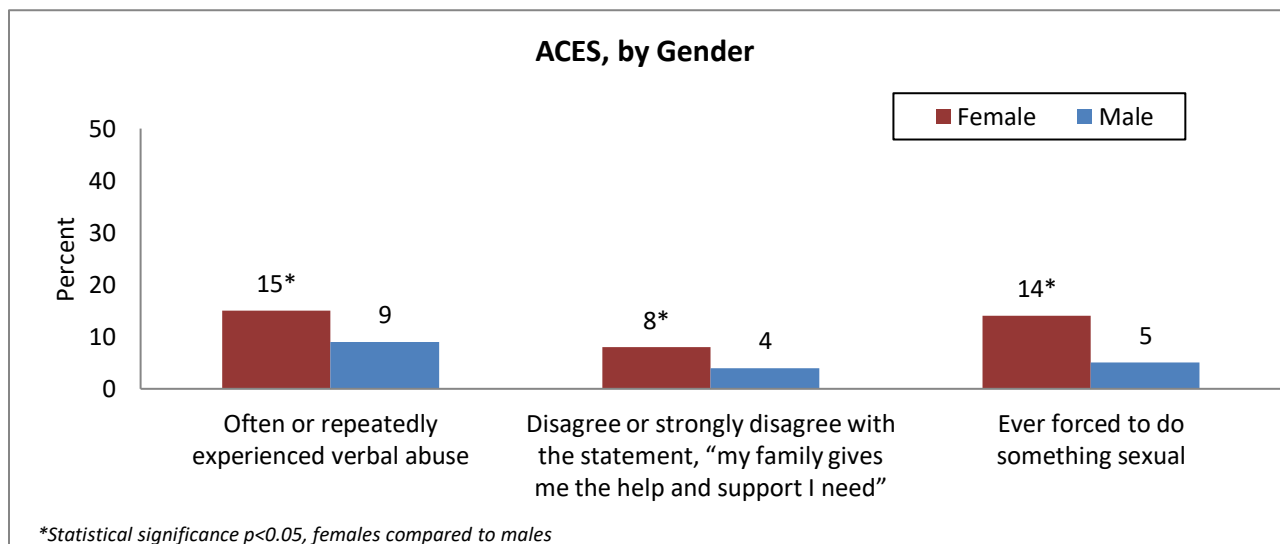
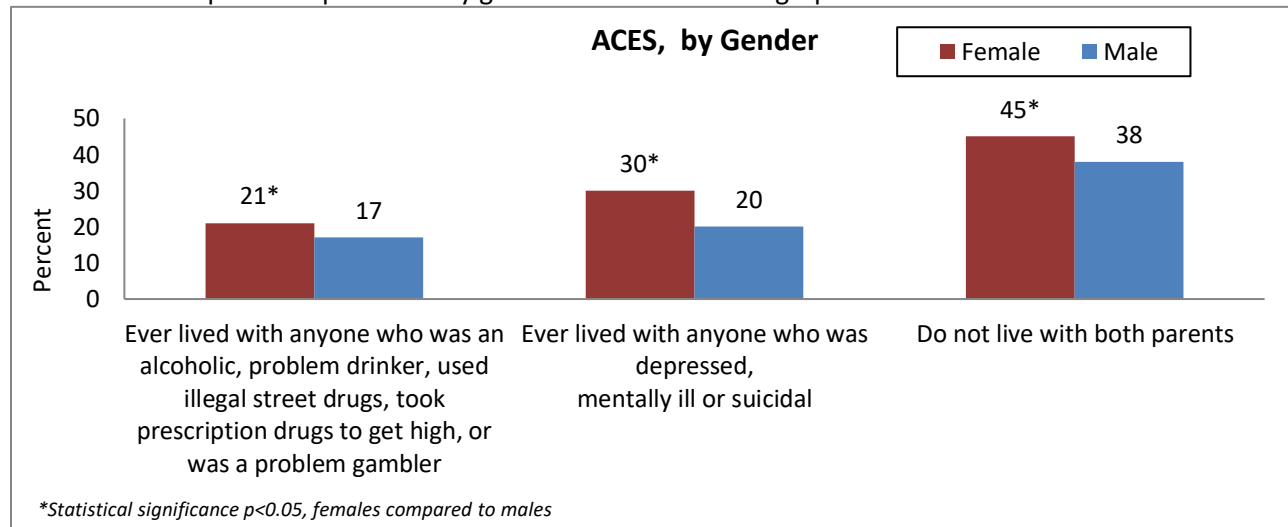
# of Traumatic Life Events Reported by Students	%
0	34
1	27
2	16
3	11
4-6	11
7-11	2
1 or more	66

¹⁵ <https://www.cdc.gov/violenceprevention/childabuseandneglect/acesstudy/aboutace.html>

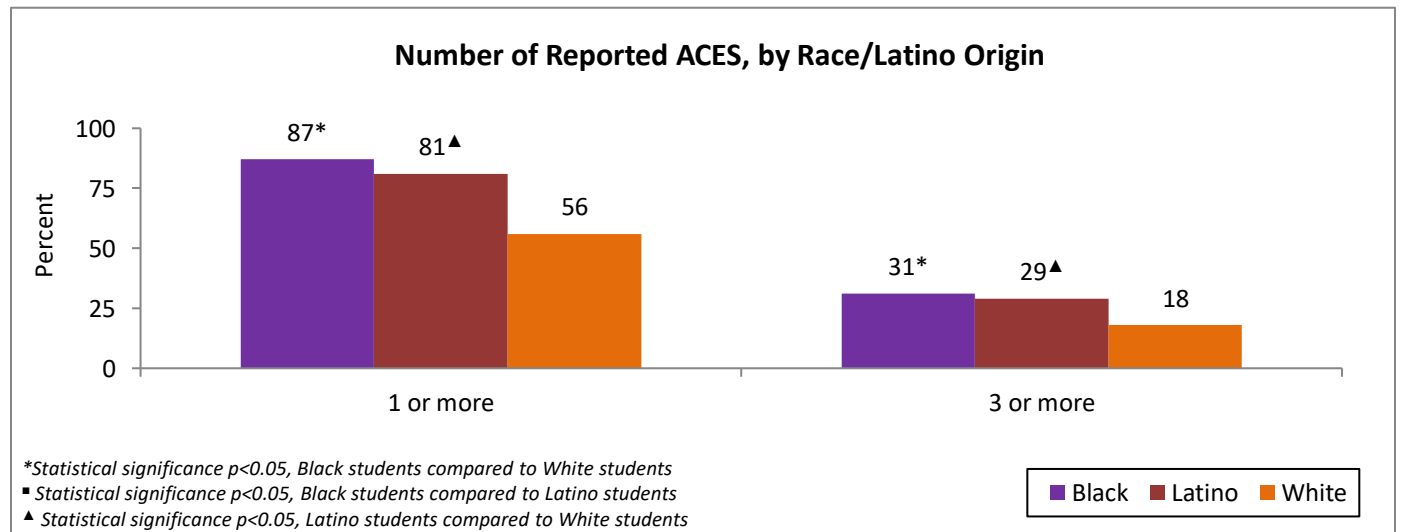
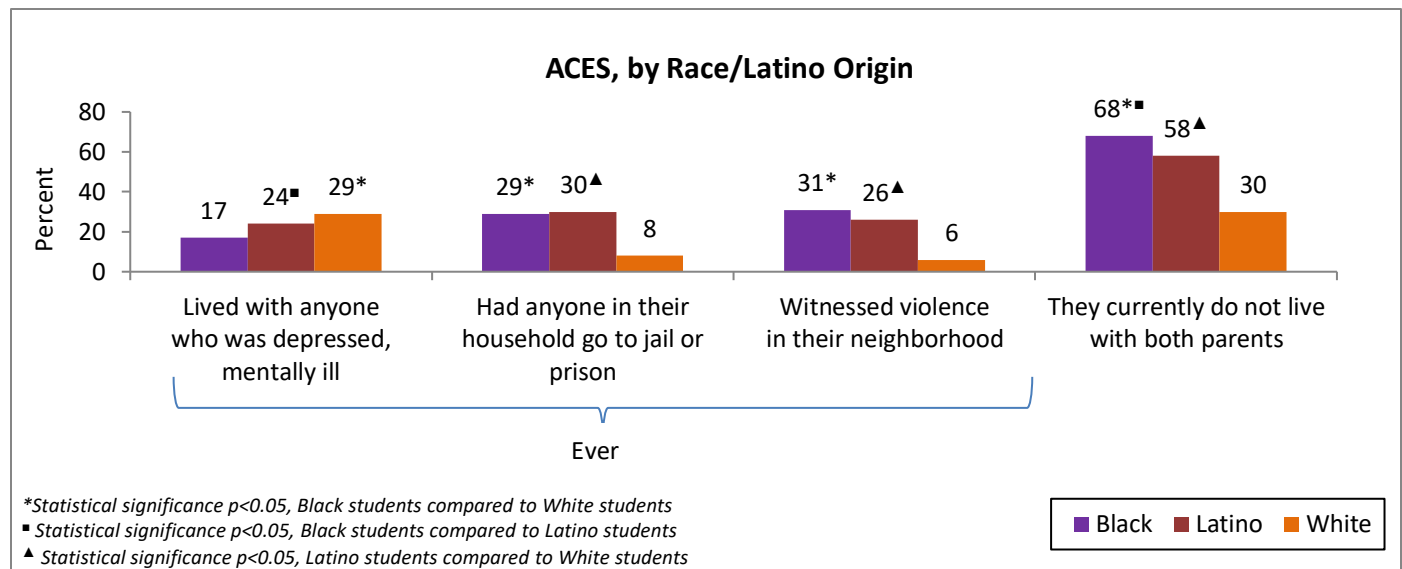
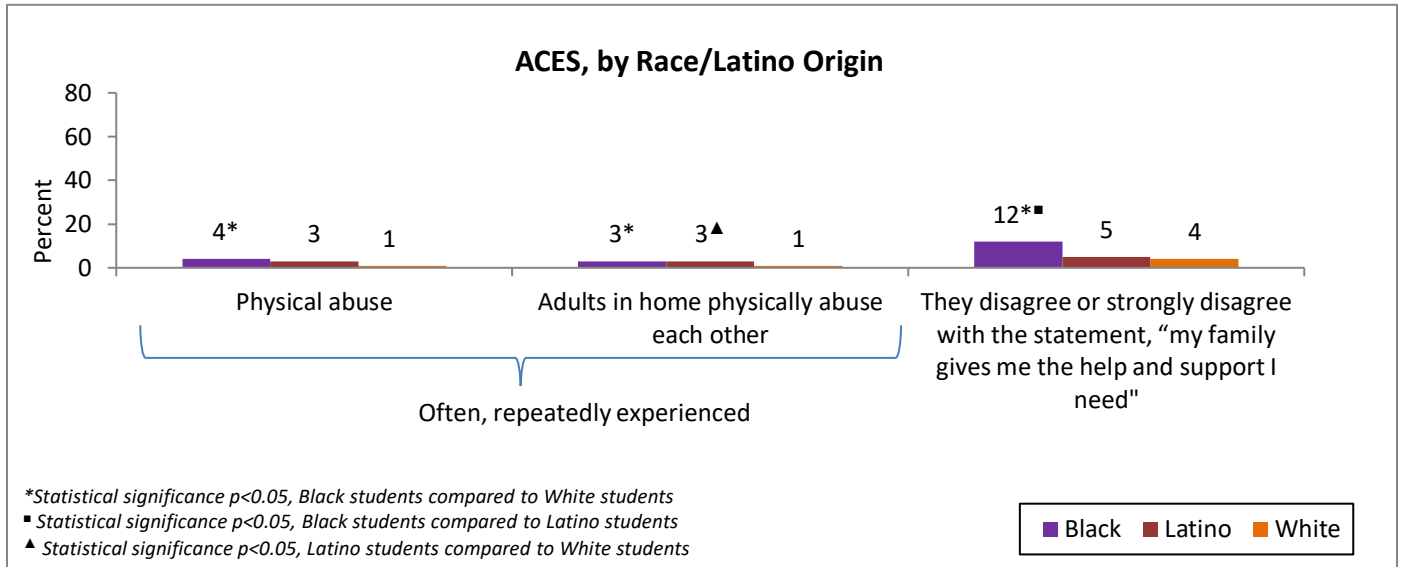
Differences by sub-populations

Among females, 71% reported one or more ACE, and 27% three or more. Among males, 61% reported one or more and 18% reported three or more.

Differences in reported experiences by gender are shown in the graphics below.



Differences by race and Latino origin are shown on the next page.



Violence/Bullying

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q13 ¹	Carried a weapon in the past month	13	11.7	14.8
Q14 ¹	Carried a weapon on school property in the past month	3	2.4	4.0
Q16 ²	Carried a gun in the past year	3	2.7	4.4
Q17	Engaged in a physical fight in past year	20	17.8	21.4
Q18	Engaged in a physical fight on school property in the past year	10	8.5	11.2
Q15	Did not go to school on one or more days in the past month because they felt unsafe	8	6.5	8.9
Q19	Were threatened/injured on school property 1 or more times during past year	8	6.5	8.9
Q20 ³	Were bullied on school property or on the way to and from school in the past 12 months. (Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student. It is not bullying when 2 students of about the same strength or power, argue, fight or tease each other in a friendly way.)*	20	17.8	21.5
Q21*	In the past year, were physically hurt by someone they were dating, "talking to" or going out with	7	6.0	8.4
Q37	Were ever forced to do any of the following: have sexual intercourse, touch someone sexually, or be touched by someone sexually	10	8.7	11.4

* Trend data not available

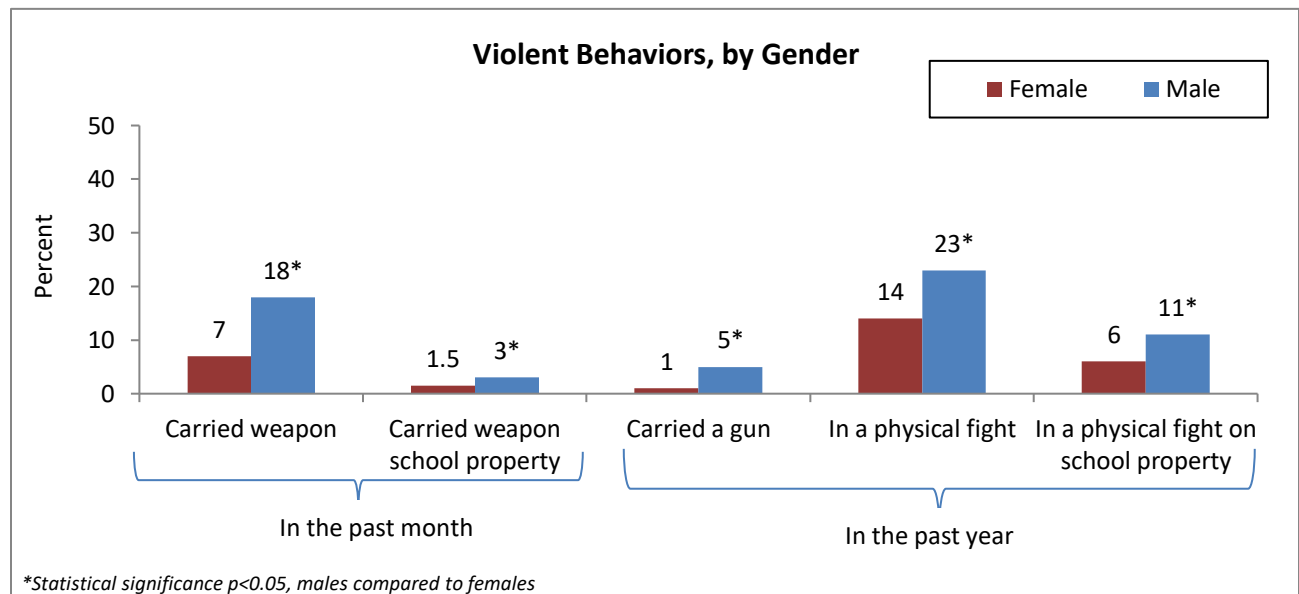
¹ Question slightly changed in 2017. "Razor" replaced "club" as an example of a weapon.

² Question changed in 2017. Asked about gun carrying in the past year, instead of past month.

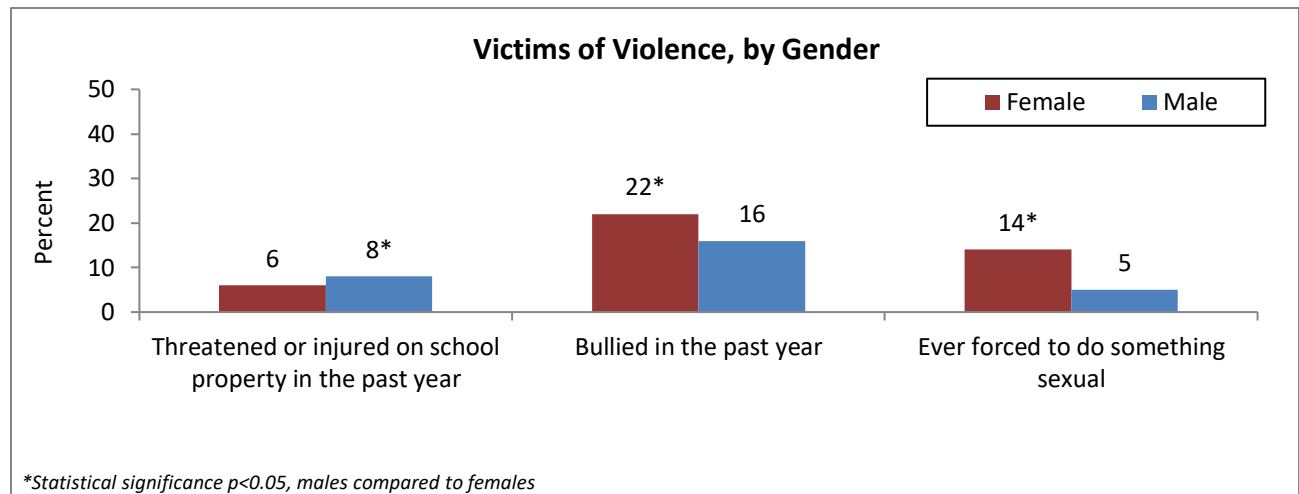
³ Question changed in 2019. In 2017 the question asked about past month and did not specifically call the behavior bullying.

Differences by sub-populations

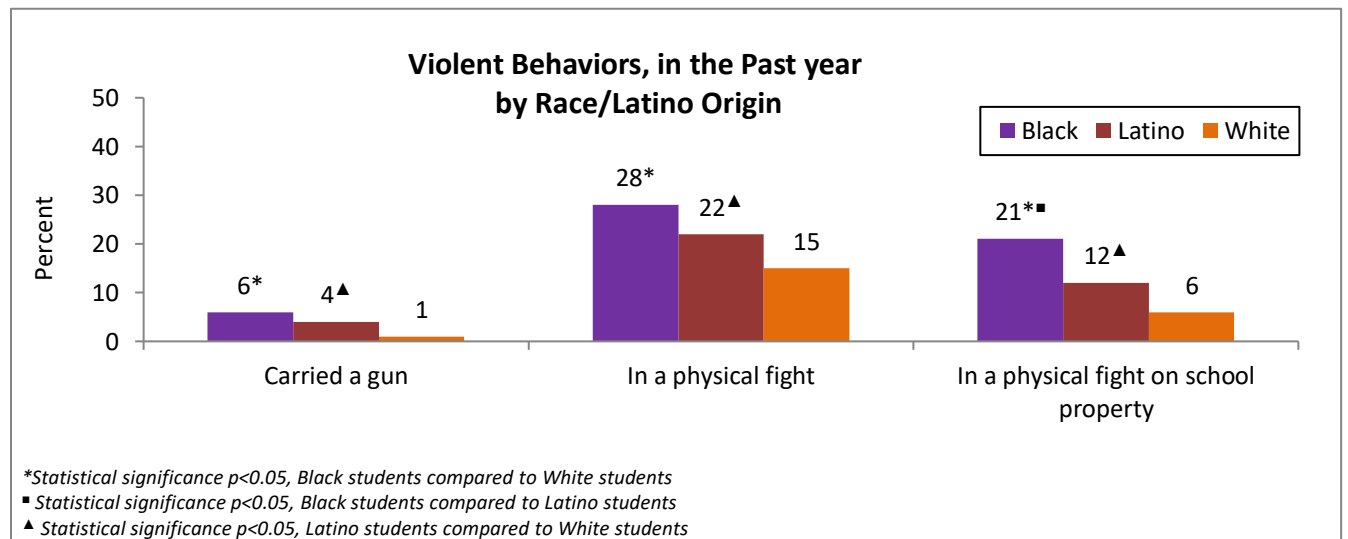
Males were more likely than females to report engaging in violent related behaviors.



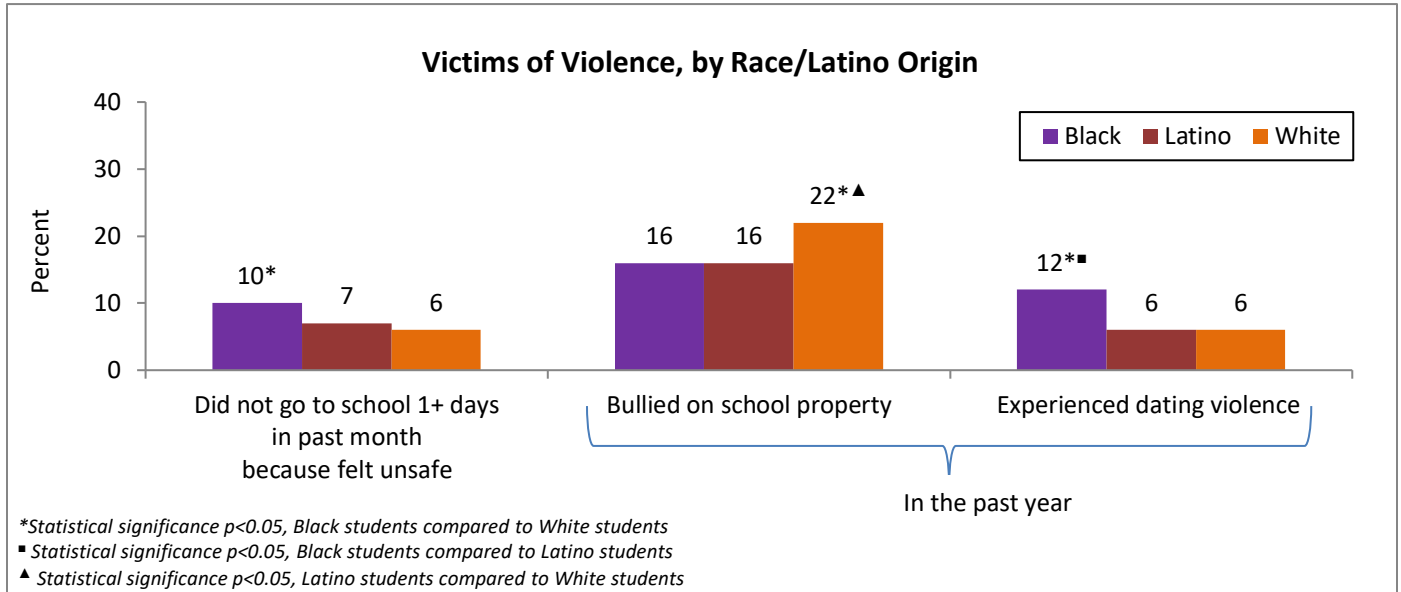
Males were more likely than females to report they were threatened or injured on school property. Reported bullying was more prevalent among females compared to males. Females were also more likely to report they were ever forced to do something sexual.



Black and Latino students were more likely to report violent behaviors compared to White students.



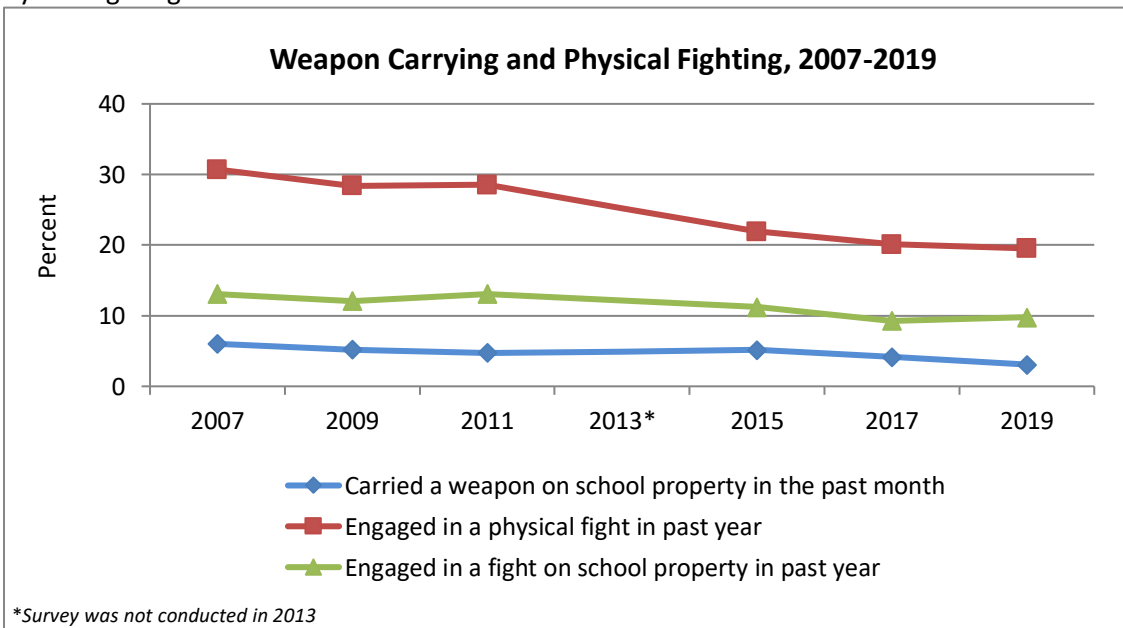
Differences in violence victimization are shown in the graphic below.



Trends

The proportion of students who reported that they did not go to school one or more days in the past month because they felt unsafe increased slightly from 6% in 2007 to 8% in 2019.

Between 2007 and 2019, there were declines in reported weapon carrying on school property and physical fighting.



Social Media-Bullying and Safety Issues

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q76 ¹	Were electronically bullied in the past 12 months [Another student teased, threatened, or spread rumors about you through texting, emails, YouTube, gaming systems, or social media websites like Facebook, Twitter, vine, yik yak, ask.fm, tumblr, Instagram, blogs, SnapChat, etc.]	17	15.0	18.5
Q77 ¹	In the past year, used a cell phone, text messaging or social media to harass or embarrass someone that they were mad at, in the past year	11	9.9	12.9
Q78*	Ever used a cell phone, computer or other electronic device to <u>SEND/POST</u> nude or semi- nude pictures or videos of themselves or someone else	17	15.2	18.8
Q79*	Ever used a cell phone, computer or other electronic device to <u>RECEIVE</u> nude or semi- nude pictures or videos of someone else	24	22.4	26.5
Q80*	Gambled one or more times the past 12 months (gambled on the Internet (example Draft Kings), gambled on a sports team, gambled when playing cards or a dice game, or bet on a game of personal skill such as pool or a video game)*	12	10.1	13.2

* Trend data not available

¹Questions changed in 2017. Replaced the word "internet" with "social media"

Differences by sub-populations

Females were more likely than males to report they were bullied electronically in the past year (20% vs. 13%). Sending or posting nude/semi-nude pictures was more common among females compared to males (19% vs. 14%). Males were more likely than females to report they gambled one or more times in the past year (17% vs. 5%).

White students were more likely than Black and Latino students to report they were electronically bullied in the past year (19% compared to 13% and 13% respectively).

Trends

The proportion of students who reported they were electronically bullied in the past year declined from 20% in 2007 to 17% in 2019.

Mental Health

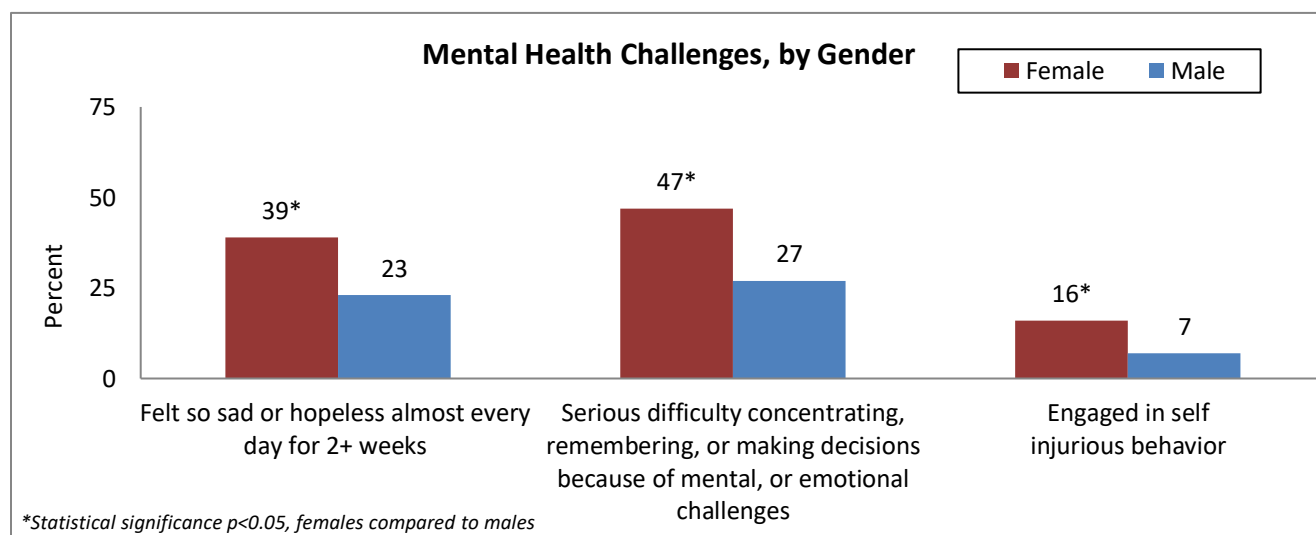
Question #	Students Reported They:	% (rounded)	LCL	UCL
Q22	Felt so sad or hopeless almost every day for two or more weeks in a row that they stopped doing their usual activities, in the past year	32	30.2	34.5
Q28 ¹	Have serious difficulty concentrating, remembering, or making decisions because of mental, or emotional challenges*	38	35.9	40.4
Q27 ¹	Did something to purposely hurt themselves without wanting to die, such as cutting or burning themselves during the past 12 months (self-injurious behavior) *	12	10.8	13.8
Q23	Seriously considered attempting suicide in the past year	14	12.9	16.1
Q24	Made a specific plan about how they would attempt suicide in past year	11	9.4	12.2
Q25	Attempted suicide in the past year	8	6.4	8.8
Q26	Attempted suicide in the past year that resulted in an injury that needed treatment by a doctor or nurse (injurious suicide attempt)	3	2.4	4.1

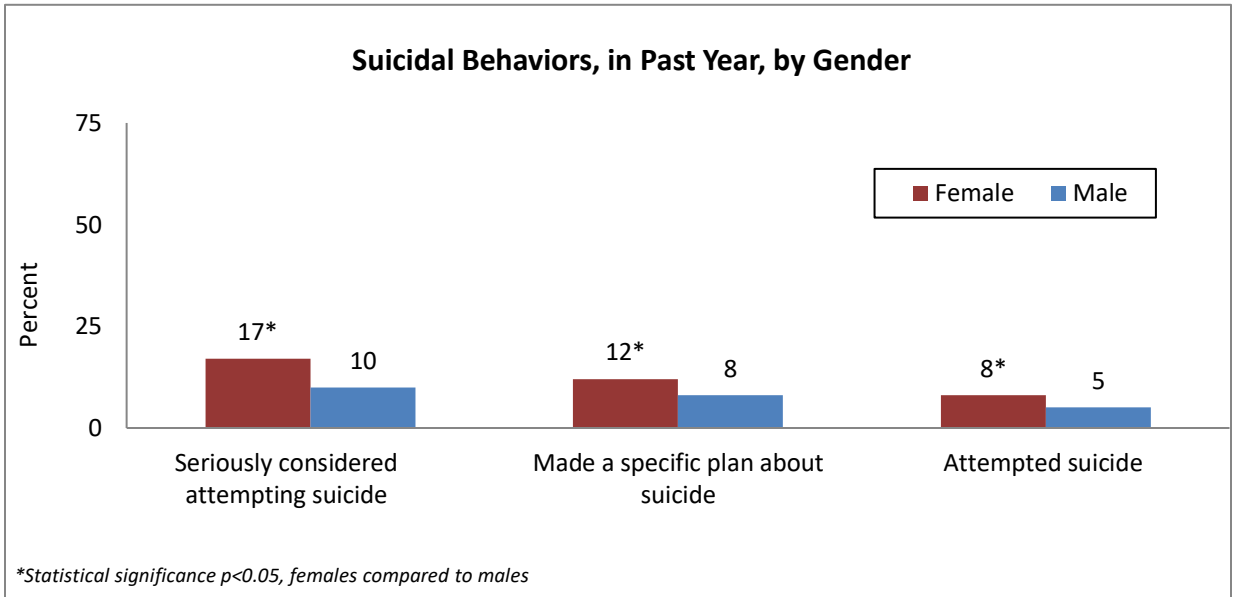
¹New question in 2019

* Trend data not available

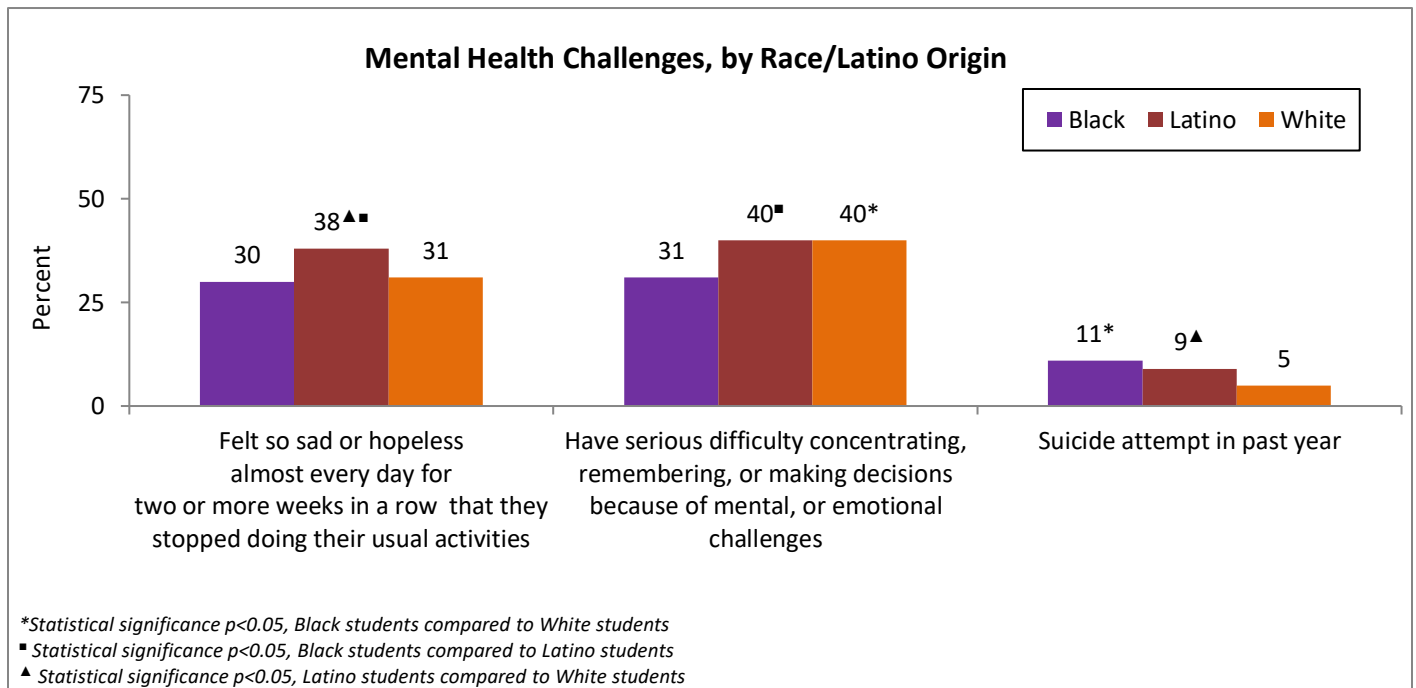
Differences by sub-populations

Females were more likely than males to report mental health problems and suicidal behavior as shown in the graphics below and on the next page.



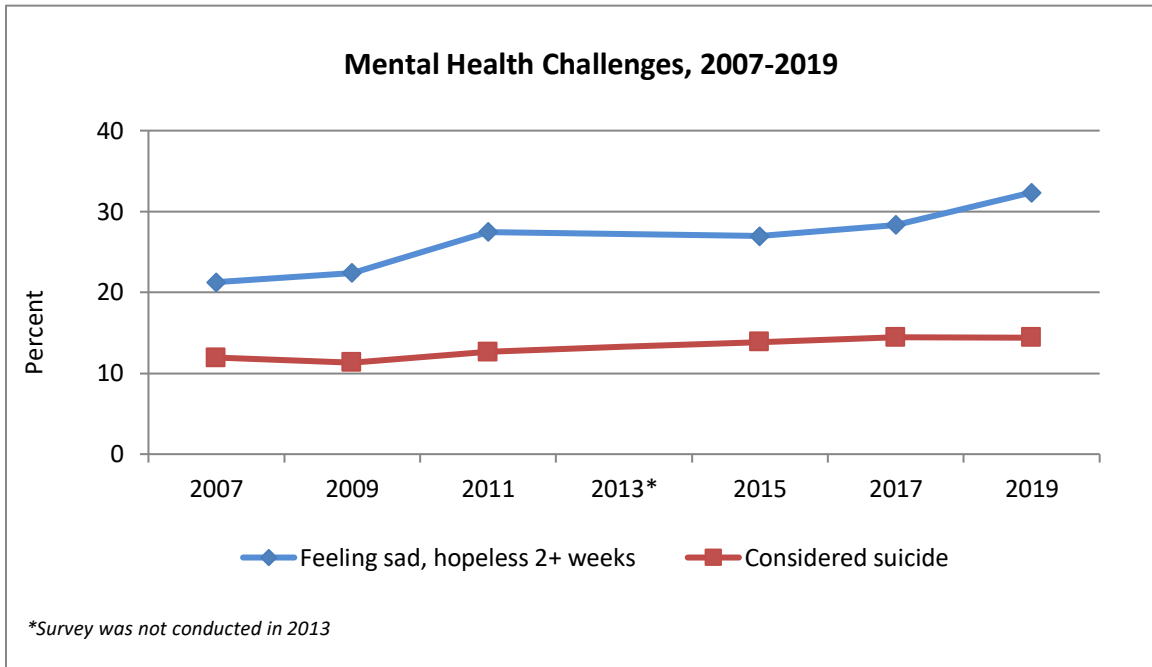


White and Latino students were more likely to report having difficulties due to emotional challenges. Black and Latino students were more likely than White students to report they attempted suicide in the past year.



Trends

The proportion of students who reported feeling sad/hopeless every day for at least two weeks in a row, showed an overall increase from 21% in 2007 to 32% in 2019. There was also an increase in the proportion who reported they considered suicide in the past year, from 12% to 14%.



Tobacco and E-Cigarette Use

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q40 ¹	Ever tried smoking cigarettes, even one or two puffs*	15	13.2	16.5
Q40	Tried cigarette smoking, even one or two puffs, before age 13	6	4.6	6.7
Q41	Smoked cigarettes on one or more days in the past 30 days [Current smoker]	4	3.3	5.1
Q42	Smoked cigars or Black & Milds in the past month	7	5.4	7.8
Q43 ²	Ever used an e-cig or vape product	35	32.7	37.2
Q44 ²	Used an e-cig or vape product before age 13	4	3.3	5.1
Q45 ²	Used an e-cig or vape product on one or more of the past 30 days	23	20.7	24.6

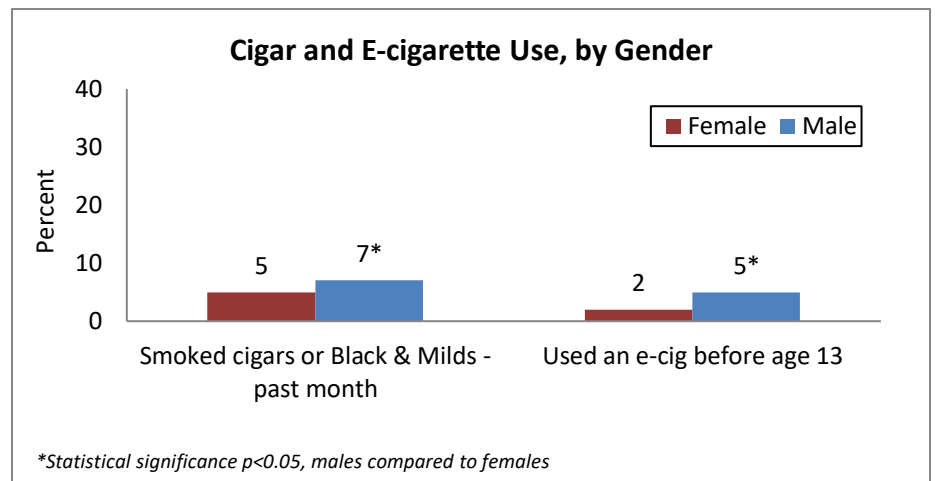
¹In 2019 these results were based on the question “how old were you when you first tried cigarette smoking, even one or two puffs?” Not comparable to other years.

²Slight change in definition in 2019- included vape and vape products, and JUUL

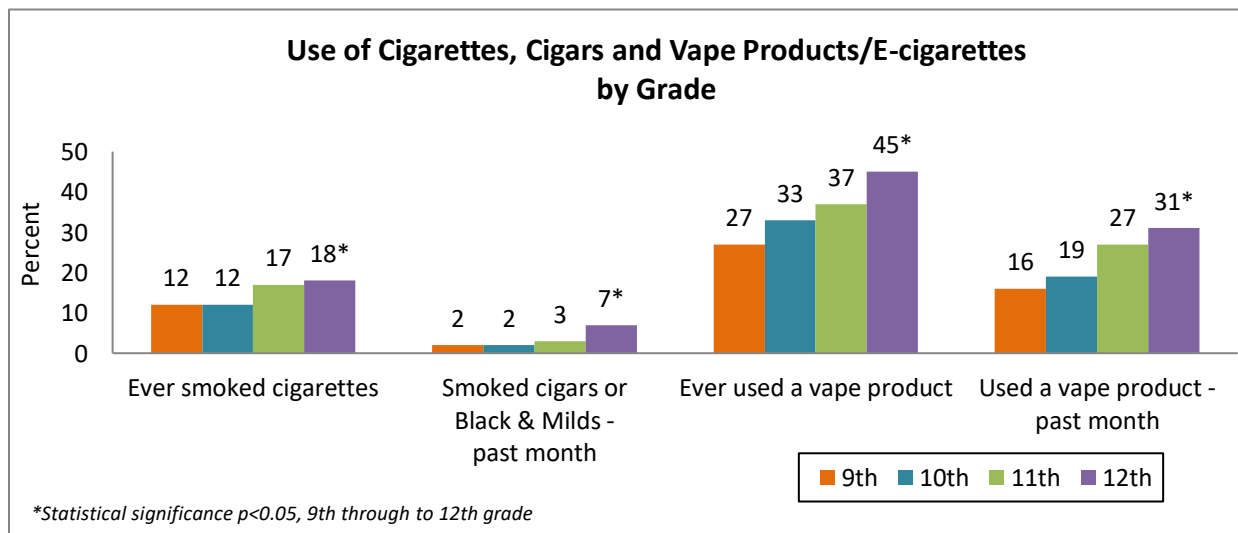
*Trend data not available

Differences by sub-populations

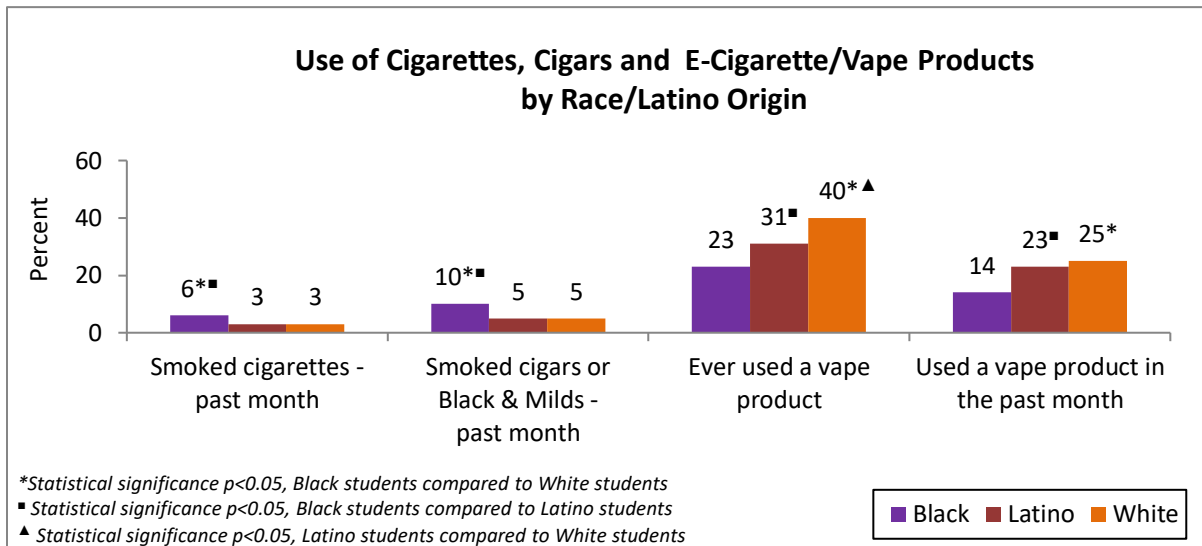
Males were more likely than females to report cigar smoking and early initiation of vape.



Reported use of cigars and vape products increases with grade level.

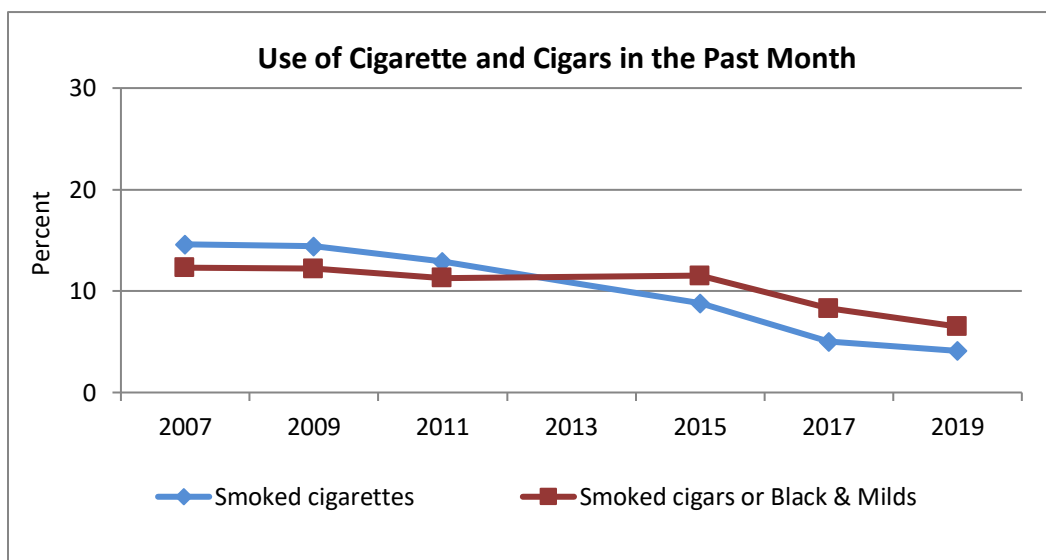


Black students were more likely than White and Latino students to report they smoked cigarettes, cigars or Black & Milds. White and Latino students were more likely than African American students to use vape products.



Trends

Between 2007 and 2019 cigarette and cigar smoking declined significantly.



Between 2015 and 2019, the proportion of youth who reported ever using a vape product/e-cigarette increased from 31% to 35%. During the same time period, the proportion who reported using a vape product in the last 30 days increased from 20% to 23%

Main reason use e-cigarette or vape products

Students were asked to select the one main reason they now use e-cigarettes or vape products.

One Main Reason they Now Use E-cigarettes or Vape Products	%
To get a nicotine buzz	21
To relax or de-stress	20
My friends use them	16
To do tricks or make shapes with the vapor	12
I like the flavors	9
I can't quit/I crave them	3
To try to quit using other tobacco products	1
They are less harmful than other tobacco products	1
Other reasons	17

Alcohol Use

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q47 ¹	Ever drank one or more drinks of alcohol in their lifetime (not including for religious purposes)	42	40.1	44.8
Q47	Had their first drink of alcohol before age 13, other than a few sips	11	9.6	12.5
Q48	Had at least one drink of alcohol in the past month	21	18.8	22.5
Q49 ²	Engaged in binge drinking one or more times during the past month (4 or more drinks of alcohol in a row, within a couple of hours)	10	9	11.8

¹In 2019 these results were based on the question "How old were you when you had your first drink of alcohol?"

²Question changed in 2019, trend data not available. In 2017 defined binge drinking as 4 drinks for males, 5 drinks for females.

The table below shows how students reported that they usually got their alcohol, among those who drank in the past month.

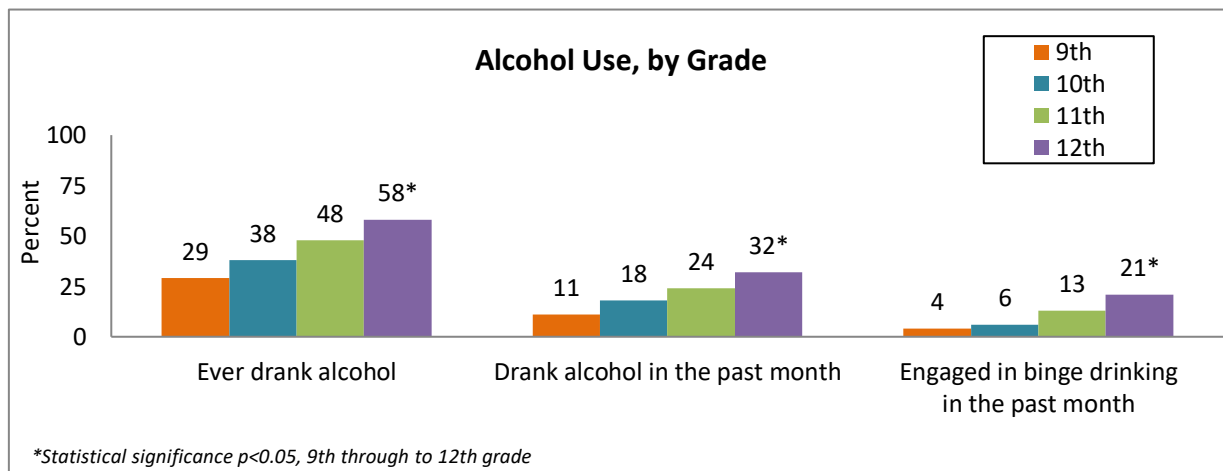
Q50*	How they usually got alcohol, reported by those who drank alcohol in past month	%
	A friend gave it to me	24
	A family member gave it to me	22
	I took it from my home, garage, porch or deck	19
	I gave someone else money to buy it for me	13
	I got it some other way	12
	I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station	4
	I took it from another person's home, garage, porch or deck	3
	I stole it	3
	I bought it at a restaurant, bar, club or a public event such as a concert or sporting event	1

*Trend data not available

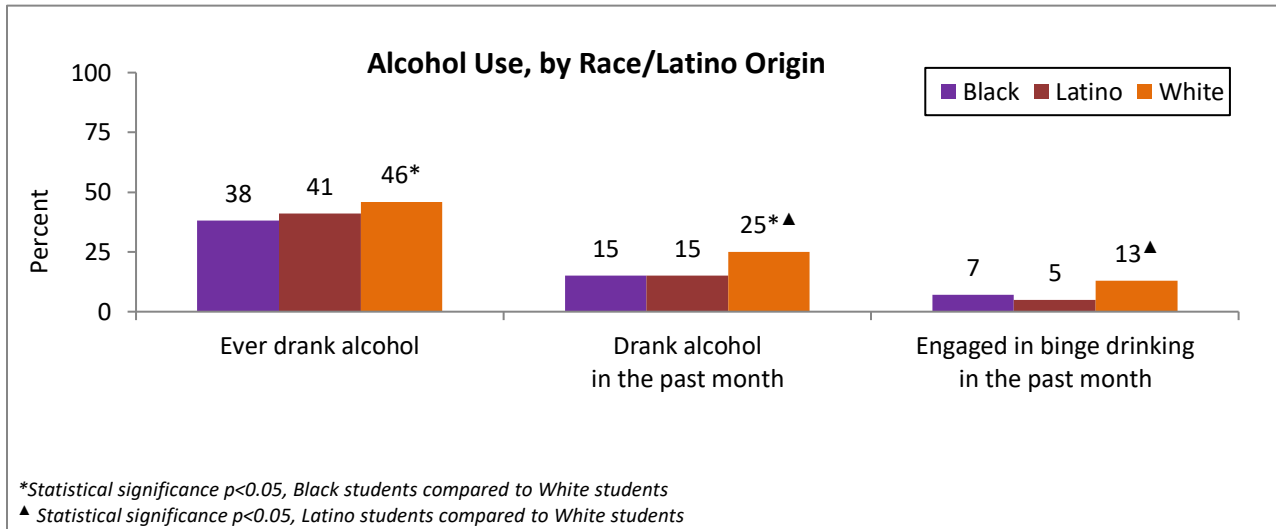
Differences by sub-populations

Females were more likely than males to report ever drinking one or more drinks of alcohol (44% vs. 39%).

Use of alcohol increases with grade level.

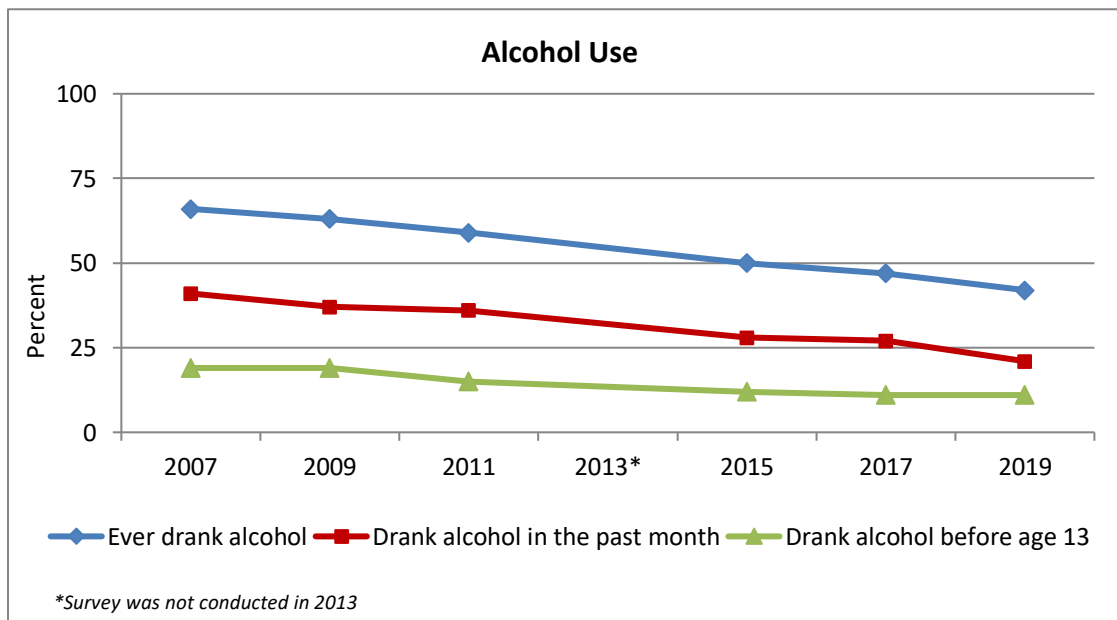


White students were more likely than Black and Latino students to report alcohol use.



Trends

The proportions of youth who reported various alcohol use behaviors declined overall between 2007 and 2019.



Marijuana Use

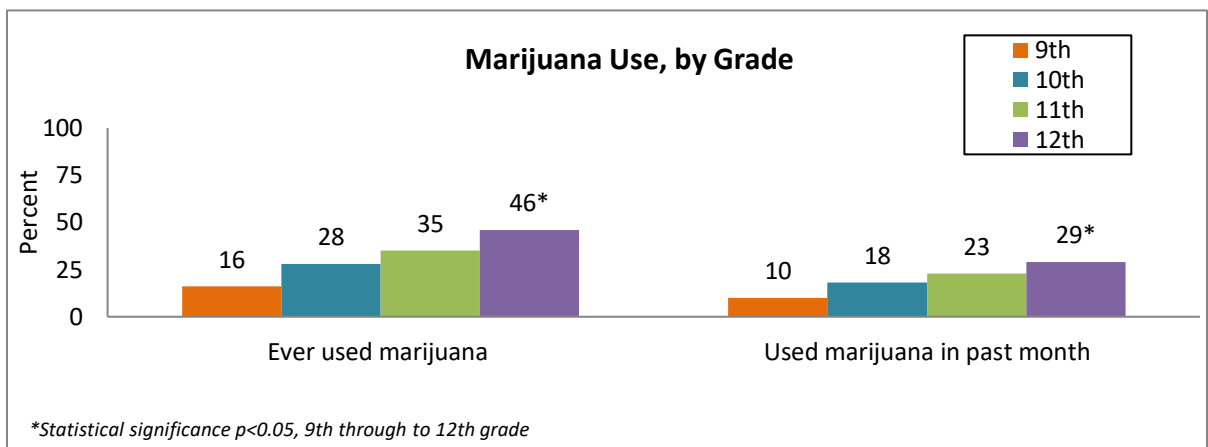
Question #	Students Reported They:	% (rounded)	LCL	UCL
Q51 ¹	Ever used marijuana	30	28.3	32.6
Q51	Used marijuana before age 13	5	3.9	5.9
Q52	Used marijuana in the past month [Current users]	19	17.5	21.1

¹Results based on question, "How old were you when you tried marijuana for the first time?"

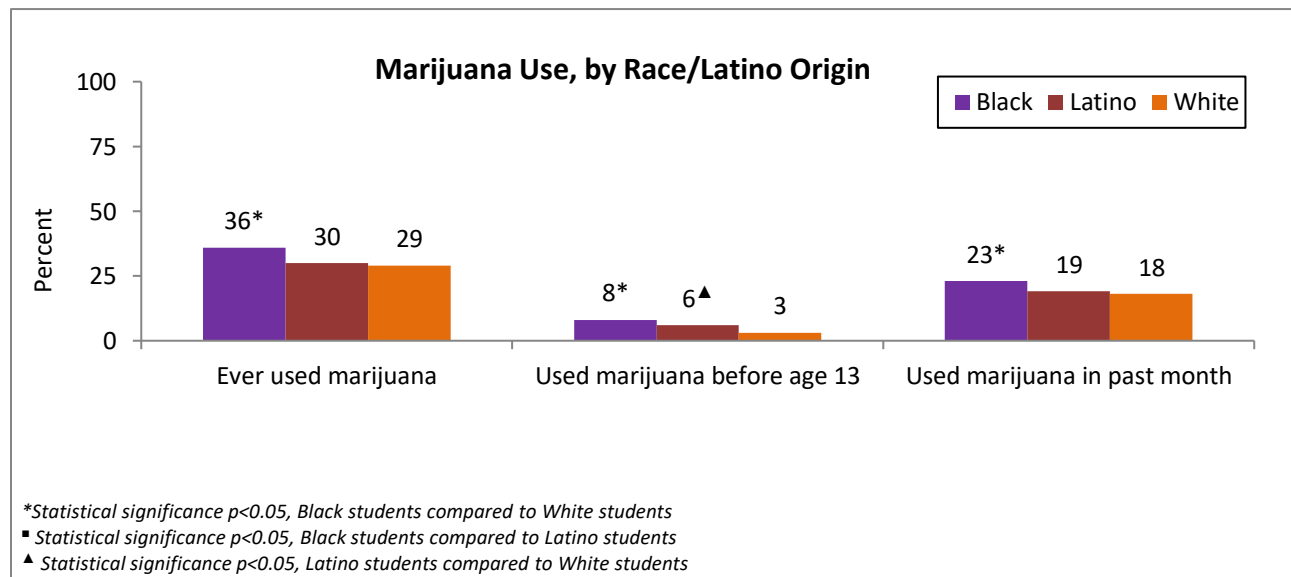
Differences by sub-populations

There were no differences in reported marijuana use by gender.

Marijuana use increased with grade level.

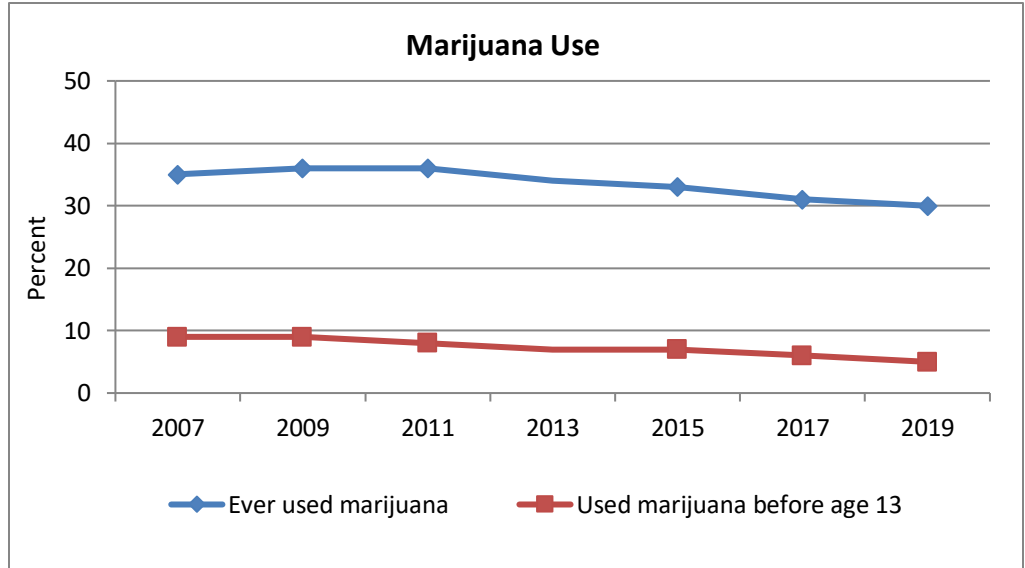


Black students were more likely than White students to report marijuana use.



Trends

The proportions of students who reported they ever used marijuana and they used marijuana before age 13 declined slightly between 2007 and 2019. Reported marijuana use in the past month however, remained stable.



The table to the right shows how marijuana was used, by those who reported using it in the past month. Of note, more than half reported vaping it. Of students who used marijuana, White students (71%) and Latino students (45%) were more likely than Black students (23%) to report that they vaped it.

Question 53* How Marijuana was Used, Reported by those Who Used it in the Past Month¹	%
Smoked it	75
Ate it in food	26
Vaporized it	53
Drank it in tea, cola, etc.	4
Used in in some other way	6
* Trend data not available as there were changes in the description of vaporizing. – included “cartis, cartridges, wax, hash oils, Dabs, THC drops.”	
¹ Students were allowed to select more than one response	

Use of Other Drugs

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q54	Ever used any synthetic drugs (for example K2, Spice, or fake weed)	3	2.1	3.7
Q55 ¹	Ever used cocaine*	3	2.4	4.0
Q56	Ever used heroin	3	1.9	3.4
Q57	Ever used ecstasy	3	2.4	4.0
Q58	Ever used hallucinogenic drugs such as LSD, acid, PCP, angel dust, mescaline or mushrooms	5	3.7	5.7
Q59	Ever injected any illegal drug into their body	2	1.6	2.9
Q60 ²	Ever took prescription medicines not prescribed by their doctor or took them differently than their doctor's directions – PAIN MEDICINE (examples, OxyContin, Hydrocodone, Percocet)*	9	8.0	10.7
Q60 ²	Ever took prescription medicines not prescribed by their doctor or took them differently than their doctor's directions – SEDATIVE MEDICINE (examples, Xanax, Zannie bars, Klonopin, K-pins, Valium)*	5	3.9	6.0
Q60 ²	Ever took prescription medicines not prescribed by their doctor or took them differently than their doctor's directions – STIMULANT MEDICINE (examples, Adderall, Ritalin, and other ADHD medicine)*	8	6.5	9.1
Q60 ²	Ever took prescription medicines not prescribed by their doctor or took them differently than their doctor's directions – PAIN, SEDATIVE AND/OR STIMULANT MEDICINE*	14	12.9	16.2
Q61	Ever took any form of over-the-counter (OTC) drug to get high	6	4.8	6.9
Q81	Used an energy drink one or more times in the past week*	21	19.4	23.3

*Trend data not available

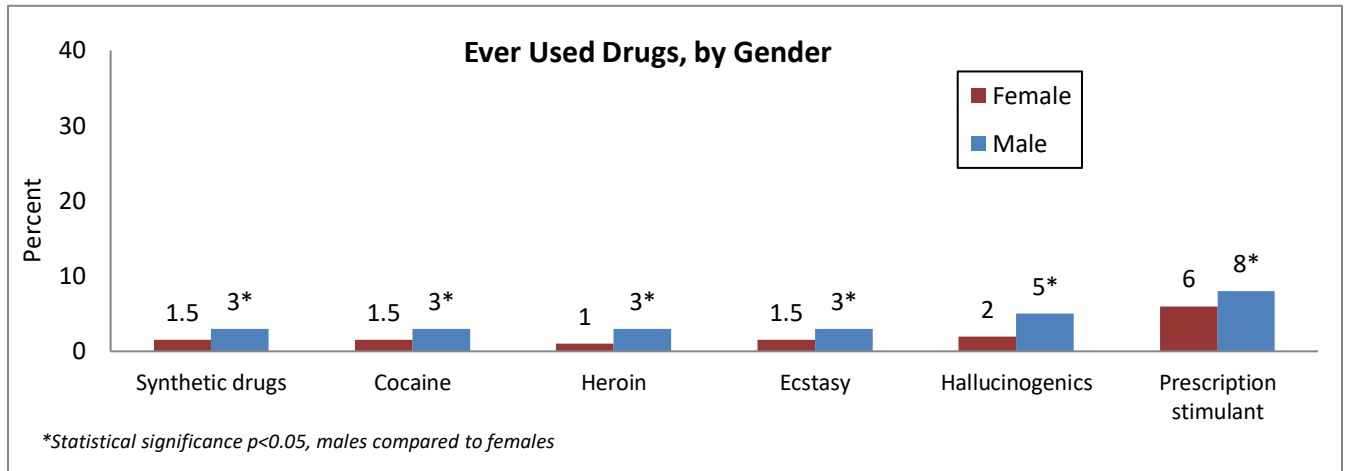
¹Question changed in 2017 to "ever" using from using in the past month.

²New question in 2019. Separated out pain, sedative, and stimulant medicine and added additional examples. In previous years, question about all types was asked in one question – "During your life, how many times have you taken any drug or pill to get high that was prescribed for someone else? (Examples include OxyContin, Percocet, Vicodin, Codeine, Adderall, Ritalin, Xanax, etc.)"

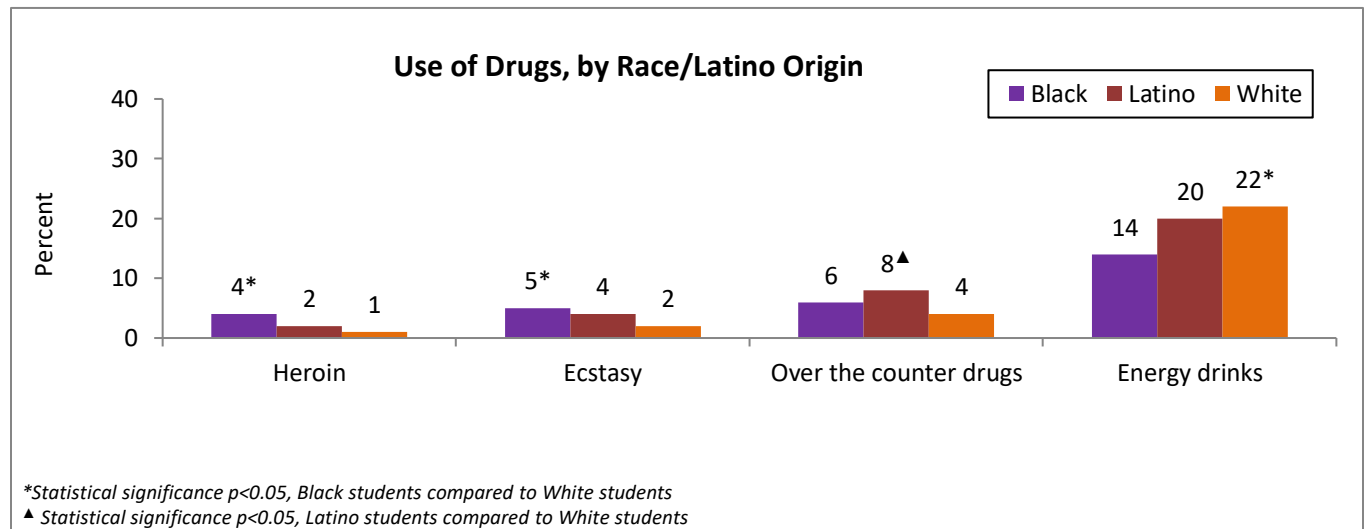
Differences by sub-populations

Use of energy drinks during the past month was more common among males compared to females (26% vs. 15%).

Males were more likely than females to use certain drugs.



Differences by race and Latino origin are shown in the graphic below.



Black and Latino students were more likely to report using a needle to inject drugs compared to White students (5%, 3% and 1% respectively).

Trends

Reported use of synthetic drugs, ecstasy, and over the counter drugs to get high, declined between 2007 and 2019.

Use of Substances at School/Before School

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q62 ¹	During the past year, were offered, sold, or given any drugs or <i>prescription medicines</i> , on school property or on the way to/from school (not counting medicine given by the school nurse)*	12	10.6	13.6
Q63 ¹	During this school year, used any of the following at school or at school events*			
	Alcohol	4	3.1	5.0
	Marijuana, pot, weed or cannabis	8	6.5	9.0
	Cocaine	1	0.6	1.6
	Heroin	1	0.5	1.5
	Pills not prescribed for them	1.5	1.0	2.2
	Other drugs	1	0.7	1.7
	Vape	9	8.1	10.9
	Did not use any of these at school or school events	86	83.6	87
Q64 ¹	During this school year, used any of the following right before going to school or right before school events*			
	Alcohol	4	3.4	5.3
	Marijuana, pot, weed or cannabis	11	9.8	12.8
	Cocaine	1	0.6	1.6
	Heroin	1	0.4	1.2
	Pills not prescribed for them	2	1.1	2.4
	Other drugs	2	1.1	2.3
	Did not use an of these right before going to school or right before going to school events	86	84.1	87.4

* Trend data not available

¹New question

Differences by sub-populations

Males were more likely than females to report alcohol use (5% vs 3%) and marijuana use (6% vs. 9%) before school or school events.

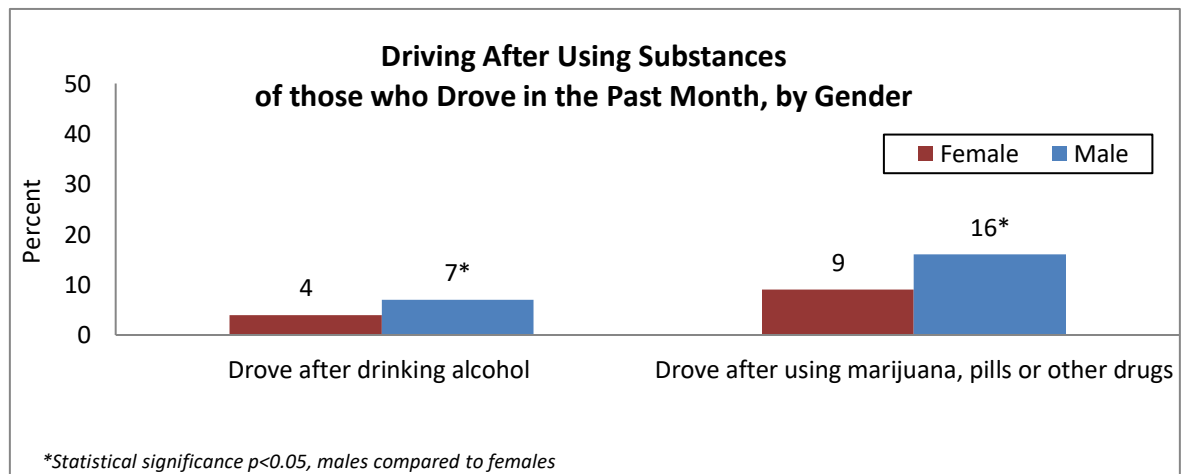
Distracted Driving and Driving Under the Influence

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q12*	Texted, used social media, scrolled the internet, or emailed while driving a car or other vehicle - of those who drove in the past month	30	27.6	33.4
Q8	In the past month, rode in a car with a driver who had been drinking alcohol	15	13.3	16.6
Q9	Drove a car after drinking alcohol – of all students	3	2.7	4.4
Q9*	Drove a car after drinking alcohol-only of those who drove in the past month	7	5.3	8.6
Q10*	In the past month, rode in a car with a driver who had been using marijuana, pills or other drugs	16	14.2	17.6
Q11*	Drove a car when they had been using marijuana, pills or other drugs– of all students	7	6.1	8.5
Q11*	Drove a car when they had been using marijuana, pills or other drugs– only those who drove a car in the past month	14	11.9	16.3

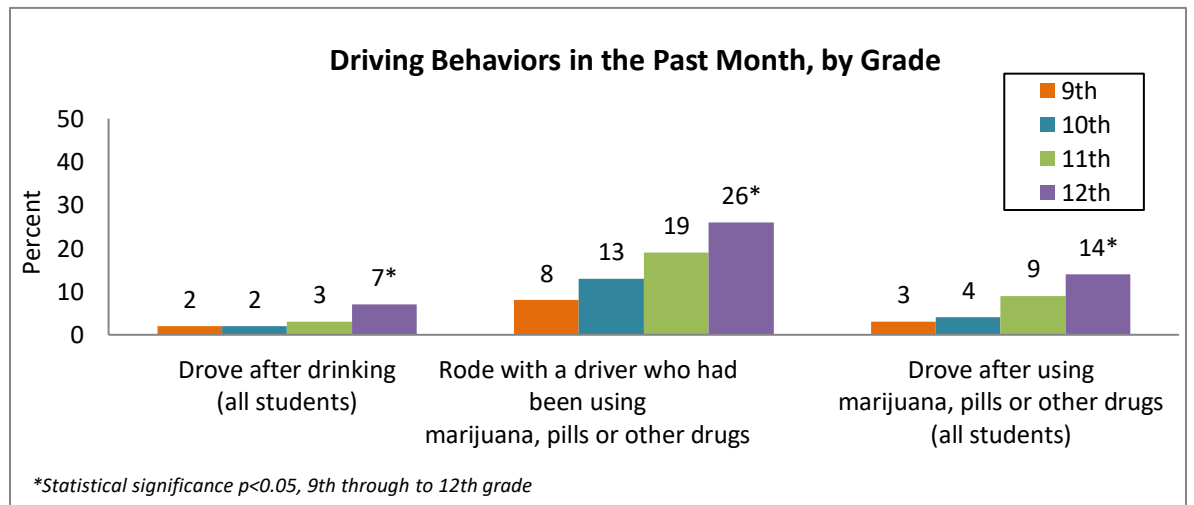
* Trend data not available

Differences by sub-populations

Males were more likely than females to report driving after using substances.



Risky driving behaviors increase with grade level.



Trends

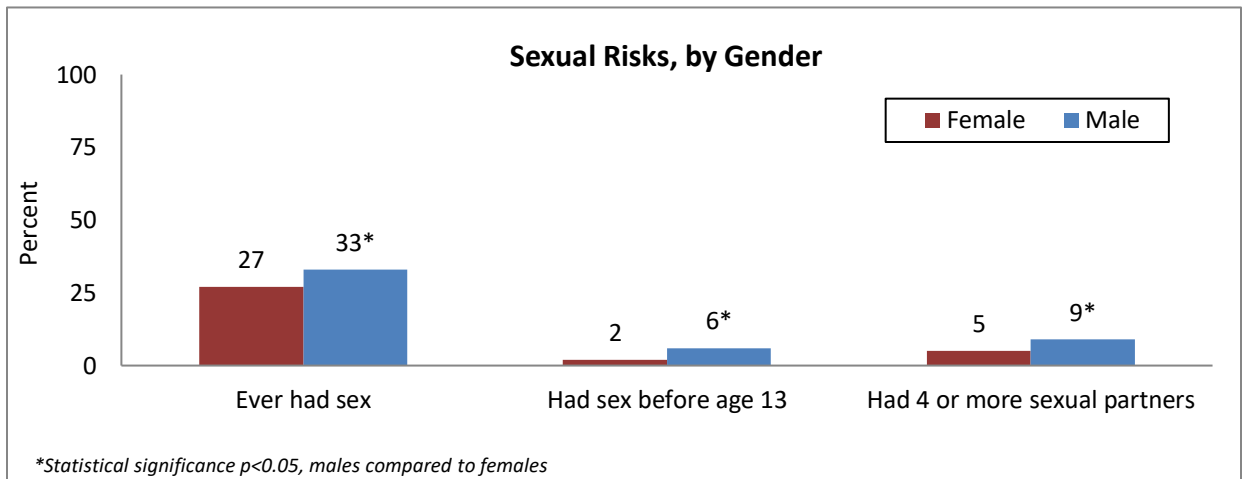
The proportion of students who reported they rode in a car with someone who had been drinking declined from 25% in 2007 to 15% in 2019. Reported drinking and driving declined from 10% in 2007 to 4% in 2019.

Sexual Risk Behaviors

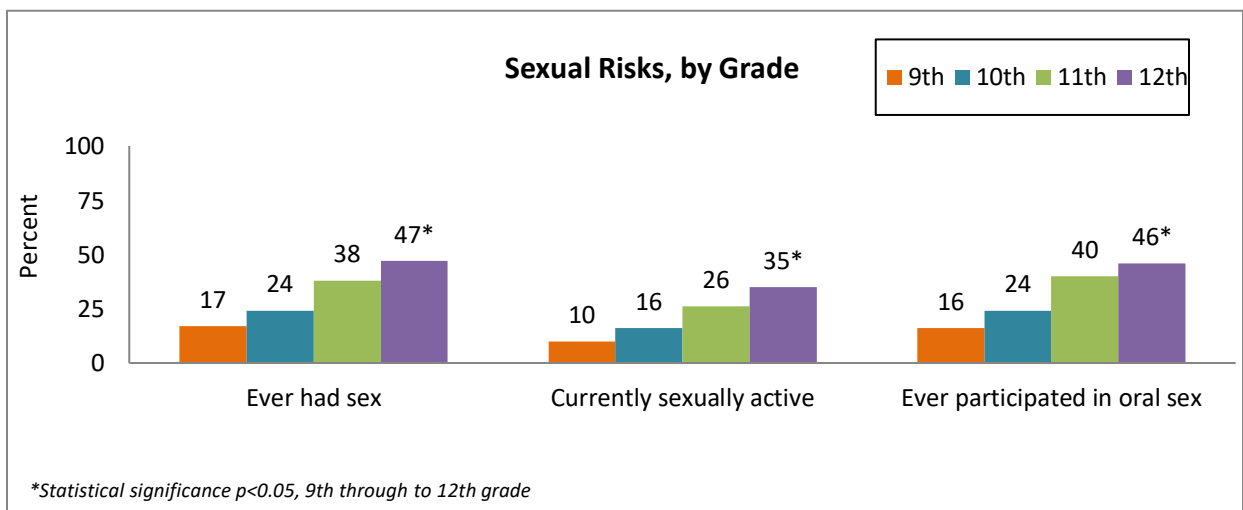
Question #	Students Reported They:	% (rounded)	LCL	UCL
Q65	Ever engaged in sexual intercourse	31	28.4	32.7
Q66	Had sexual intercourse before age 13	4	3.2	5.1
Q68	Engaged in sexual intercourse in the past 3 months [currently sexually active]	21	19.3	23.2
Q67	Had sexual intercourse with 4 or more partners in their lifetime	8	6.5	9.1
Q73	Ever participated in oral sex	31	28.6	33.0
Q74	Participated in oral sex before age 13	3	2.6	4.3
Q69	Used alcohol or drugs before they had sex the last time, of currently sexually active students	22	18.0	26.7

Differences by sub-populations

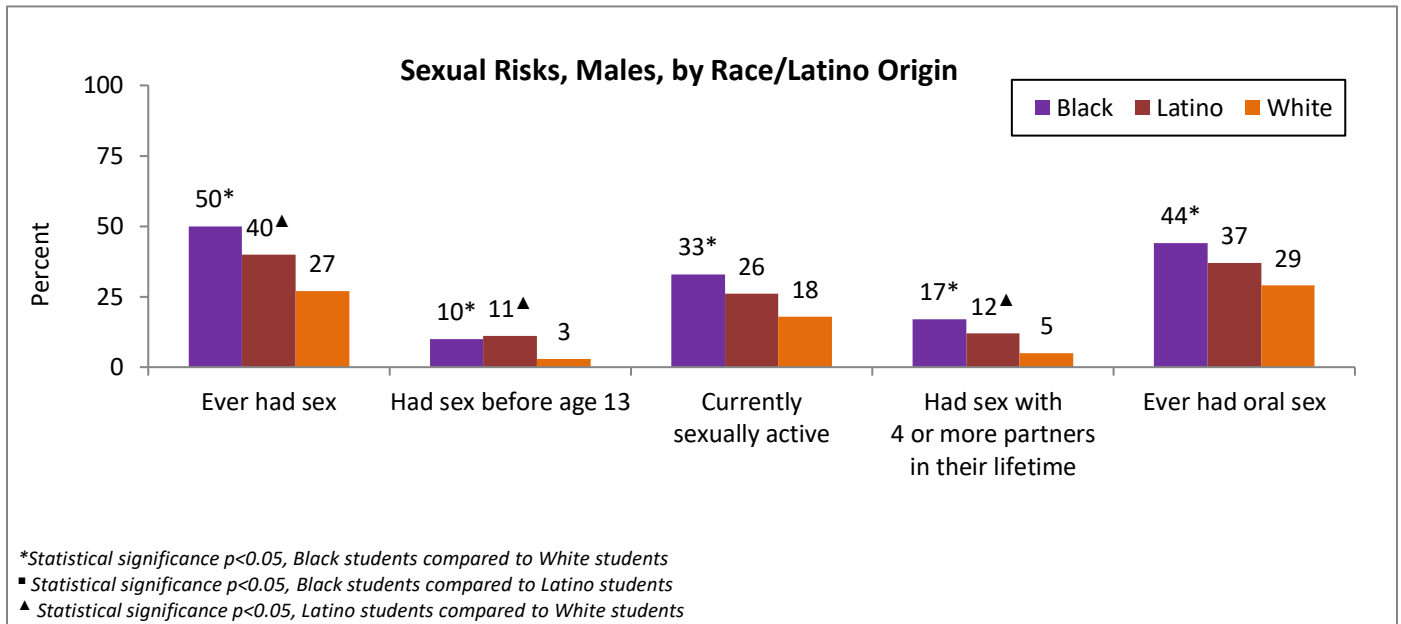
Males were more likely than females to report selected sexual risks.



Sexual risks increase with grade level.

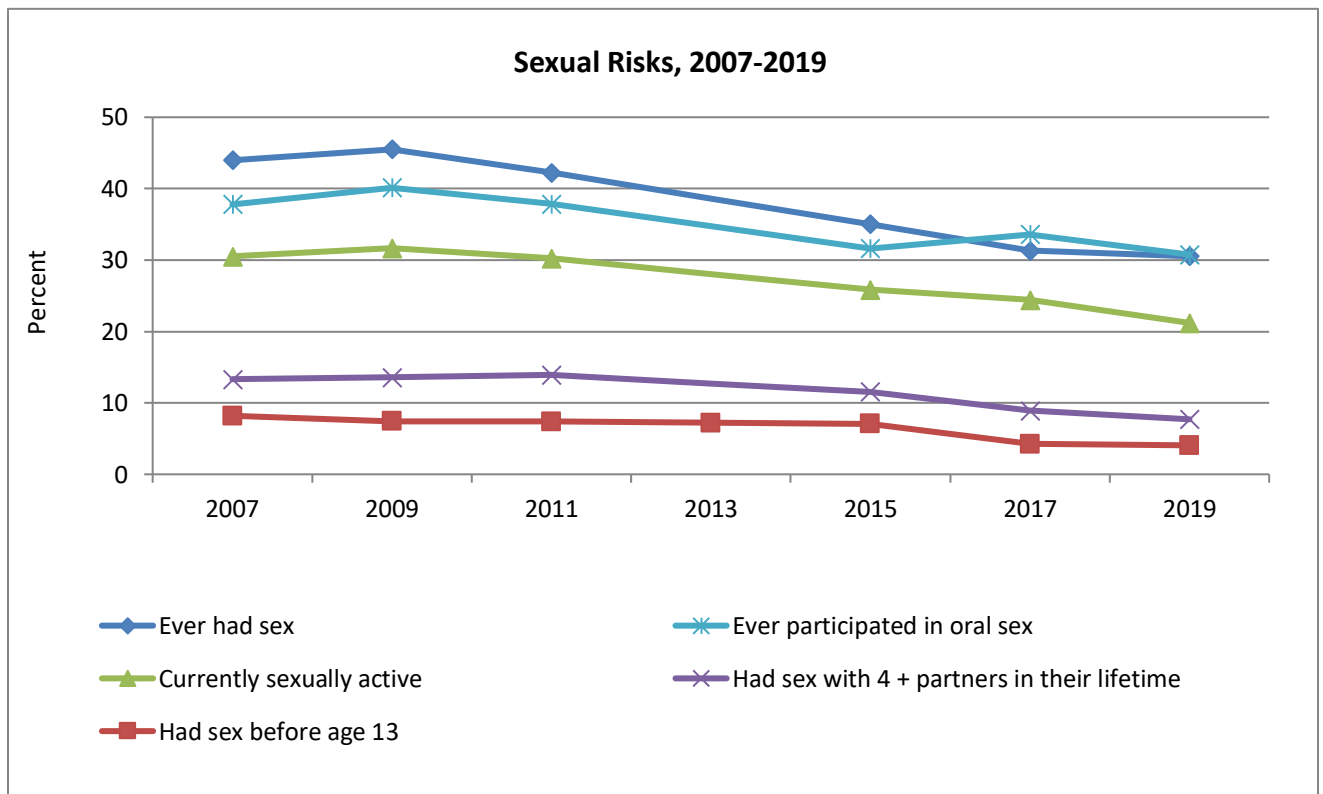


Black and Latino male students were more likely to report sexual risks compared to White male students. There were not differences by race and Latino origin among female students.



Trends

Reported sexual risks among youth declined overall between 2007 and 2019 as shown in the graphic below.



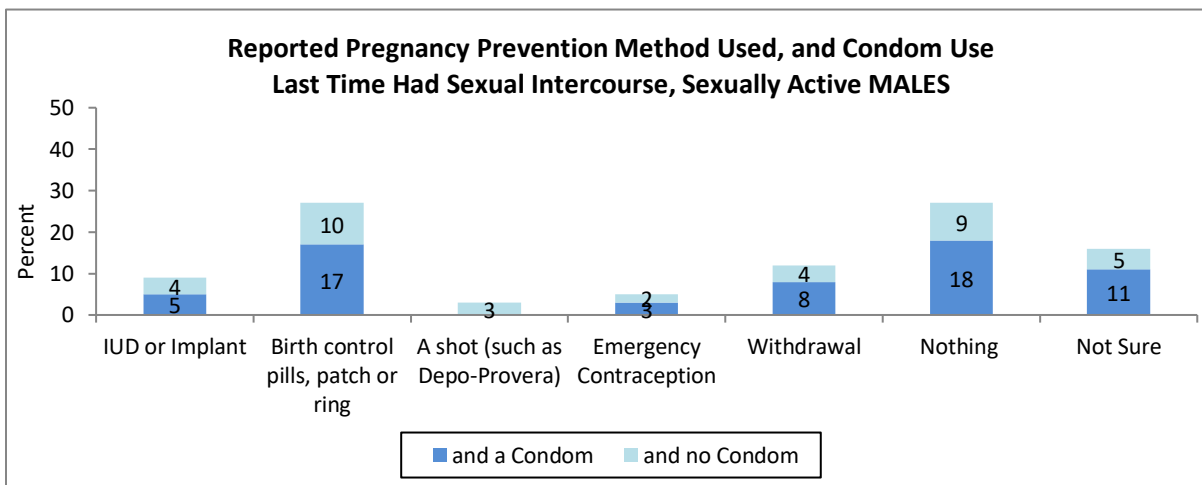
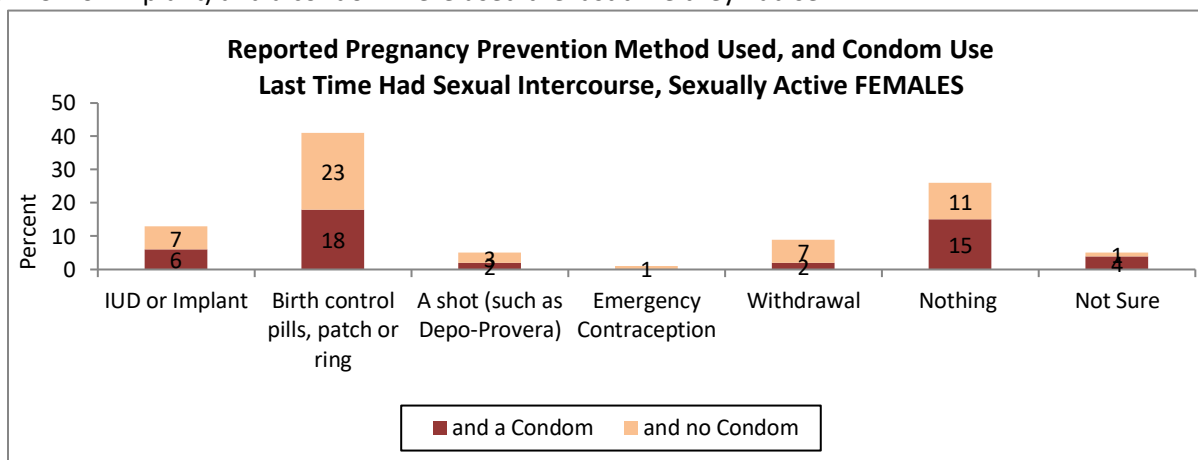
Prevention of Pregnancy and STDs

Long Acting Reversible Contraception (LARC), including IUDs (intrauterine devices) and contraceptive implants (Nexplanon), have high success rates (>99%) in preventing pregnancy.¹⁶ The American Congress of Obstetricians and Gynecologists recommends LARC be offered as first-line contraceptive options for all adolescents.¹⁷ LARC, however, does not offer protection against sexually transmitted diseases. The American Academy of Pediatrics recommends that health care providers encourage the consistent and correct use of both condoms and reliable contraception as part of anticipatory guidance with adolescents who are sexually active or contemplating sexual activity in order to prevent pregnancies and STDs.¹⁸

Of sexually active youth:

- 47% of females reported their partner used a condom the last time they had sex.
- 61% of males reported they used a condom the last time they had sex.

The graphics below show the pregnancy prevention methods reported by sexually active youth, by gender. Of note, only 6% of sexually active females reported that long acting reversible contraception (an IUD or implant) and a condom were used the last time they had sex.



¹⁶ Winner, B., Peipert, J., Zhao, Q., Buckel, C., Madden, T., Allsworth, J. "Effectiveness of Long-Acting Reversible Contraception" NEJ Med May 24,2012;366:1998-07.

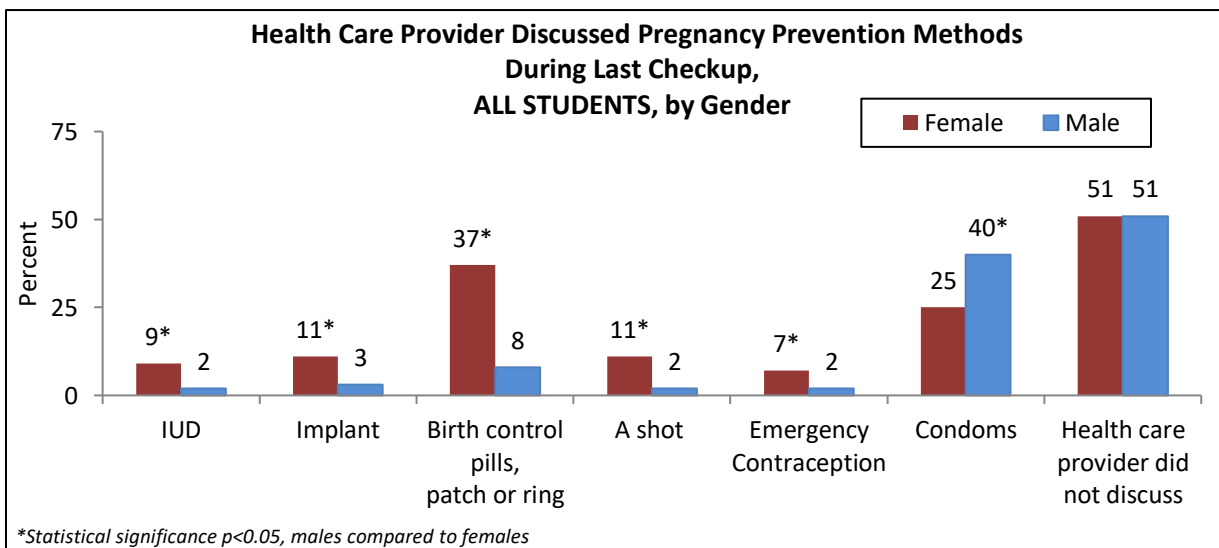
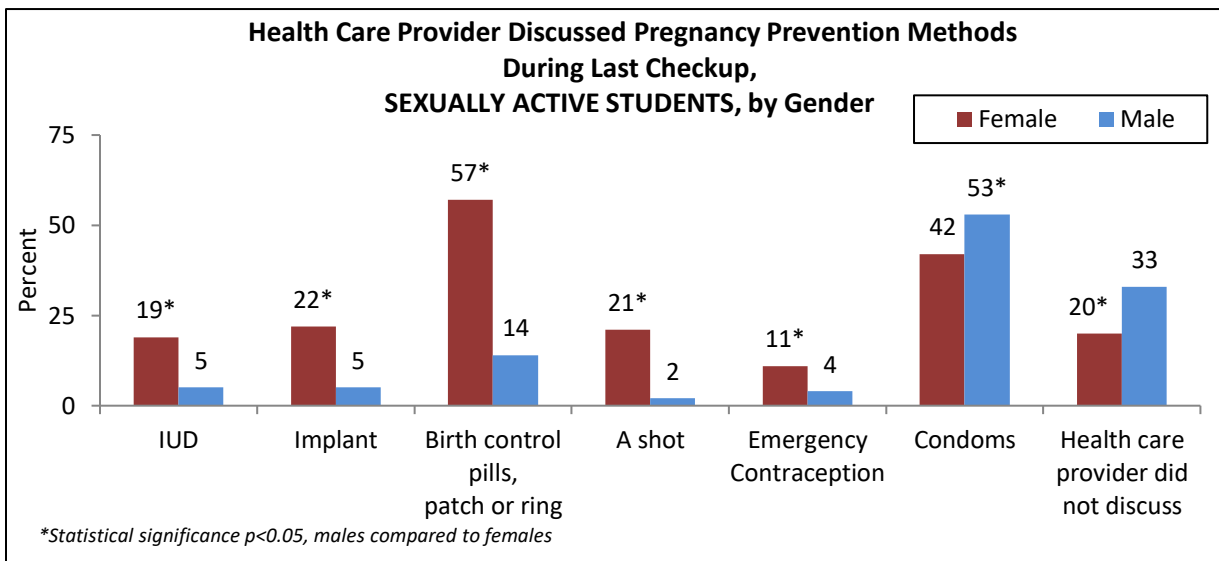
¹⁷ ACOG Committee on Adolescent Health Care Long-Acting Reversible Contraception Working Group (2012) The American Congress of Obstetricians and Gynecologists. Committee opinion no. 539: adolescents and long-acting reversible contraception: implants and intrauterine devices. Committee Opinion Number 539. Retrieved on 5-19-15, from <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Adolescent-Health-Care/Adolescents-and-Long-Acting-Reversible-Contraception>

¹⁸ POLICY STATEMENT: Condom Use by Adolescents. PEDIATRICS Volume 132, Number 5, November 2013. <downloaded 10-20-2015>

The graphics below show the proportions of sexually active students and all students, who reported their health care provider discussed various pregnancy prevention methods with them at their last checkup.

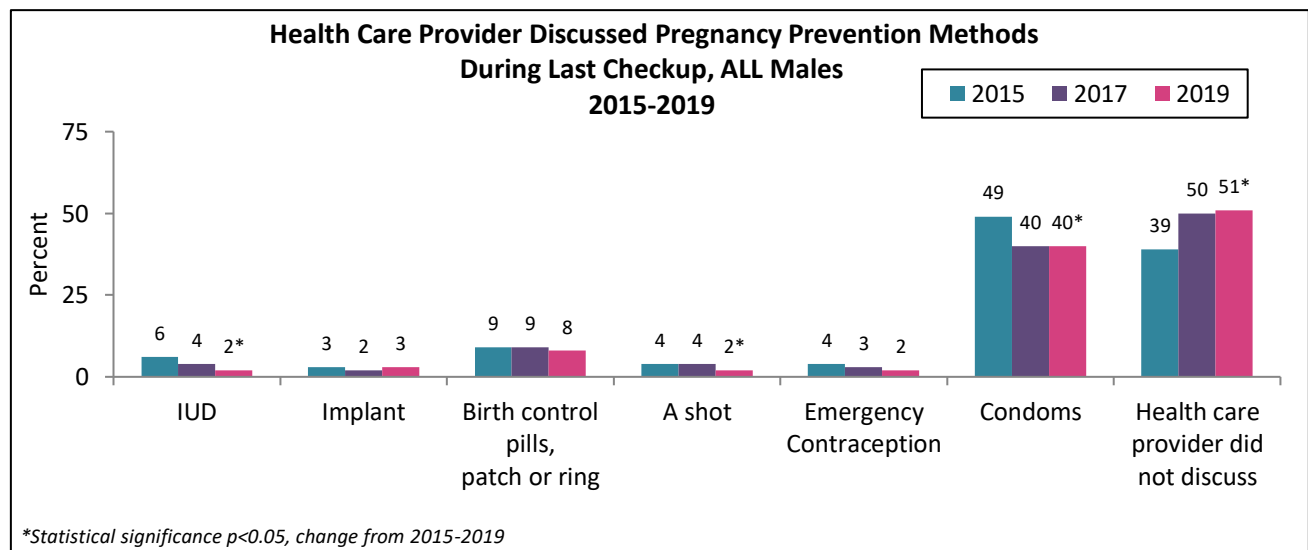
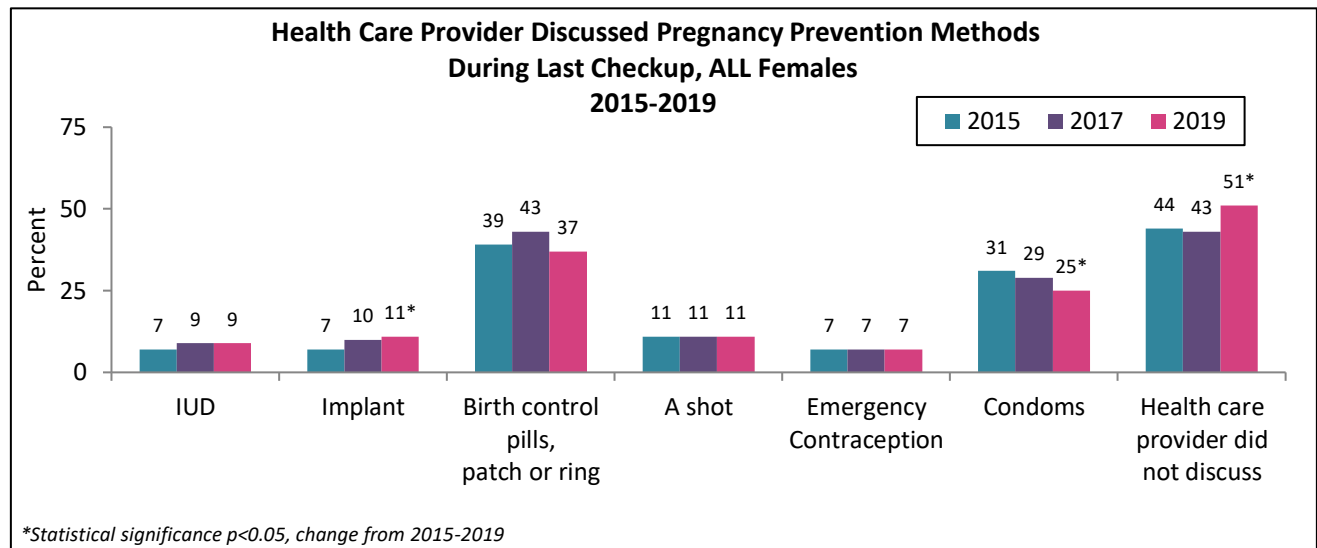
Females were more likely than males to report their doctor discussed using an IUD, implant, pill, patch, ring, shot, and emergency contraception as pregnancy prevention methods.

Males were more likely than females to report their health care provider discussed using a condom as a pregnancy prevention method. Sexually active males were more likely than sexually active females to report their doctor did not discuss any pregnancy prevention method with them.



Trends

Between 2015 and 2019, among all female and male students, there was an increase in those who reported that during their last checkup, their doctor or health care provider did not discuss ways to prevent pregnancy. There were declines in the proportion who reported their doctor discussed using condoms. The proportion of females that reported their doctor discussed an implant as a pregnancy prevention method increased from 7% to 11%.



Among sexually active females, the proportion who reported that their doctor discussed an implant as a pregnancy prevention method increased from 14% to 22%.

Among sexually active males, the proportion who reported their health care provider did not discuss pregnancy prevention methods at their last checkup declined from 21% to 33%.

Physical Activity/Sedentary Behavior

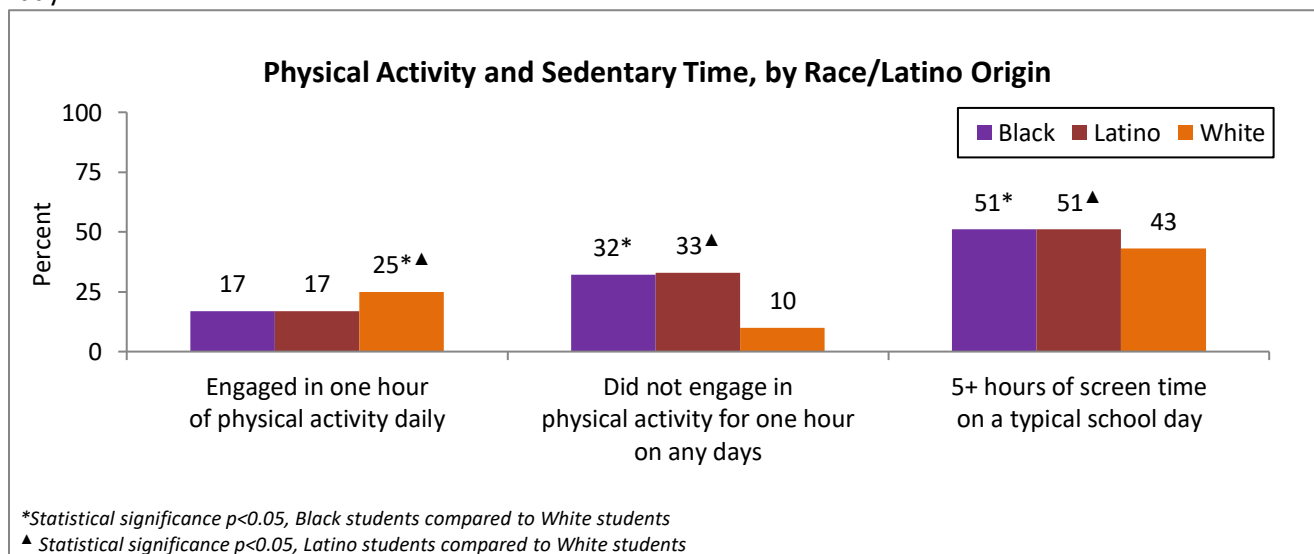
Question #	Students Reported They:	% (rounded)	LCL	UCL
Q82	Engaged in one hour or more of physical activity daily during the past seven days (current recommendations)	22	20.4	24.4
Q82	Engaged in one hour or more of physical activity daily during the past five days	42	40.1	44.8
Q82	Did not engage in one hour of physical activity on any of the past seven days	18	16.3	20.0
Q83 ¹	On an average school day, spend 3+ hours watching TV, Netflix, Hulu, or other video streaming websites	41	39.1	43.8
Q84 ¹	On an average school day, spend 3+ hours playing video or computer games, or using a computer or smartphone <u>for something that is not school work</u>	42	40.0	44.6
Q83 Q84	Watch TV or video streaming sites, play video or computer games or use a computer/smartphone <u>for something that is not school work</u> , for 3 or more hours on a typical school day (3+ hours screen time)	72	70.0	74.3
Q83 Q84	Watch TV or video streaming sites, play video or computer games or use a computer/smartphone <u>for something that is not school work</u> , for 5 or more hours on a school day (5+ hours screen time)	47	44.4	49.1

¹questions changed slightly related to new technology and websites

Differences by sub-populations

Males were more likely to report they met the current recommendations for physical activity compared to females (28% compared to 16%).

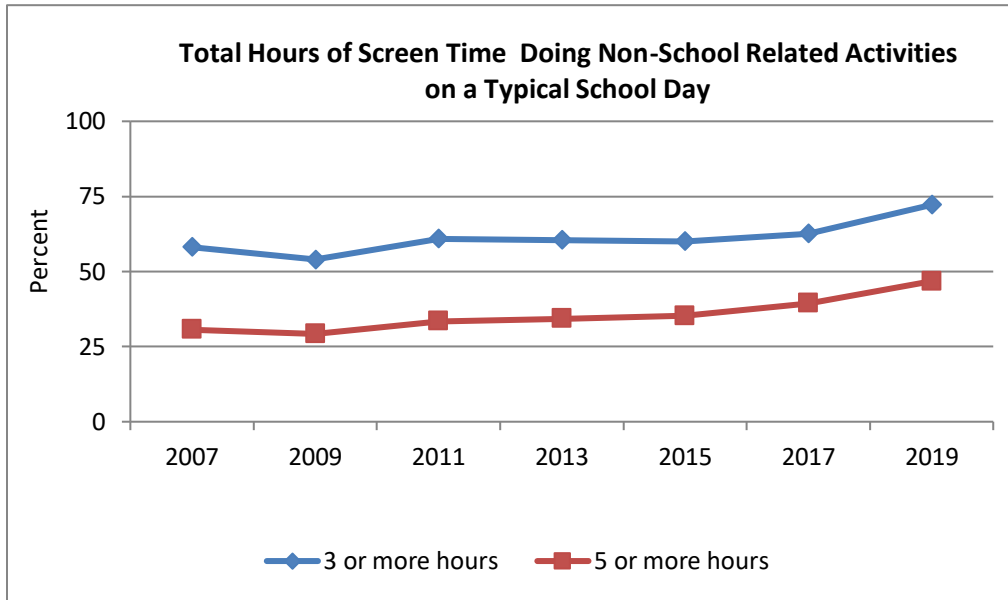
White students were more likely than Black and Latino students to report engaging in physical activity. Black and Latino students were more likely to report five or more hours of screen time on a typical school day.



Trends

There was an increase in the proportion of students reporting one hour of daily physical activity from 15% in 2007 to 22% in 2019. At the same time, there was a decline in the proportion who reported they did not get one hour of physical activity on any of the past seven days (from 26% to 18%).

Time spent in front of a screen, doing non-school related activities increased between 2007 and 2019.



Sleeping Habits

Question #	Students Reported They:	% (rounded)	LCL	UCL
Q85	Get 8 or more hours of sleep on an average school night	28	25.5	29.7
Q85	Get 6 or less hours of sleep on an average school night	45	42.3	47.0

Differences by sub-populations

Males were more likely than females to report getting eight or more hours of sleep (31% vs. 24%). Females were more likely than males to report getting six or less hours of sleep on a typical school night (49% vs. 40%).

Trends

Reported hours of sleep per night has not changed significantly since 2011 when the question was first added to the survey.

Parental Influences

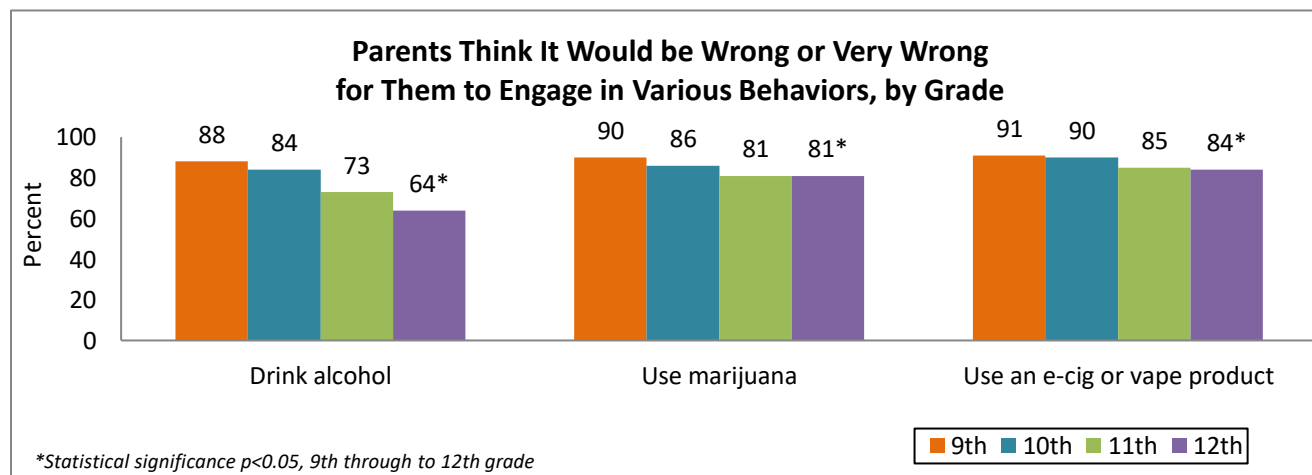
Question #	Students Reported Their Parents Feel	% (rounded)	LCL	UCL
Q86*	It would be <u>very wrong</u> or <u>wrong</u> for them to drink alcohol	78	75.8	79.7
Q86*	It would be <u>very wrong</u> or <u>wrong</u> for them to smoke	96	95.2	97.1
Q86*	It would be <u>very wrong</u> or <u>wrong</u> for them to smoke marijuana	85	82.9	86.3
Q86*	It would be <u>very wrong</u> or <u>wrong</u> for them to use an e-cig or vape product	88	86.1	89.1

* Trend data not available

Differences by sub-populations

Females were more likely than males to report their parents would feel it was wrong or very wrong for them to smoke cigarettes (98% vs. 96%).

Students in 12th grade were less likely to report their parents would disapprove of them using substances, compared to students in lower grade levels.

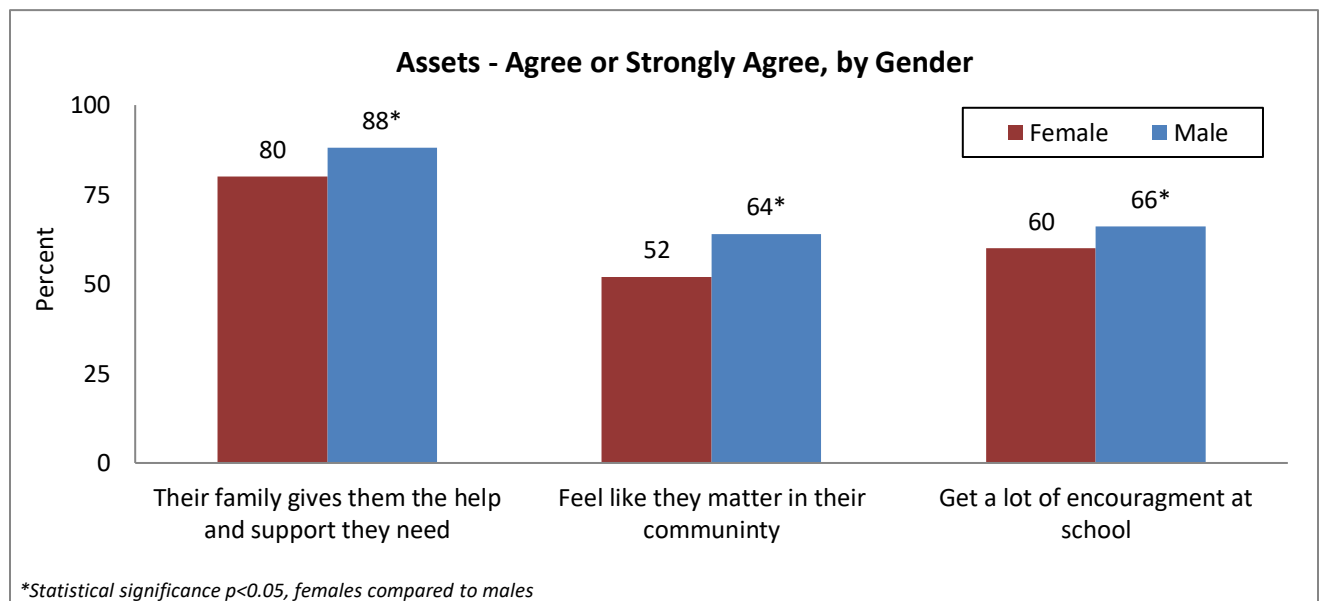


Assets

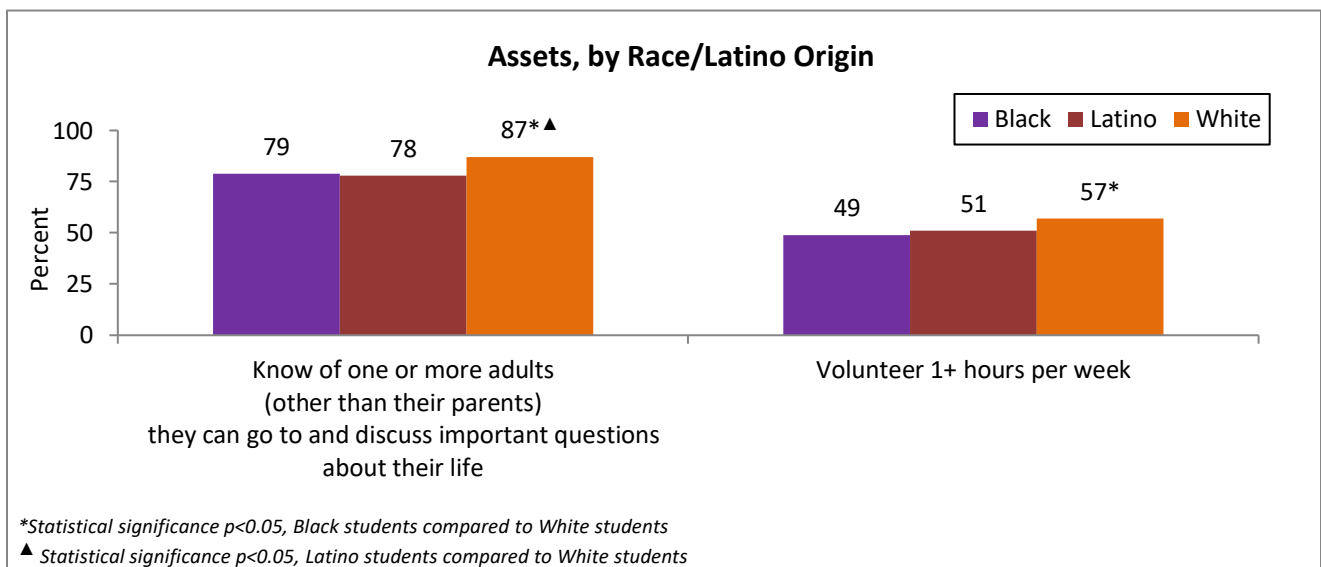
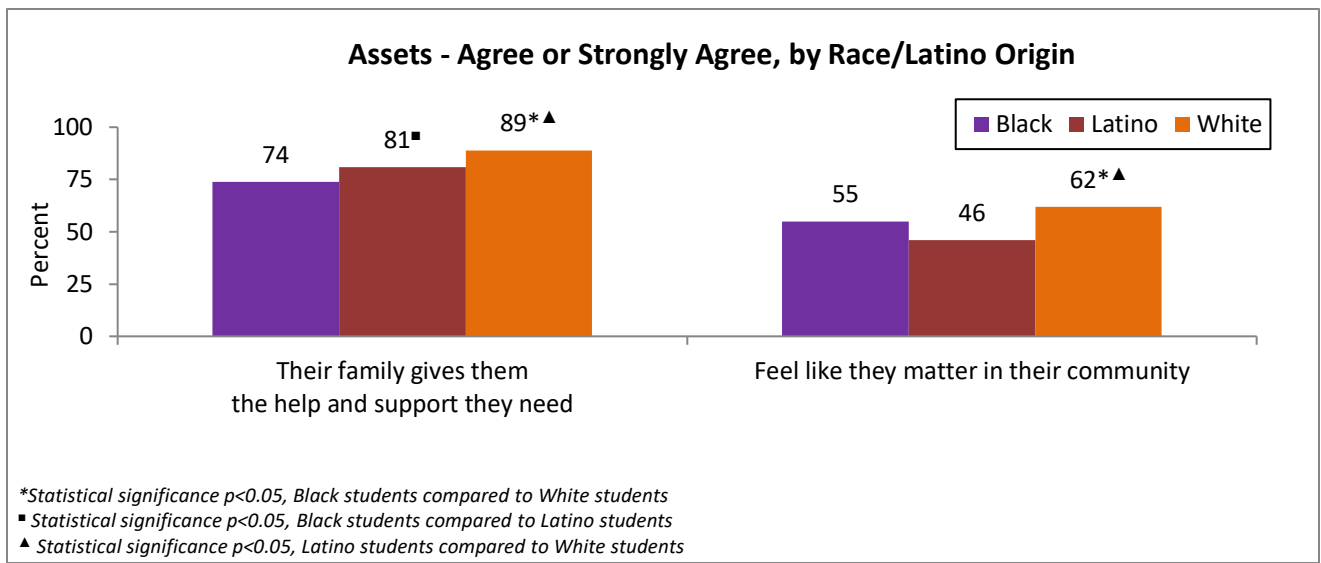
Question #	Students Reported They:	% (rounded)	LCL	UCL
Q38	Agree or strongly agree with the statement "My family gives me help and support when I need it"	83	81.5	84.9
Q87	Agree or strongly agree with the statement "In my family there are clear rules about what I can and cannot do"	85	83.5	86.9
Q88	Agree or strongly agree with the statement "I get a lot of encouragement at my school"	62	60.1	64.7
Q89	Agree or strongly agree with the statement "In my community I feel like I matter to people"	57	54.8	59.5
Q90	Know of one or more adults (other than their parents) they can go to and discuss important questions about their life	84	81.8	85.3
Q91	Spend one or more hours per week helping others without getting paid (volunteering) (Count such things as helping out at church/temple/mosque, a hospital, daycare center, food shelf, youth program, community service agency or doing other things to make your city/town a better place for people to live)	55	52.2	56.9

Differences by sub-populations

Males were more likely than females to report they receive family support, matter in the community and receive a lot of encouragement in school.



Differences by race and Latino origin are shown in the graphics below.



Trends

The proportion of students who reported they agree or strongly agree with the statement “In my family there are clear rules about what I can and cannot do” increased from 81% in 2007 to 85% in 2019.