
RESULTS OF THE MASSACHUSETTS YOUTH HEALTH SURVEY 2023

Health Survey Program
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Office of Population Health
Massachusetts Department of Public Health



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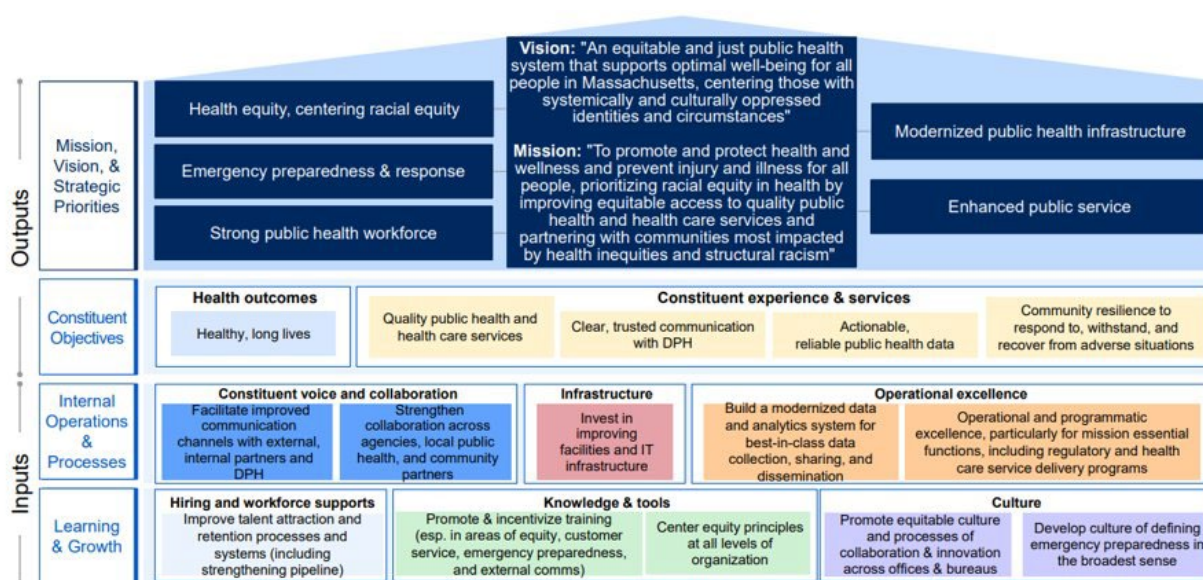
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Introduction

The following report presents analyses of health-related behaviors for middle and high school youth in Massachusetts from the Massachusetts Youth Health Survey (MYHS). The report presents comparative descriptive analyses of health behaviors by gender, race/ethnicity, and grade of middle and high school students. It provides a picture of the current health behaviors of Massachusetts students with the goal to identify high risk population groups with a particular focus on racial/ethnic disparities. It aims to assess the association between certain health behaviors and the demographic structure of student populations. The information obtained in these surveys assists in identifying the need for youth programs, interventions, and health policies.

In interpreting these results, it is critical to recognize that the social, economic, behavioral, and physical factors experienced by populations where they live, work, and play profoundly impact their health. Disparities in outcomes by race, for example, are much more often due to social factors and the legacy of racial discrimination than biological causes. The social determinants of health (SDOH) are rooted in systems therefore, public health action to reduce and prevent health inequities must be directed at systems change. The Massachusetts Department of Public Health (MDPH) focuses on the SDOHs to achieve the vision of an equitable and just public health system that supports optimal well-being for all people in Massachusetts. More information about Social Determinants of Health can be found on the Population Health Information Tool (PHIT) website [[Population Health Information Tool | Mass.gov](#)].



The survey has historically been conducted during the spring of odd-numbered years. However, due to the COVID-19 global pandemic, most schools nationwide, including those in Massachusetts, began their 2020-2021 school year with students learning remotely; the decision was made to defer the administration until the fall of 2021. The pandemic impacted students' lives and social connections, as many of these social connections are made while in school. This likely contributed to several changes in behaviors, most notably alcohol, tobacco, and marijuana use. In 2023, the survey returned to a spring administration; many behaviors remained closer to 2021 levels than to 2019.

In 2023, for the first time, YHS was able to include a 'nonbinary' response option to the question on gender. This group is included in the demographics table; however, as is frequently the case with smaller subpopulations, the variance around estimates for health indicators for this group was sufficiently high that these estimates are not presented here. We recognize that this is an important group that experiences several health disparities and will be able to document these as more years of data become available. Where available, multiple years of data are shown for comparison.

Executive Summary

This report presents key indicators of the health behaviors of middle and high school students reported on the Massachusetts Youth Health Survey (MYHS). These indicators provide important information about the health, safety, and well-being of youth across the state. In 2023, 60 high schools participated, with 2,456 students completing the YHS high school survey. Ninety-one middle schools participated in 2023, with 3,426 students completing the YHS middle school survey. Surveys were administered in schools between January and June of 2023. The statistics presented are weighted to be representative of all Massachusetts public middle and high school students.

Highlights

Data provided by the MYHS are used throughout the department for program planning, monitoring, and evaluation. Several topics of policy relevance were selected to highlight.

Protective Factors: The prevalence of protective factors has remained stable overall and among demographic subgroups since 2019. However, in 2023, we found that Black and Hispanic/Latine students were less likely than White or Asian students to report taking part in organized activities. Female students and Black and Hispanic/Latine students were less likely than male students and White students to report feeling like they belong at their school. In addition, students who identified as LGBTQ were less likely to report feeling safe when with family/caregivers, were less likely to feel like they belonged at school, and were less likely to report feeling that their family/caregivers supported their interests than their straight, cisgender counterparts.

Mental Health and Suicidality: The prevalence of non-suicidal intentional self-injury and feeling sad or hopeless among both high school and middle school youth has been increasing, and although slightly better than in 2021, it was still higher than in previous years. Females were more likely than males to report self-injury, feeling sad or hopeless, and seriously considering suicide. Likewise, students who identified as LGBTQ were more likely to report all three of these indicators than straight/cisgender students.

Tobacco Use: Among high school students, rates of vaping decreased dramatically in 2021 and remained stable in 2023 compared to 2019. Additionally, in 2023, we found that females were more likely than males to report the use of vape products; LGBTQ students were more likely than straight/cisgender students to report ever smoking cigarettes or using a vape product in the prior 30 days; and, among middle schoolers, Hispanic/Latine students were more likely than White students to report ever smoking cigarettes and using vape products.

Alcohol Use: Recent alcohol use decreased by 25% from 2019 to 2021 and then remained stable in 2023 among middle and high school youth. Additionally, in 2023, we found that, among high schoolers, White students were more likely than Hispanic/Latine or Asian students to report alcohol use in the prior 30 days. Nearly 2/3 of high schoolers thought it would be very or fairly easy to get alcohol. Over half of high school students who reported ever drinking alcohol said they got it from their friends and at parties. Finally, among middle schoolers, nearly 1 in 5 reported thinking that most people their age drink alcohol.

Marijuana Use: Use decreased dramatically for high school students in 2021 and remained stable in 2023 compared to 2019. Additionally, in 2023, we found that, among high schoolers, Asian students were less likely than any other racial/ethnic group to report using marijuana, and LGBTQ students were more likely than straight/cisgender students to report ever using marijuana. Half of high school students thought it would be very or fairly easy to get marijuana. Asian students were less likely than other students to think this. Among middle school students, Black and Hispanic/Latino students were more likely than White students to report that it would be very or fairly easy for them to get marijuana.

Demographic Characteristics of the 2023 MYHS

	Middle School (N=3,304)	High School (N=2,423)
Gender		
Male	1727 (51.3%)	1223 (51.0%)
Female	1571 (48.6%)	1096 (45.6%)
Nonbinary	112 (0.1%)	119 (0.4%)
Missing	16	18
Grade		
6th grade	1022 (31.8%)	--
7th grade	1084 (33.5%)	--
8th grade	1305 (34.7%)	--
9th grade	--	789 (26.3%)
10th grade	--	603 (25.5%)
11th grade	--	700 (24.0%)
12th grade	--	339 (24.2%)
Ungraded or Other	9	8
Missing	6	17
Race/Ethnicity^a		
White	1360 (51.5%)	1309 (56.5%)
Black	395 (9.3%)	164 (10.0%)
Hispanic or Latine	1013 (23.7%)	608 (23.8%)
Asian	186 (5.1%)	168 (4.9%)
Other or Multiple Race	352 (10.4%)	171 (4.8%)
Missing	120	36
Sexual Orientation and Gender Identity^b		
LGBTQ	--	618 (23.2%)
Straight / Cisgender	--	1740 (76.8%)
Missing		98
<p>(a) Students were allowed to indicate multiple race categories. If Hispanic/Latine was indicated as an ethnic identification, the student was categorized as Hispanic/Latine regardless of race. The Other or Multiple Race category includes American Indian, Alaska Natives or Pacific Islander and youth who indicated more than one race other than Hispanic/Latine.</p> <p>(b) High school students were asked separate questions about sexual orientation and gender identity. Those who responded gay or lesbian, bisexual, questioning/not sure, or other to sexual orientation, or responded they were transgender or not sure to the gender identity question were included in the category LGBTQ. Students who indicated that they did not know what either question was asking were excluded.</p>		

Protective Factors

While epidemiology often focuses on factors that increase the risk of disease, death, or other poor health outcomes, there are also protective factors that promote health and well-being. For youth, these protective factors are centered on positive interactions with family, school, and community. Previous research has demonstrated links between these protective factors and decreased tobacco use, better general health, decreased engagement in gun violence, decreased risk of suicidal ideation, and decreased alcohol use.

Students were asked the following six questions:

1. During the past 7 days, on how many days did you do volunteer work, community service or help people outside of your home without getting paid?
2. During the past 7 days, on how many days did you take part in organized activities (including sports teams, school clubs, music, art or dance lessons, church groups, or other supervised activities)?
3. How safe from crime do you consider your neighborhood to be?
4. How true is the following statement: I feel safe when I am with my family/caregiver(s)?
5. How true is the following statement: I feel that I belong at my school?
6. How true is the following statement: I feel that my family/caregiver(s) support my interests and things that I care about (new in 2023)

Key Findings:

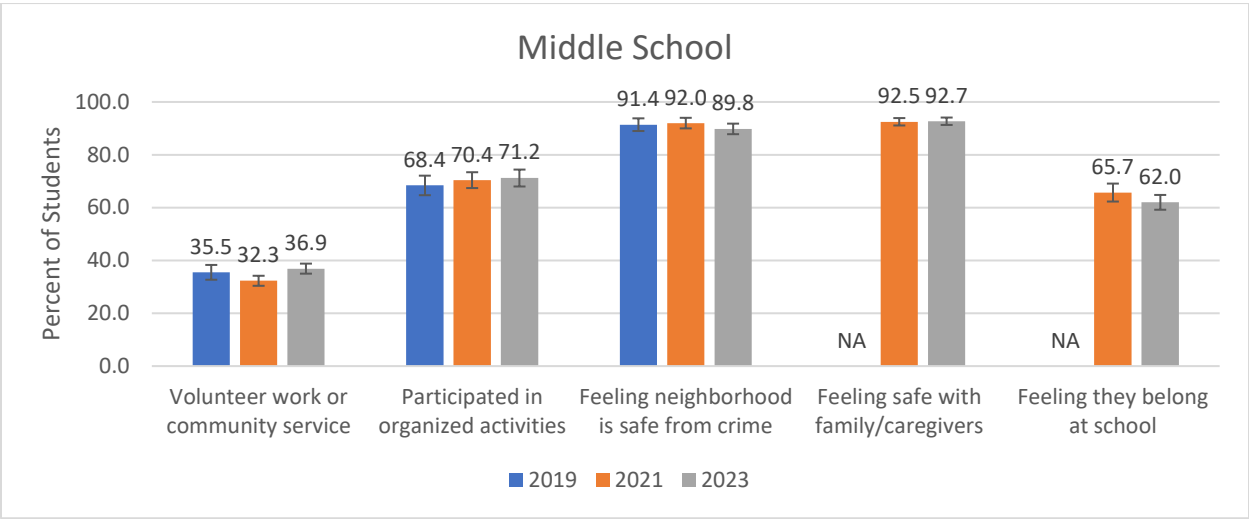
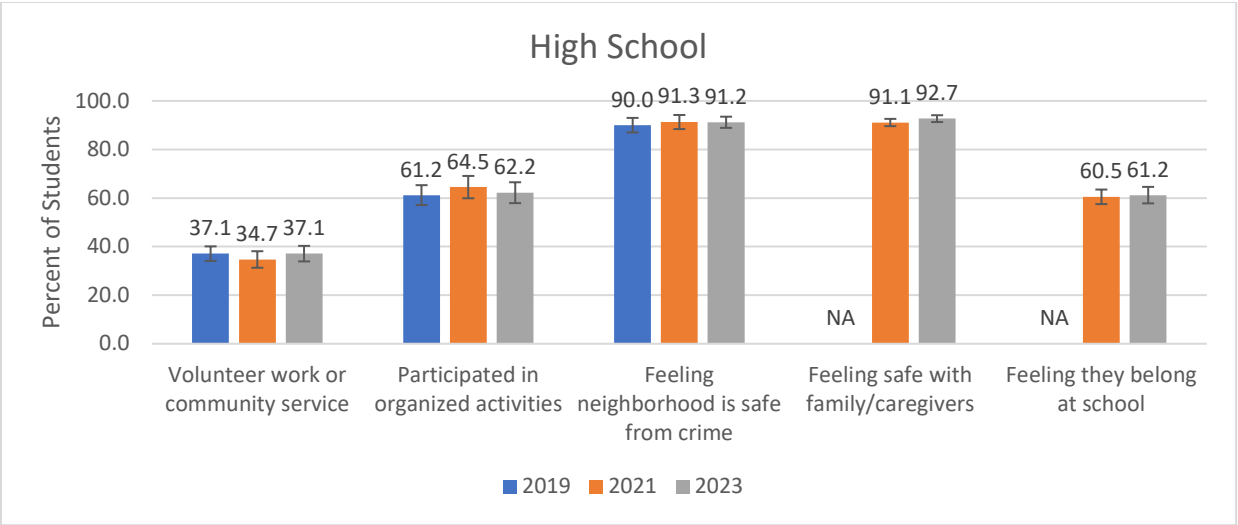
- There was no significant difference in the 2019, 2021, or 2023 data for these indicators for either middle or high school.

Among high school students:

- Black and Hispanic/Latine students were less likely than White or Asian students to engage in volunteer/community work or participate in organized activities.
- Black and Hispanic/Latine students were less likely than White students to report feeling that their neighborhood was safe from crime.
- Students who identified as LGBTQ were less likely than straight/cisgender students to feel that their neighborhoods were safe from crime.
- Black and Hispanic/Latine students were less likely than White students to report feeling that they belong at school.
- Similarly female students were less likely than male students to feel that they belong at their school.
- Hispanic/Latine students were less likely than White students to feel that their family/caregivers support their interests.
- Students who identified as LGBTQ were less likely to report feeling safe when with family/caregivers, were less likely to feel like they belonged at school, and less likely to report feeling that their family/caregivers supported their interests than their straight, cisgender counterparts.

Among middle school students:

- Black and Hispanic/Latine were less likely than White or Asian students to report taking part in organized activities.
- Black and Hispanic/Latine students were less likely than White students to report feeling that their neighborhood was safe from crime.
- Black and Hispanic/Latine students were less likely than White students to report feeling safe when they are with family/caregivers, feeling that they belong at school, and feeling that family/caregivers support their interests.



PROTECTIVE FACTORS – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts high school students who reported:		Doing volunteer work or community service in past week	Taking part in organized activities in past week	Feeling their neighborhood was safe from crime
Overall (95% Confidence Interval)		37.1 (33.9 - 40.3)	62.2 (57.9 - 66.5)	91.2 (88.9 - 93.4)
Grade	9th Grade	34.5 (29.8 - 39.2)	65.3 (59.4 - 71.2)	90.3 (86.5 - 94.1)
	10th Grade	36.7 (31.8 - 41.6)	67.4 (60.7 - 74.0)	88.8 (84.4 - 93.2)
	11th Grade	39.5 (34.8 - 44.2)	58.7 (52.1 - 65.3)	91.8 (88.6 - 95.0)
	12th Grade	38.4 (31.3 - 45.6)	56.6 (48.1 - 65.2)	94.4 (91.3 - 97.5)
Gender	Male	33.0 (30.0 - 36.0)	59.4 (54.9 - 64.0)	91.3 (88.8 - 93.8)
	Female	41.3 (36.8 - 45.8)	64.9 (59.3 - 70.6)	91.3 (88.3 - 94.3)
Race/Ethnicity	White	39.9 (36.3 - 43.6)	69.1 (65.1 - 73.2)	95.1 (93.5 - 96.8)
	Black	29.4 (20.5 - 38.2)	48.6 (39.2 - 57.9)	82.3 (74.9 - 89.7)
	Hispanic or Latine	31.3 (26.4 - 36.3)	46.8 (40.7 - 52.9)	84.1 (80.6 - 87.6)
	Asian	43.4 (35.1 - 51.7)	71.2 (61.7 - 80.7)	96.0 (91.8 - 100.0)
	Other/Multiracial	40.3 (31.8 - 48.7)	69.1 (60.4 - 77.7)	91.8 (86.5 - 97.0)
Sexual Orientation and Gender Identity	LGBTQ	33.7 (26.8 - 40.6)	59.1 (53.0 - 65.2)	87.2 (82.8 - 91.7)
	Straight / Cisgender	38.4 (34.8 - 41.9)	63.6 (58.7 - 68.5)	92.5 (90.3 - 94.8)

PROTECTIVE FACTORS – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts high school students who reported:		Feeling safe with family/caregivers a lot or quite a bit	Feeling they belong at school a lot or quite a bit	Feeling that family/caregivers support their interests a lot or quite a bit
Overall (95% Confidence Interval)		92.7 (91.3 - 94.2)	61.2 (57.8 - 64.7)	78.7 (75.6 - 81.8)
Grade	9th Grade	92.9 (91.1 - 94.7)	63.8 (58.8 - 68.8)	80.3 (76.1 - 84.5)
	10th Grade	93.7 (91.3 - 96.0)	64.0 (58.8 - 69.2)	80.6 (75.2 - 86.0)
	11th Grade	94.0 (91.8 - 96.1)	58.9 (53.4 - 64.3)	74.7 (69.8 - 79.7)
	12th Grade	90.3 (86.1 - 94.5)	57.1 (49.7 - 64.5)	78.4 (72.3 - 84.5)
Gender	Male	93.2 (91.4 - 95.1)	65.3 (61.0 - 69.6)	81.2 (78.3 - 84.2)
	Female	92.3 (90.4 - 94.2)	57.1 (52.7 - 61.4)	76.1 (71.6 - 80.6)
Race/Ethnicity	White	94.3 (92.6 - 96.1)	67.4 (63.2 - 71.7)	82.4 (78.9 - 85.9)
	Black	90.6 (85.2 - 96.0)	51.1 (40.6 - 61.5)	74.1 (64.4 - 83.9)
	Hispanic or Latine	91.2 (88.8 - 93.5)	51.2 (46.3 - 56.1)	72.2 (67.0 - 77.4)
	Asian	90.9 (85.8 - 96.0)	65.4 (55.1 - 75.7)	76.5 (66.9 - 86.0)
	Other/Multiracial	87.0 (79.0 - 95.1)	51.1 (41.5 - 60.7)	74.0 (64.4 - 83.7)
Sexual Orientation and Gender Identity	LGBTQ	86.1 (82.4 - 89.7)	50.0 (44.1 - 55.9)	67.1 (61.0 - 73.1)
	Straight / Cisgender	94.8 (93.4 - 96.3)	65.0 (61.1 - 69.0)	82.6 (79.6 - 85.7)

PROTECTIVE FACTORS – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts middle school students who reported:		Doing volunteer work or community service in past week	Taking part in organized activities in past week	Feeling their neighborhood was safe from crime
Overall (95% Confidence Interval)		36.9 (35.0 - 38.7)	71.2 (68.0 - 74.3)	89.8 (87.8 - 91.8)
Grade	6th Grade	34.1 (30.5 - 37.8)	71.7 (66.9 - 76.5)	89.3 (86.3 - 92.3)
	7th Grade	39.0 (35.8 - 42.2)	72.4 (68.2 - 76.5)	89.8 (87.0 - 92.5)
	8th Grade	37.3 (34.2 - 40.4)	69.5 (64.8 - 74.2)	90.3 (87.5 - 93.2)
Gender	Male	32.8 (30.4 - 35.1)	69.5 (66.1 - 73.0)	90.8 (88.8 - 92.9)
	Female	41.1 (38.5 - 43.8)	73.0 (69.3 - 76.6)	88.7 (86.0 - 91.4)
Race/Ethnicity	White	38.4 (35.3 - 41.5)	78.2 (74.6 - 81.9)	94.6 (93.0 - 96.2)
	Black	38.0 (32.1 - 43.9)	62.3 (57.5 - 67.2)	86.4 (81.4 - 91.3)
	Hispanic or Latine	33.2 (29.9 - 36.4)	59.3 (55.6 - 63.0)	80.1 (77.0 - 83.3)
	Asian	38.0 (29.8 - 46.2)	73.7 (65.6 - 81.9)	90.3 (86.0 - 94.5)
	Other/Multiracial	37.5 (32.0 - 43.0)	67.3 (60.8 - 73.8)	86.4 (81.3 - 91.5)

PROTECTIVE FACTORS – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts middle school students who reported:		Feeling safe with family/caregivers a lot or quite a bit	Feeling they belong at school a lot or quite a bit	Feeling that family/caregivers support their interests a lot or quite a bit
Overall (95% Confidence Interval)		92.8 (91.4 - 94.1)	62.0 (59.2 - 64.9)	79.5 (77.0 - 81.9)
Grade	6th Grade	92.3 (90.3 - 94.2)	62.8 (58.6 - 67.0)	79.1 (75.2 - 83.1)
	7th Grade	92.5 (90.5 - 94.5)	61.2 (56.5 - 65.8)	80.9 (78.0 - 83.9)
	8th Grade	93.5 (91.6 - 95.3)	62.2 (57.9 - 66.5)	78.1 (74.1 - 82.1)
Gender	Male	94.0 (92.5 - 95.6)	68.4 (65.2 - 71.5)	82.8 (80.2 - 85.5)
	Female	91.5 (89.8 - 93.3)	55.7 (52.1 - 59.3)	76.1 (72.7 - 79.4)
Race/Ethnicity	White	95.1 (93.8 - 96.4)	67.4 (64.1 - 70.8)	85.3 (83.0 - 87.6)
	Black	88.5 (84.1 - 92.9)	53.6 (45.7 - 61.4)	69.3 (63.8 - 74.9)
	Hispanic or Latine	89.9 (87.3 - 92.5)	53.9 (49.9 - 57.9)	71.1 (67.4 - 74.9)
	Asian	93.4 (89.9 - 96.8)	62.8 (55.1 - 70.5)	68.9 (56.8 - 81.1)
	Other/Multiracial	90.0 (86.7 - 93.3)	57.6 (49.9 - 65.2)	79.8 (75.3 - 84.4)

Mental Health and Suicidality

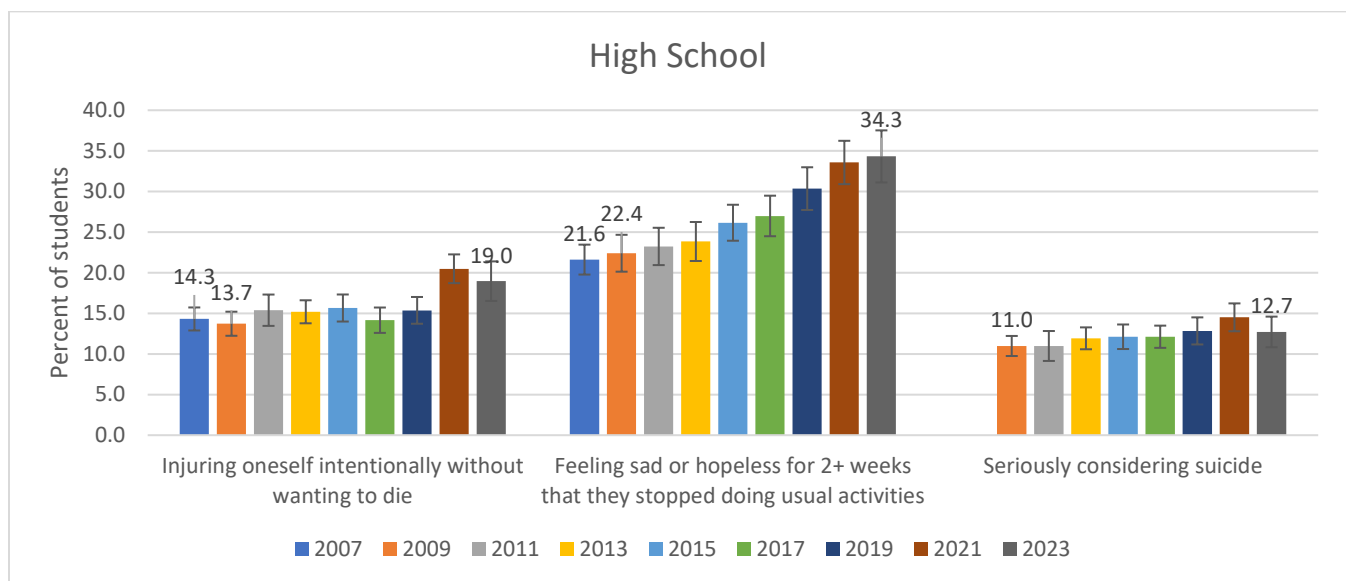
Youth with better mental health are physically healthier, demonstrate more socially positive behaviors, and engage in fewer risky behaviors, whereas youth with mental health problems, such as depression, are more likely to engage in health-risk behaviors. Suicide is a significant yet largely preventable public health problem. The MDPH Suicide Prevention Program provides support to community agencies, education and training for professionals and caregivers, and funds programs working with youth, veterans, and older adults. The program also supports and encourages communities to collaborate across disciplines to prevent suicide and suicide attempts across the lifespan. More information about the program as well as suicide prevention resources, can be found at [Suicide Prevention Program | Mass.gov](https://www.mass.gov/info-details/suicide-prevention-program)

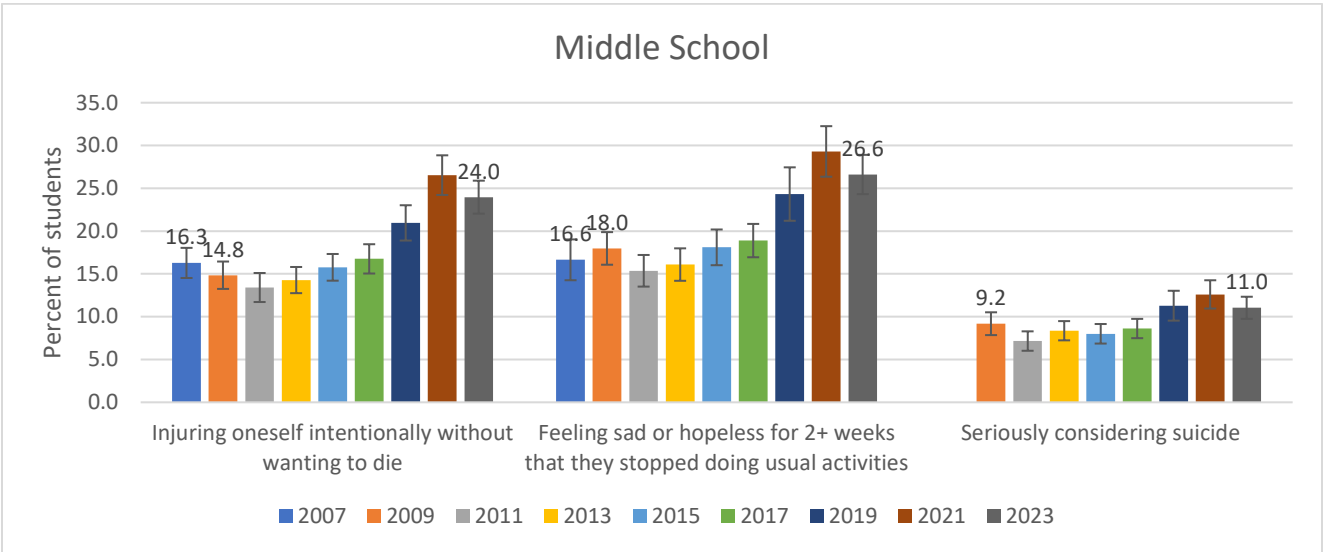
Students were asked the following three questions:

1. During the past 12 months, how many times did you hurt or injure yourself on purpose without wanting to die? (For example, by cutting, burning, or bruising yourself on purpose.)
2. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
3. During the past 12 months, did you ever seriously consider attempting suicide?

Key Findings:

- The prevalence of intentional self-injury and feeling sad or hopeless has been increasing among both middle and high school students. Suicidal ideation, **while slightly higher among middle school students since 2019**, has been stable among high schoolers.
- Among both middle and high school students, females were more likely than males to report intentional self-injury, feeling sad or hopeless, and seriously considering suicide.
- Among high school students, those who identified as LGBTQ were more likely to report intentional self-injury, feeling sad or hopeless, and seriously considering suicide than were students who identified as straight/cisgender.





MENTAL HEALTH AND SUICIDALITY – MASSACHUSETTS HIGH SCHOOL STUDENTS

Percentage of Massachusetts high school students who reported:		Injuring oneself intentionally without wanting to die, past year	Feeling sad or hopeless for 2+ weeks that they stopped doing usual activities, past year	Seriously considering suicide, past year
Overall (95% Confidence Interval)		19.0 (16.5 - 21.4)	34.3 (31.1 - 37.6)	12.7 (10.8 - 14.6)
Grade	9th Grade	21.4 (17.9 - 24.9)	32.5 (28.4 - 36.5)	13.7 (11.1 - 16.3)
	10th Grade	16.3 (12.6 - 19.9)	33.7 (28.3 - 39.2)	10.5 (7.5 - 13.5)
	11th Grade	17.6 (13.7 - 21.5)	34.5 (29.8 - 39.2)	12.3 (9.7 - 14.9)
	12th Grade	20.7 (14.0 - 27.4)	37.1 (29.2 - 45.0)	14.5 (9.0 - 19.9)
Gender	Male	12.4 (9.8 - 14.9)	23.0 (20.1 - 25.9)	7.6 (5.8 - 9.4)
	Female	25.6 (21.8 - 29.4)	46.0 (40.9 - 51.1)	17.8 (14.3 - 21.4)
Race/Ethnicity	White	18.1 (14.8 - 21.5)	32.7 (28.2 - 37.3)	12.4 (9.9 - 14.9)
	Black	24.2 (17.3 - 31.0)	37.3 (28.1 - 46.5)	13.9 (8.2 - 19.5)
	Hispanic or Latine	17.5 (13.5 - 21.5)	38.0 (33.8 - 42.2)	12.1 (9.0 - 15.2)
	Asian	19.6 (12.1 - 27.0)	24.8 (16.3 - 33.3)	11.3 (5.0 - 17.5)
	Other/Multiracial	26.0 (17.9 - 34.2)	38.4 (29.0 - 47.8)	20.0 (12.9 - 27.2)
Sexual Orientation and Gender Identity	LGBTQ	39.3 (34.4 - 44.2)	62.2 (56.0 - 68.3)	30.4 (25.1 - 35.8)
	Straight / Cisgender	13.3 (11.0 - 15.6)	26.0 (22.8 - 29.1)	7.5 (6.1 - 8.8)

MENTAL HEALTH AND SUICIDALITY – MASSACHUSETTS MIDDLE SCHOOL STUDENTS

Percentage of Massachusetts middle school students who reported:		Injuring oneself intentionally without wanting to die, past year	Feeling sad or hopeless for 2+ weeks that they stopped doing usual activities, past year	Seriously considering suicide, past year
Overall (95% Confidence Interval)		24.0 (22.0 - 25.9)	26.6 (24.3 - 28.9)	11.0 (9.7 - 12.3)
Grade	6th Grade	26.7 (23.1 - 30.2)	27.2 (23.3 - 31.1)	11.2 (8.8 - 13.6)
	7th Grade	21.9 (18.8 - 25.1)	24.3 (21.0 - 27.6)	9.9 (7.8 - 11.9)
	8th Grade	23.2 (20.6 - 25.9)	28.4 (24.9 - 32.0)	12.1 (9.9 - 14.4)
Gender	Male	18.3 (15.9 - 20.6)	17.3 (14.9 - 19.8)	6.8 (5.7 - 8.0)
	Female	30.0 (27.2 - 32.7)	36.3 (32.9 - 39.7)	15.5 (13.2 - 17.7)
Race/Ethnicity	White	21.1 (18.9 - 23.3)	22.1 (19.3 - 24.9)	9.0 (7.1 - 11.0)
	Black	25.7 (20.9 - 30.5)	33.1 (27.0 - 39.2)	13.8 (10.7 - 16.9)
	Hispanic or Latine	29.6 (25.7 - 33.5)	33.6 (30.4 - 36.7)	14.5 (12.3 - 16.7)
	Asian	26.4 (19.4 - 33.4)	26.6 (17.3 - 36.0)	13.1 (8.9 - 17.4)
	Other/Multiracial	24.7 (20.1 - 29.3)	28.8 (23.3 - 34.4)	10.8 (7.7 - 13.9)

Tobacco Use

Tobacco use, including cigarettes, cigars, electronic vape products, and smokeless tobacco, remains the leading preventable cause of death in the United States. Nationally, tobacco product use is started and established primarily during adolescence, with nearly 9 out of 10 adults who smoke cigarettes daily first try smoking by age 18.¹ The Massachusetts Tobacco Cessation and Prevention Program's (MTCP) mission is to reduce the health and economic burden of tobacco use by preventing young people from starting to use tobacco and nicotine products, helping current tobacco and nicotine users to quit, protecting children and adults from secondhand smoke, and identifying and eliminating tobacco-related disparities. More information and resources on prevention and quit aids can be found at [Massachusetts Tobacco Cessation and Prevention Program \(MTCP\) | Mass.gov](https://www.mass.gov/info-details/massachusetts-tobacco-cessation-and-prevention-program)

Students were asked the following questions:

1. How old were you when you first tried cigarette smoking, even one or two puffs? (HS)² or Have you ever tried cigarette smoking, even one or two puffs? (MS)³
2. How old were you when you first tried a vape product, even one or two puffs? (HS) or Have you ever tried a vape product, even one or two puffs? (MS)
3. During the past 30 days, on how many days did you use a vape product?
4. Do you think most people your age do the following? Use vape products (including JUUL, Puff Bar, Fruyt Stik, e-cigarettes, e-cigars, vape pipes, vaping pens, e-hookahs, hookah pens, etc.)
5. How much do you think people risk harming themselves if they occasionally use: Conventional tobacco (including cigarettes, cigars, chew, dip, snus, pipe tobacco, etc.)?
6. How much do you think people risk harming themselves if they occasionally use: Vape products (including JUUL, Puff Bar, Fruyt Stik, e-cigarettes, e-cigars, vape pipes, vaping pens, e-hookahs, hookah pens, etc.)?
7. During the past 30 days, how did you get your tobacco products (this includes vape products, cigarettes, cigars, smokeless tobacco)? (Choose all that apply)
8. During the past 30 days, what flavor(s) did the tobacco product(s) (including vape products, cigarettes, cigars, smokeless tobacco) you used contain? (Choose all that apply)

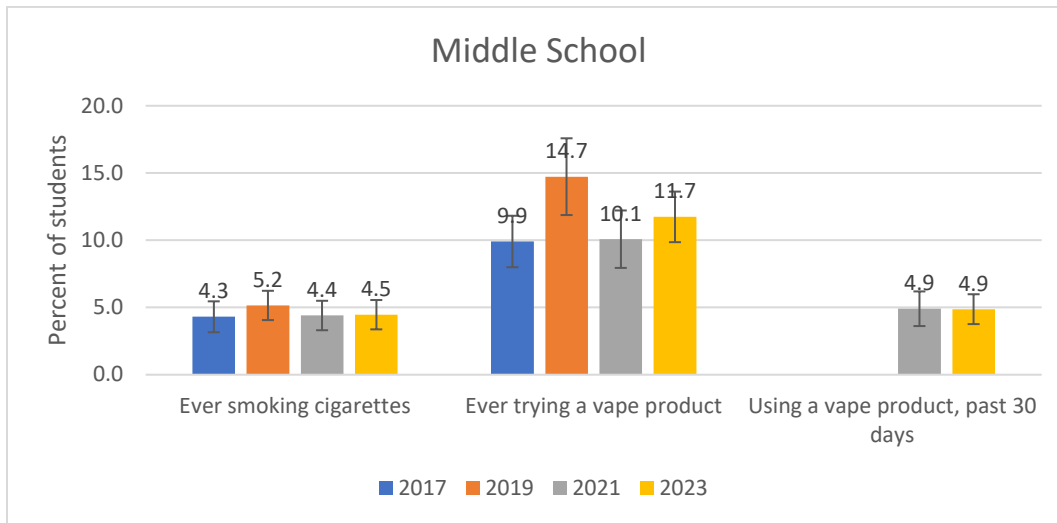
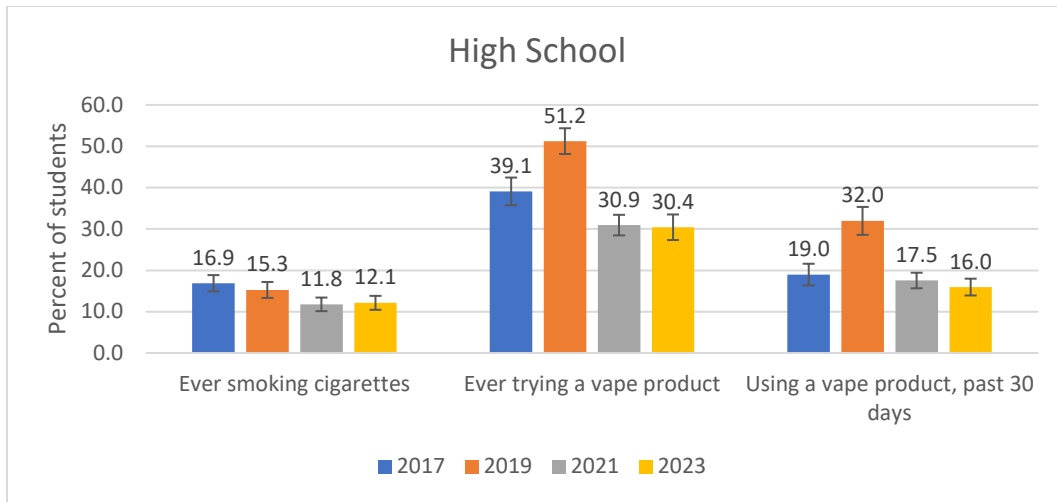
Key Findings:

- Among high school students, vaping rates decreased dramatically in 2021 and remained stable in 2023 compared to 2019. Although not as dramatic, the percentage of middle school students ever trying a vape product also decreased.
- Among both middle and high school students, females were more likely than males to report the use of vape products.
- LGBTQ high school students were more likely than straight/cisgender students to report ever smoking cigarettes, ever using a vape product, and using a vape product in the prior 30 days.
- Among middle schoolers, Hispanic/Latine students were more likely than White students to report ever smoking cigarettes, and Black and Hispanic/Latine students were more likely than White students to report ever using vape products.
- Just over half of middle schoolers and three-quarters of high schoolers reported thinking that most people their age use electronic vapor products. This was higher among female students than among male students.
- Only 2/3 of middle and high school students thought that there was a moderate or great risk of harm from using either conventional tobacco or vape products.
- Many high school students who reported using tobacco products also reported that these products contained flavorings. Fruit, alcohol, or candy flavoring were the most commonly reported.

¹ Source: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm

² HS = high school

³ MS = middle school



TOBACCO USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts high school students who reported:		Ever smoking cigarettes	Ever trying a vape product	Using a vape product, past 30 days
Overall (95% Confidence Interval)		12.1 (10.4 - 13.9)	30.4 (27.3 - 33.6)	16.0 (13.9 - 18.0)
Grade	9th Grade	8.8 (6.6 - 11.0)	23.3 (19.6 - 27.0)	11.0 (8.1 - 13.9)
	10th Grade	8.8 (6.1 - 11.5)	28.7 (23.1 - 34.3)	13.3 (9.8 - 16.7)
	11th Grade	10.8 (7.9 - 13.7)	28.7 (23.4 - 34.0)	15.4 (11.3 - 19.5)
	12th Grade	21.0 (16.4 - 25.6)	42.3 (37.0 - 47.6)	25.4 (21.3 - 29.4)
Gender	Male	11.5 (9.2 - 13.9)	25.6 (21.9 - 29.3)	12.9 (10.3 - 15.6)
	Female	12.8 (10.3 - 15.3)	35.3 (31.1 - 39.5)	19.0 (16.2 - 21.8)
Race/Ethnicity	White	12.8 (10.5 - 15.1)	29.3 (26.2 - 32.5)	15.8 (13.5 - 18.2)
	Black	**	31.7 (19.7 - 43.8)	13.0 (6.1 - 19.9)
	Hispanic or Latine	13.3 (10.0 - 16.7)	35.3 (29.8 - 40.7)	17.7 (13.3 - 22.1)
	Asian	**	**	**
	Other/Multiracial	16.4 (9.0 - 23.9)	32.0 (21.8 - 42.1)	20.3 (11.7 - 28.8)
Sexual Orientation and Gender Identity	LGBTQ	16.2 (12.5 - 20.0)	37.2 (31.2 - 43.2)	19.9 (15.9 - 23.9)
	Straight / Cisgender	11.1 (9.2 - 13.0)	28.6 (25.0 - 32.2)	15.0 (12.6 - 17.4)

TOBACCO USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts high school students who reported:		Thinking most people their age use electronic vapor products	Thinking the risk of harm from occasionally use conventional tobacco is moderate to great	Thinking the risk of harm from occasionally use vape products is moderate to great
Overall (95% Confidence Interval)		76.6 (73.0 - 80.2)	64.0 (61.8 - 66.2)	66.0 (63.7 - 68.4)
Grade	9th Grade	72.3 (66.7 - 77.9)	63.7 (59.9 - 67.6)	64.4 (60.9 - 67.9)
	10th Grade	74.6 (69.5 - 79.6)	67.6 (63.3 - 71.9)	68.5 (63.4 - 73.5)
	11th Grade	78.7 (72.2 - 85.3)	63.4 (59.4 - 67.5)	67.2 (63.1 - 71.2)
	12th Grade	81.9 (75.7 - 88.0)	61.1 (54.6 - 67.5)	63.9 (56.7 - 71.2)
Gender	Male	69.5 (64.6 - 74.3)	61.9 (58.9 - 64.9)	64.0 (60.3 - 67.6)
	Female	84.2 (80.5 - 87.8)	66.2 (62.7 - 69.8)	68.3 (64.6 - 71.9)
Race/Ethnicity	White	77.2 (72.6 - 81.7)	63.0 (59.9 - 66.0)	66.8 (63.9 - 69.7)
	Black	74.5 (67.3 - 81.7)	63.7 (56.8 - 70.6)	60.4 (53.9 - 66.9)
	Hispanic or Latine	76.7 (70.1 - 83.3)	63.6 (59.7 - 67.6)	64.4 (59.8 - 69.0)
	Asian	72.4 (62.6 - 82.2)	74.5 (67.9 - 81.0)	72.8 (64.8 - 80.9)
	Other/Multiracial	82.1 (74.8 - 89.5)	67.0 (58.3 - 75.6)	66.8 (57.6 - 76.0)
Sexual Orientation and Gender Identity	LGBTQ	79.2 (73.6 - 84.9)	66.3 (61.6 - 71.0)	66.5 (61.7 - 71.3)
	Straight / Cisgender	76.3 (72.5 - 80.1)	63.3 (60.4 - 66.1)	65.8 (62.9 - 68.7)

All high school respondents were asked, “During the past 30 days, how did you get your tobacco products (this includes vape products, cigarettes, cigars, smokeless tobacco)?”. They could select multiple response options. A distribution of responses is presented below.

	%	95% CL
I did not use any tobacco products in past 30 days	78.2	75.7 – 80.7
Buy from a supermarket or convenience store	2.9	2.0 – 3.7
Bought from a vape shop or vapor store	2.1	1.3 – 2.9
Bought from another state	0.3	0.1 – 0.6
Gave someone else money to buy them for me	1.2	0.6 – 1.8
Got from friends	4.3	3.3 – 5.2
Got them from a family member	9.9	8.3 – 11.5
Got them online	2.0	1.4 – 2.6
Got them some other way	0.9	0.5 – 1.2
Missing	9.2	6.9 – 11.4

All high school students were also asked, “During the past 30 days, what flavor(s) did the tobacco product(s) (including vape products, cigarettes, cigars, smokeless tobacco) you used contain?”. They could select multiple response options.

	%	95% CL
I did not use any tobacco products in past 30 days	75.2	72.6 – 77.8
Fruit, alcohol, or candy flavors	11.3	9.5 – 13.1
Mint, menthol, or wintergreen flavors	6.6	5.3 – 7.8
Clove or spice	0.5	0.5 – 0.8
Other flavor not listed	2.0	1.2 – 2.8
Not sure	2.7	1.9 – 3.5
No flavors	1.8	1.1 – 2.4
Missing	7.6	5.3 – 10.0

TOBACCO USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts middle school students who reported:		Ever smoking cigarettes	Ever trying a vape product	Thinking most people their age use electronic vapor products
Overall (95% Confidence Interval)		4.5 (3.4 - 5.6)	11.7 (9.8 - 13.6)	54.1 (50.1 - 58.0)
Grade	6th Grade	3.3 (1.8 - 4.9)	8.3 (5.7 - 10.8)	40.1 (34.4 - 45.9)
	7th Grade	4.5 (2.7 - 6.4)	10.8 (8.0 - 13.6)	56.7 (50.7 - 62.6)
	8th Grade	5.4 (3.7 - 7.1)	15.8 (12.9 - 18.7)	64.5 (60.1 - 69.0)
Gender	Male	4.5 (3.3 - 5.7)	8.8 (7.1 - 10.6)	44.3 (40.1 - 48.4)
	Female	4.4 (2.9 - 5.9)	14.7 (12.0 - 17.4)	64.5 (60.0 - 69.0)
Race/Ethnicity	White	3.0 (1.9 - 4.2)	7.6 (5.7 - 9.4)	51.7 (46.5 - 56.8)
	Black	**	16.8 (11.5 - 22.0)	64.7 (58.9 - 70.4)
	Hispanic or Latine	8.2 (5.7 - 10.7)	21.5 (18.7 - 24.2)	63.9 (60.5 - 67.2)
	Asian	**	**	48.7 (37.0 - 60.3)
	Other/Multiracial	5.3 (2.4 - 8.2)	12.0 (8.5 - 15.4)	46.2 (39.7 - 52.8)

TOBACCO USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts middle school students who reported:		Thinking the risk of harm from occasionally use conventional tobacco is moderate to great	Thinking the risk of harm from occasionally use vape products is moderate to great
Overall (95% Confidence Interval)		68.1 (66.0 - 70.3)	69.7 (67.4 - 72.1)
Grade	6th Grade	69.8 (66.1 - 73.5)	71.2 (67.0 - 75.3)
	7th Grade	68.5 (64.7 - 72.3)	71.0 (67.7 - 74.3)
	8th Grade	66.2 (63.2 - 69.2)	67.3 (64.1 - 70.6)
Gender	Male	69.1 (66.4 - 71.8)	70.2 (67.3 - 73.1)
	Female	67.3 (64.3 - 70.4)	69.5 (66.5 - 72.5)
Race/Ethnicity	White	67.0 (63.8 - 70.2)	73.2 (70.7 - 75.8)
	Black	74.1 (68.3 - 80.0)	68.2 (61.3 - 75.2)
	Hispanic or Latine	66.9 (63.2 - 70.5)	62.1 (58.4 - 65.7)
	Asian	72.8 (66.5 - 79.1)	70.7 (63.7 - 77.8)
	Other/Multiracial	69.7 (64.7 - 74.6)	70.3 (65.0 - 75.5)

Alcohol Use

Among youth, the use of alcohol is associated with adverse effects on normal brain development and cognitive functioning. It has been linked to unintentional injuries, physical fights, risky sexual behavior, academic and occupational problems, and illegal behavior. Alcohol use is a significant contributor to the leading causes of adolescent death (i.e., motor vehicle crashes, homicide, and suicide) in the United States.⁴

The DPH Bureau of Substance Addiction Services (BSAS) oversees the statewide system of prevention, intervention, treatment, and recovery support services for individuals, families, and communities affected by substance addiction. For information on prevention or treatment/recovery, see [Bureau of Substance Addiction Services | Mass.gov](https://www.mass.gov/bureau-of-substance-addiction-services)

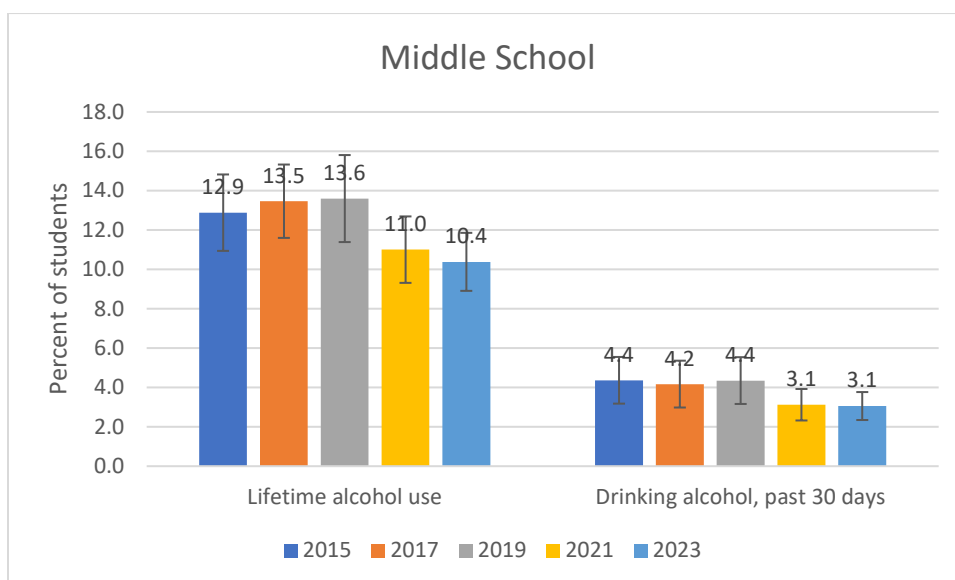
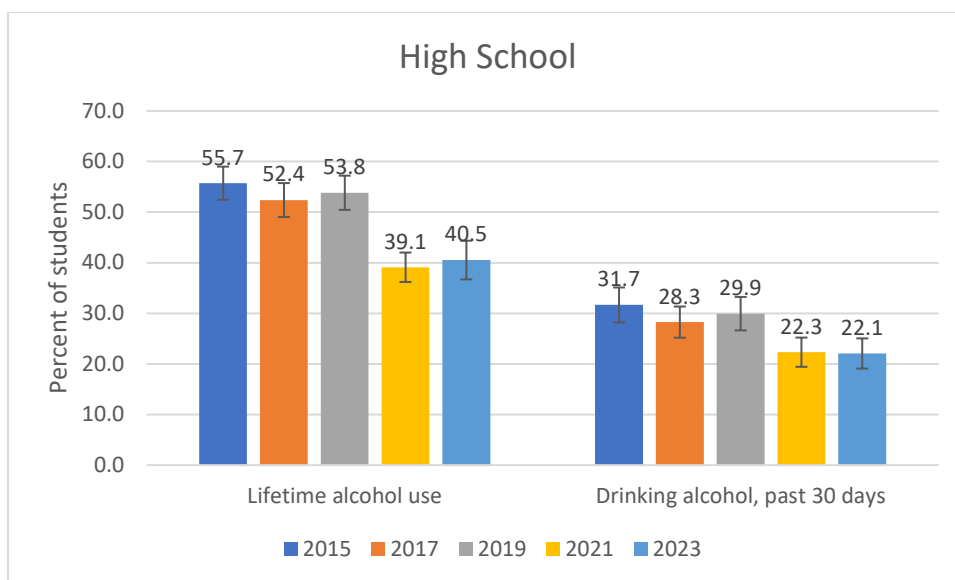
Students were asked the following questions:

1. During your life, on how many days have you had at least one drink of alcohol?
2. During the past 30 days, on how many days did you have at least one drink of alcohol?
3. During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row (if you are female) or 5 or more drinks of alcohol in a row (if you are male), that is within a couple of hours? – *note that this is a new definition*
4. During the past 30 days, did you drive a car or other vehicle when you had been drinking alcohol? (HS) or During the past 30 days, did you ever ride in a car or other vehicle driven by someone who had been drinking alcohol? (MS)
5. How much do you think people risk harming themselves (physically or in other ways) if they have five or more drinks in a row?
6. How easy or difficult would it be for you to get each of the following: Beer, wine, or other alcohol?
7. Do you think most people your age do the following? Drink alcohol
8. There are many different ways to get beer, wine coolers, wine, or liquor. Which of the following are how you get alcohol?

Key Findings:

- Recent alcohol use decreased by 25% from 2019 to 2021 and then remained stable in 2023 among middle and high school youth.
- Among high schoolers, White students were more likely than Black, Hispanic/Latine, or Asian students to report alcohol use in the prior 30 days.
- LGBTQ high school students were more likely to report alcohol use in the previous 30 days than were their straight/cisgender counterparts.
- Although a decrease from 72.3% in 2019, nearly 2/3 of high school students thought it would be fairly easy or very easy to get alcohol, and about almost 2/3 thought that most people their age drink alcohol.
- Over half of the high school students who reported ever drinking alcohol said they got it from their friends and at parties.
- Among middle schoolers, females were more likely than males to report riding in a car with someone who had been drinking alcohol.
- Almost 1 in 5 middle schoolers reported thinking that most people their age drink alcohol. Females were nearly twice as likely as males to report this.

⁴ Source: <https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>



ALCOHOL USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts high school students who reported:		Drinking alcohol, past 30 days	Binge drinking, past 30 days	Driving a car after drinking alcohol, past 30 days (among those who drive and used alcohol in past 30 days)
Overall (95% Confidence Interval)		22.1 (19.0 - 25.1)	12.6 (10.3 - 14.9)	4.5 (2.3 - 6.7)
Grade	9th Grade	11.1 (8.4 - 13.7)	4.1 (2.3 - 6.0)	**
	10th Grade	15.2 (12.2 - 18.2)	7.4 (5.0 - 9.7)	**
	11th Grade	22.8 (18.6 - 27.0)	12.6 (9.1 - 16.1)	**
	12th Grade	41.0 (34.0 - 48.0)	27.8 (21.5 - 34.1)	**
Gender	Male	17.9 (14.6 - 21.2)	9.9 (7.5 - 12.3)	7.1 (3.4 - 10.9)
	Female	26.5 (22.5 - 30.5)	15.4 (11.8 - 19.0)	**
Race/Ethnicity	White	26.1 (22.4 - 29.9)	14.5 (11.4 - 17.6)	**
	Black	15.6 (9.1 - 22.2)	9.1 (4.2 - 14.1)	**
	Hispanic or Latine	17.6 (13.3 - 21.9)	10.2 (7.3 - 13.1)	**
	Asian	10.1 (4.6 - 15.7)	**	**
	Other/Multiracial	24.4 (14.7 - 34.2)	17.0 (9.1 - 24.9)	**
Sexual Orientation and Gender Identity	LGBTQ	26.9 (22.1 - 31.6)	15.7 (10.7 - 20.7)	**
	Straight / Cisgender	20.9 (17.3 - 24.5)	11.7 (8.9 - 14.4)	**

ALCOHOL USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts high school students who reported:		Thinking most people their age drink alcohol	Thinking the risk of harm from binge drinking is moderate to great	Thinking it's very or fairly easy to get alcohol
Overall (95% Confidence Interval)		65.5 (61.5 - 69.5)	73.1 (70.0 - 76.2)	62.3 (58.8 - 65.9)
Grade	9th Grade	47.6 (42.2 - 53.0)	75.9 (72.0 - 79.8)	53.5 (48.4 - 58.6)
	10th Grade	63.5 (58.9 - 68.0)	74.2 (69.1 - 79.3)	58.9 (52.8 - 65.0)
	11th Grade	69.9 (63.7 - 76.0)	69.3 (62.8 - 75.9)	67.6 (61.5 - 73.6)
	12th Grade	83.7 (79.1 - 88.2)	72.3 (65.9 - 78.7)	70.6 (63.7 - 77.6)
Gender	Male	55.9 (51.0 - 60.9)	67.6 (63.5 - 71.7)	60.6 (56.0 - 65.2)
	Female	75.6 (71.6 - 79.7)	78.8 (75.3 - 82.2)	64.1 (59.5 - 68.6)
Race/Ethnicity	White	67.9 (63.3 - 72.5)	76.7 (73.6 - 79.8)	66.7 (63.4 - 70.1)
	Black	58.6 (51.5 - 65.6)	65.8 (55.3 - 76.4)	56.7 (43.5 - 69.9)
	Hispanic or Latine	64.6 (56.9 - 72.3)	66.0 (60.2 - 71.8)	53.8 (47.4 - 60.2)
	Asian	57.2 (46.1 - 68.3)	81.5 (75.7 - 87.3)	53.3 (44.4 - 62.2)
	Other/Multiracial	67.2 (56.8 - 77.5)	69.4 (60.7 - 78.1)	65.3 (55.5 - 75.1)
Sexual Orientation and Gender Identity	LGBTQ	67.7 (63.5 - 71.8)	81.9 (77.8 - 86.1)	66.1 (60.3 - 72.0)
	Straight / Cisgender	65.5 (60.8 - 70.3)	70.9 (67.7 - 74.1)	61.4 (57.1 - 65.6)

High school students who reported that they had ever had at least one drink of alcohol were asked, “There are many different ways to get beer, wine coolers, wine, or liquor. Which of the following are how you get alcohol?” were asked to respond Yes/No for each option.

	%	95% CL
Buy it from a supermarket or convenience store	5.8	4.0 – 7.6
Buy it from a liquor store or package store	7.5	5.4 – 9.6
Buy it from bars, clubs or restaurants	6.8	4.0 – 9.6
Have someone else buy it for me	33.7	29.7 – 37.7
Get it through my friends	48.2	44.4 – 52.0
Get it at home	39.3	35.2 – 43.3
Get it at parties	51.8	47.6 – 55.9
Missing (all blank or all No)	22.5	19.9 – 25.1

ALCOHOL USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts middle school students who reported:		Drinking alcohol, past 30 days	Binge drinking, past 30 days	Rode in a car driven by someone who had been drinking alcohol, past 30 days
Overall (95% Confidence Interval)		3.1 (2.3 - 3.8)	1.0 (0.6 - 1.4)	9.1 (8.0 - 10.2)
Grade	6th Grade	1.6 (0.7 - 2.5)	**	8.5 (7.0 - 10.0)
	7th Grade	2.5 (1.2 - 3.7)	**	8.9 (7.0 - 10.9)
	8th Grade	4.8 (3.6 - 6.1)	1.5 (0.7 - 2.3)	9.7 (7.9 - 11.5)
Gender	Male	2.8 (1.9 - 3.6)	1.0 (0.5 - 1.6)	7.5 (5.9 - 9.1)
	Female	3.4 (2.2 - 4.5)	1.0 (0.4 - 1.6)	10.8 (9.3 - 12.3)
Race/Ethnicity	White	3.2 (2.1 - 4.4)	**	9.8 (8.2 - 11.4)
	Black	**	**	8.0 (5.0 - 11.0)
	Hispanic or Latine	3.1 (1.7 - 4.6)	**	9.9 (7.4 - 12.3)
	Asian	**	**	7.1 (3.5 - 10.8)
	Other/Multiracial	**	**	7.9 (5.2 - 10.6)

ALCOHOL USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts middle school students who reported:		Thinking most people their age drink alcohol	Thinking the risk of harm from binge drinking is moderate to great	Thinking it's very or fairly easy to get alcohol
Overall (95% Confidence Interval)		18.7 (16.1 - 21.3)	71.5 (68.9 - 74.2)	36.1 (33.2 - 39.0)
Grade	6th Grade	10.1 (7.1 - 13.0)	67.4 (63.6 - 71.1)	23.4 (19.0 - 27.7)
	7th Grade	17.2 (13.1 - 21.2)	73.6 (69.5 - 77.7)	35.3 (30.6 - 40.0)
	8th Grade	28.1 (24.0 - 32.3)	73.6 (69.9 - 77.4)	46.8 (42.8 - 50.7)
Gender	Male	12.8 (10.5 - 15.2)	70.0 (66.8 - 73.2)	31.9 (28.4 - 35.4)
	Female	24.8 (21.3 - 28.2)	73.3 (70.0 - 76.5)	40.2 (36.4 - 44.1)
Race/Ethnicity	White	15.1 (12.2 - 18.1)	76.5 (73.5 - 79.4)	40.3 (36.2 - 44.5)
	Black	27.4 (21.6 - 33.2)	70.7 (63.7 - 77.6)	30.7 (24.6 - 36.7)
	Hispanic or Latine	27.7 (24.0 - 31.5)	60.5 (56.7 - 64.2)	31.2 (27.2 - 35.1)
	Asian	11.8 (6.4 - 17.3)	74.2 (68.5 - 79.9)	32.4 (22.6 - 42.3)
	Other/Multiracial	15.9 (11.5 - 20.4)	71.9 (66.7 - 77.1)	33.4 (26.1 - 40.7)

Marijuana Use

Marijuana can have permanent effects on the developing brain when use begins in adolescence, especially with regular or heavy use. Adverse effects of teen marijuana use include difficulty thinking and problem-solving, problems with memory and learning, reduced coordination, difficulty maintaining attention, and problems with school and social life.⁵

The MDPH Bureau of Substance Addiction Services (BSAS) oversees the statewide system of prevention, intervention, treatment, and recovery support services for individuals, families, and communities affected by substance addiction. For information on prevention or treatment/recovery, see [Bureau of Substance Addiction Services | Mass.gov](https://www.mass.gov/bureau-of-substance-addiction-services)

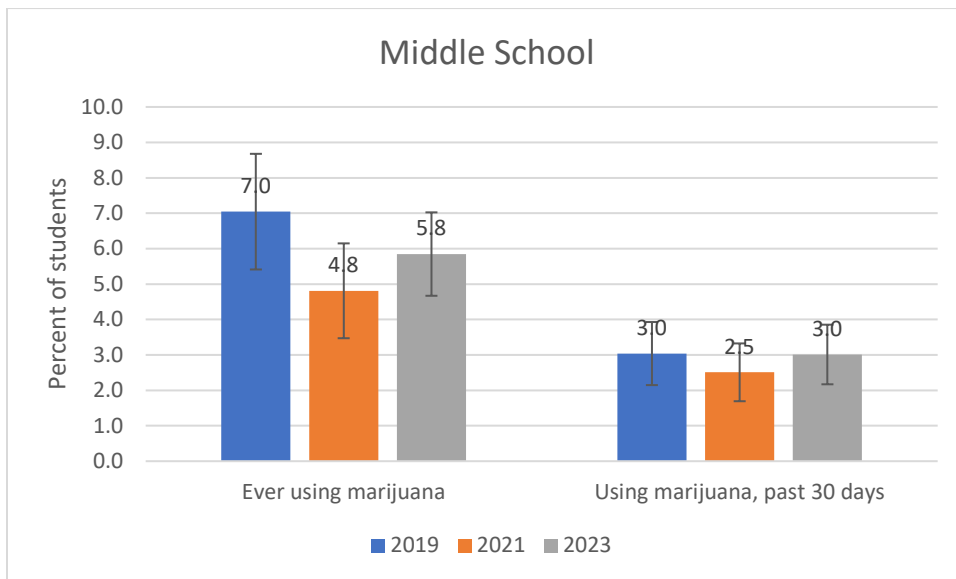
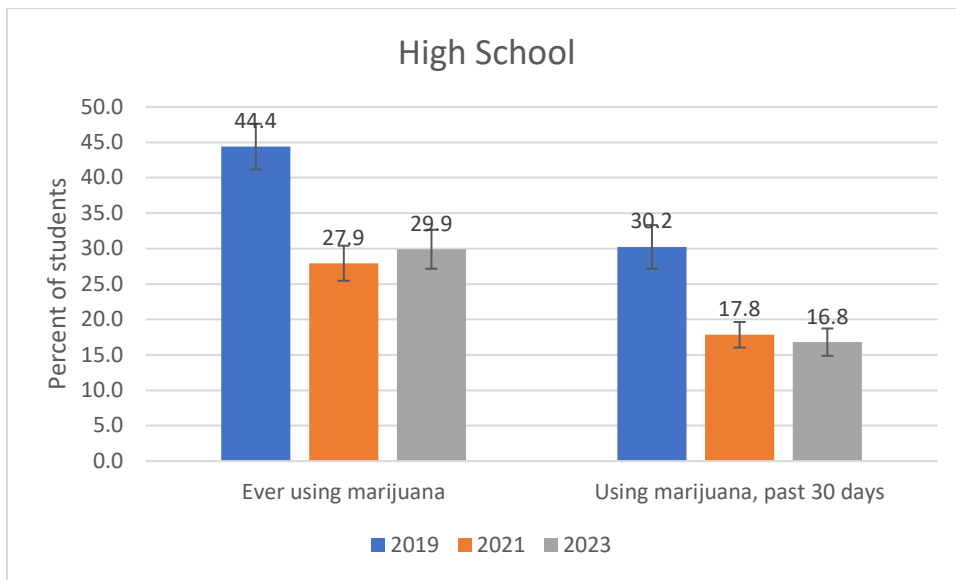
Students were asked the following questions:

1. How old were you when you tried marijuana for the first time?
2. During the past 30 days, how many times did you use marijuana?
3. During the past 30 days, did you ever drive a car or other vehicle when you had been using marijuana? (HS) or During the past 30 days, did you ever ride in a car or other vehicle driven by someone who had been using marijuana? (MS)
4. How much do you think people risk harming themselves if they occasionally use: Marijuana (also called dope, grass, hashish, herb, joint, pot, weed, or reefer)?
5. How easy or difficult would it be for you to get each of the following: Marijuana (also called dope, grass, hashish, herb, joint, pot, weed, or reefer)?
6. Do you think most people your age do the following? Use marijuana
7. During the past 30 days, how did you use marijuana?
8. During the past 30 days, how did you get the marijuana that you used?

Key Findings:

- Marijuana use decreased dramatically for high school students in 2021 and then remained stable in 2023. While rates also declined for middle school youth, they rebounded somewhat in 2023.
- Among high schoolers, Asian students were less likely than any other racial/ethnic group to report using marijuana.
- LGBTQ high school students were more likely than straight/cisgender students to report ever using marijuana.
- Among middle school students, Black and Hispanic/Latine students were more likely than White students to report ever using marijuana.
- Half of high school students thought it would be very or fairly easy to get marijuana. Asian students were less likely than other students to think this.
- Only approximately half of high school students reported thinking the risk of harm from using marijuana was moderate or great. This was higher among Asians than Whites and lower among LGBTQ students than straight/cisgender students.
- Among middle schoolers, Black and Hispanic/Latine students were more likely than White students to report that it would be very or fairly easy for them to get marijuana.
- Nearly 1 in 4 middle schoolers reported thinking that most people their age use marijuana. Female students were more likely than male students to believe this.

⁵ Source: <https://www.cdc.gov/marijuana/health-effects/teens.html>



MARIJUANA USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts high school students who reported:		Ever using marijuana	Using marijuana, past 30 days	Driving a car after using marijuana, past 30 days (among those who drive and used marijuana in past 30 days)
Overall (95% Confidence Interval)		29.9 (27.1 - 32.7)	16.8 (14.8 - 18.8)	15.7 (12.0 - 19.4)
Grade	9th Grade	17.0 (13.3 - 20.8)	8.2 (6.0 - 10.5)	**
	10th Grade	26.2 (21.9 - 30.4)	14.4 (10.9 - 18.0)	**
	11th Grade	31.9 (26.5 - 37.3)	19.6 (15.3 - 23.9)	14.5 (8.0 - 21.0)
	12th Grade	46.9 (42.6 - 51.3)	26.6 (21.3 - 31.9)	17.6 (11.5 - 23.6)
Gender	Male	26.3 (22.3 - 30.3)	14.6 (12.0 - 17.2)	17.1 (10.2 - 24.0)
	Female	33.5 (29.5 - 37.5)	19.0 (15.8 - 22.1)	14.4 (9.1 - 19.8)
Race/Ethnicity	White	31.0 (27.8 - 34.2)	15.4 (13.2 - 17.5)	15.0 (9.6 - 20.4)
	Black	30.5 (21.4 - 39.5)	23.1 (14.7 - 31.4)	**
	Hispanic or Latine	29.9 (24.4 - 35.4)	18.4 (13.8 - 22.9)	**
	Asian	16.5 (8.3 - 24.7)	**	**
	Other/Multiracial	32.8 (23.6 - 41.9)	24.9 (15.9 - 33.9)	**
Sexual Orientation and Gender Identity	LGBTQ	38.7 (33.3 - 44.2)	24.3 (19.5 - 29.1)	14.7 (8.0 - 21.4)
	Straight / Cisgender	27.6 (24.3 - 31.0)	14.7 (12.7 - 16.7)	16.3 (11.4 - 21.2)

MARIJUANA USE – MASSACHUSETTS HIGH SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts high school students who reported:		Thinking most people their age use marijuana	Thinking it's very or fairly easy to get marijuana	Thinking the risk of harm from occasionally using marijuana is moderate to great
Overall (95% Confidence Interval)		65.4 (61.1 - 69.6)	51.0 (46.9 - 55.1)	53.1 (50.3 - 55.8)
Grade	9th Grade	53.6 (47.8 - 59.5)	36.9 (31.2 - 42.6)	63.5 (60.0 - 67.1)
	10th Grade	60.0 (52.6 - 67.4)	47.3 (40.2 - 54.4)	56.2 (51.5 - 60.8)
	11th Grade	69.7 (63.2 - 76.2)	54.5 (47.7 - 61.3)	47.8 (42.8 - 52.9)
	12th Grade	80.2 (75.0 - 85.4)	66.4 (60.1 - 72.7)	42.2 (36.2 - 48.3)
Gender	Male	58.8 (53.4 - 64.2)	49.9 (45.1 - 54.8)	48.1 (44.4 - 51.8)
	Female	72.3 (68.1 - 76.6)	52.0 (46.2 - 57.7)	58.2 (54.6 - 61.8)
Race/Ethnicity	White	65.3 (60.2 - 70.4)	50.9 (46.2 - 55.5)	50.3 (47.0 - 53.6)
	Black	65.7 (55.9 - 75.6)	52.8 (38.7 - 66.8)	53.0 (45.8 - 60.2)
	Hispanic or Latine	69.9 (62.8 - 77.0)	55.9 (48.7 - 63.0)	54.3 (50.0 - 58.5)
	Asian	46.9 (36.2 - 57.7)	25.1 (14.2 - 36.0)	76.3 (68.5 - 84.1)
	Other/Multiracial	68.1 (58.3 - 77.8)	56.6 (46.9 - 66.4)	51.7 (42.9 - 60.5)
Sexual Orientation and Gender Identity	LGBTQ	71.7 (66.1 - 77.3)	55.7 (48.7 - 62.7)	47.0 (41.4 - 52.6)
	Straight / Cisgender	63.8 (59.2 - 68.4)	49.5 (44.8 - 54.2)	54.6 (51.6 - 57.6)

High school respondents who reported that they had ever used marijuana were asked, “During the past 30 days, how did you get the marijuana that you used?” and could select multiple response options.

	%	95% CL
I did not use marijuana in past 30 days	35.1	31.1 – 39.1
I bought it from a store	3.5	1.9 – 5.1
I bought it from someone else	21.3	17.6 – 24.9
I got it at home with permission from a parent or family member over the age of 21	6.6	4.5 – 8.7
I took it from home without permission of a parent or adult family member over the age of 21	3.1	1.7 – 4.5
I took it from some other place without permission	1.8	0.8 – 2.8
I got it from friends	31.3	27.2 – 35.5
I got it at parties	11.5	8.3 – 14.6
I got it some other way	9.6	7.3 – 11.8
Missing	17.2	11.9 – 22.5

High school respondents who reported that they had ever used marijuana were asked, “During the past 30 days, how did you use marijuana?” and could select multiple response options.

	%	95% CL
I did not use marijuana in past 30 days	34.8	30.9 – 38.8
Smoked it in a cigar or blunt wrap	16.5	12.8 – 20.2
Smoked it in a joint, pipe, bong, or dab	26.2	22.5 – 29.9
Ate it (brownies, cookies, candy, etc)	17.9	14.8 – 20.9
Drank it (tea, cola, alcohol, etc)	3.4	1.9 – 4.8
Vaped it	29.6	25.2 – 34.0
Used some other way	3.6	2.2 – 5.1
Missing	16.9	11.7 – 22.0

MARIJUANA USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 1 OF 2)

Percentage of Massachusetts middle school students who reported:		Ever using marijuana	Using marijuana, past 30 days	Rode in a car driven by someone who had been using marijuana, past 30 days
Overall (95% Confidence Interval)		5.8 (4.7 - 7.0)	3.0 (2.2 - 3.9)	7.8 (6.5 - 9.1)
Grade	6th Grade	3.3 (2.0 - 4.6)	1.4 (0.6 - 2.1)	6.3 (4.5 - 8.1)
	7th Grade	4.8 (2.8 - 6.7)	2.9 (1.3 - 4.5)	6.7 (4.8 - 8.6)
	8th Grade	9.2 (7.1 - 11.2)	4.6 (3.2 - 6.0)	10.2 (7.8 - 12.5)
Gender	Male	5.6 (4.3 - 6.9)	3.0 (2.0 - 3.9)	6.7 (5.3 - 8.1)
	Female	6.1 (4.6 - 7.7)	3.1 (1.9 - 4.2)	8.9 (7.3 - 10.5)
Race/Ethnicity	White	3.2 (2.1 - 4.3)	1.5 (0.8 - 2.2)	5.3 (3.8 - 6.9)
	Black	9.8 (5.1 - 14.6)	**	9.9 (5.3 - 14.5)
	Hispanic or Latine	9.9 (7.8 - 11.9)	5.0 (3.5 - 6.6)	12.4 (9.2 - 15.5)
	Asian	**	**	**
	Other/Multiracial	7.9 (4.4 - 11.3)	**	11.5 (7.6 - 15.3)

MARIJUANA USE – MASSACHUSETTS MIDDLE SCHOOL STUDENTS (PART 2 OF 2)

Percentage of Massachusetts middle school students who reported:		Thinking most people their age use marijuana	Thinking it's very or fairly easy to get marijuana	Thinking the risk of harm from occasionally using marijuana is moderate to great
Overall (95% Confidence Interval)		24.3 (21.1 - 27.5)	14.9 (12.8 - 17.1)	74.2 (72.0 - 76.3)
Grade	6th Grade	11.5 (7.6 - 15.3)	10.5 (7.7 - 13.2)	77.3 (73.6 - 81.0)
	7th Grade	24.1 (19.3 - 28.8)	12.0 (9.1 - 14.9)	75.7 (72.7 - 78.7)
	8th Grade	36.2 (31.4 - 40.9)	21.2 (17.5 - 25.0)	70.1 (66.6 - 73.6)
Gender	Male	18.4 (15.4 - 21.4)	14.8 (12.3 - 17.4)	73.8 (71.1 - 76.6)
	Female	30.4 (26.3 - 34.5)	14.9 (11.9 - 17.9)	74.6 (71.9 - 77.3)
Race/Ethnicity	White	19.7 (16.0 - 23.3)	13.0 (10.3 - 15.7)	76.6 (73.7 - 79.4)
	Black	32.2 (26.8 - 37.6)	20.6 (14.5 - 26.8)	75.5 (69.6 - 81.4)
	Hispanic or Latine	37.5 (33.2 - 41.7)	18.3 (14.9 - 21.8)	68.6 (65.1 - 72.0)
	Asian	15.0 (7.6 - 22.4)	**	83.4 (76.2 - 90.6)
	Other/Multiracial	21.3 (16.5 - 26.2)	17.3 (12.2 - 22.5)	69.0 (62.6 - 75.4)

Terms, Definitions, and Statistical Methodology

This report contains data from the Massachusetts Youth Health Survey (MYHS). The MYHS is conducted separately at the middle school (grades 6-8) and high school (grades 9-12) levels. The high school survey was conducted among 2,456 students in 60 schools, and the middle school survey was conducted among 3,426 students in 91 schools.

The MYHS data is **weighted** to represent the population of students enrolled in Massachusetts public high schools and middle schools. Weighting makes the sample representative in two ways:

- It adjusts for differences in the probability of selection due to school size
- It adjusts for school and student non-participation

The underlying **sample size (N)** in each cell of the presented tables is the number of students who responded to the specific MYHS question(s). These are unweighted numbers. These numbers exclude students who reported "don't know" or had no response coded as missing or skipped.

The **crude percentage** is the weighted proportion of respondents in a particular category. When percentages are reported in referring this report's text; they refer to crude percentages. The crude percentage of respondents used in this report reflects the burden of a certain health status indicator in a specific group of the population, e.g., grade, gender, or race/ethnicity.

The data presented here are univariate, descriptive percentages. No multivariate analysis was performed on these data. In addition, all data presented here are cross-sectional; thus, this report contains no inferences about causality.

The **95% confidence interval (95% CI)** is a range of values determined by the degree of variability of the data within which the true value is likely to lie. The confidence interval indicates the precision of a calculation, the wider the interval, the less precision in the estimate. The 95% confidence intervals used in this report for crude and age-adjusted percentages are the indicators of reliability (or stability) of the estimate. Smaller population subgroups or smaller numbers of respondents yield less precise estimates.

Statistical significance (at the 95% probability level) was considered as a basis when we used the terms "more likely" or "less likely." Differences between percentages for respective subgroups are presented when a difference is statistically significant. We considered the difference between the two percentages to be statistically significant (with 95% probability) if the calculated p-value was <0.05.

Suppression of the presented estimates:

- a) Estimates and their 95% confidence intervals are not presented in the tables if the underlying sample size is less than 100 respondents.
- b) Following recommendations of the National Center for Health Statistics, data are not presented in the tables if a ratio of standard error to the estimate itself exceeds 30% (relative standard error of greater than 30%). Standard error of the estimate is a measure of its variability. Larger standard errors yield wider confidence intervals and less reliable estimates.

Race-ethnicity categories in this report include White, Black, Hispanic/Latine, Asian, and Other/Multiracial. When referring to White, Black, Asian, or Other/Multiracial, these categories include only non-Hispanic/non-Latine respondents. All respondents reporting Hispanic/Latine ethnicity are included in the Hispanic/Latine category regardless of race. Due to small sample sizes, data on American Indian/Alaska Natives and Native Hawaiians/Other Pacific Islanders are collapsed into the Other/Multiple Race category.

Students were asked about **sexual orientation and gender identity** in separate questions. Those who responded gay or lesbian, bisexual, questioning/not sure, or other to sexual orientation or responded they were transgender or not sure to gender identity question were included in the category LGBTQ. Students who indicated that they did not know what either

question was asking were excluded. We recognize that combining these groups into one category is not ideal. However, we find it necessary to do so to be able to provide stable, reliable estimates.

Limitations

There are some limitations that should be considered when interpreting results from the MYHS based on the nature of the survey data:

- The data estimated from the MYHS pertain to middle school (grades 6-8) and high school (grades 9-12) students enrolled in a Massachusetts public school. Students who attend private or religious schools or are home-schooled, as well as youth not attending school, are not included, and results cannot be generalized to these groups.
- All data collected on the MYHS are based on self-report from respondents. By its nature, self-reported data may be subject to error for several reasons. An individual may have difficulty remembering events that occurred a long time ago or the frequency of certain behaviors. Some respondents may over or under report behaviors they deem to be socially desirable or undesirable.
- Because MYHS data is based on a random sample of schools, these results may differ from another random sample to some extent simply due to chance.
- The MYHS is only conducted in English. Students for whom English is a second language may have difficulty completing the survey in the allotted class time.