

MetroWest Adolescent Health Survey Regional Highlights Report

Informing data-driven school and community
health policies and practices

2023

MetroWest Region High School Youth

GRADES 9-12



**METROWEST
HEALTH**
FOUNDATION



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Regional Highlights from the 2023 MetroWest Adolescent Health Survey

MetroWest Region High School Report

Background

Since 2006, the MetroWest Health Foundation (MHF) has supported local communities in addressing the most pressing issues in adolescent mental and physical health through administration of the MetroWest Adolescent Health Survey (MWAHS). The MWAHS plays a critical role in the development and implementation of data-driven strategies, programs, and policies across the region. Having timely, local data not only helps schools and communities uncover trends in adolescent health and risk behaviors, but also increases their understanding of health disparities so that efforts can be made to support those youth in greatest need and promote equity across the region.

The 2023 MWAHS represents the 9th administration of this survey, administered biennially, except for a one-year delay during the COVID-19 pandemic. In total, 38,074 middle and high students in all 25 communities in the MetroWest region participated in the survey. The MWAHS initiative exemplifies the MHF's ongoing and deep commitment to identifying and understanding emerging adolescent health issues and supporting local efforts in schools and communities to enhance youth wellbeing across the region.

Methodology

The MWAHS content is based on the Centers for Disease Control and Prevention's *Youth Risk Behavior Survey* (YRBS)¹, which asks questions about health-related behaviors and experiences that can lead to poor health, death, and disability among adolescents, including: substance use, violence, behaviors related to unintentional injury, lack of physical activity, unsafe sexual behaviors (at the high school level only), and mental health. Based on input from stakeholders in the MetroWest region, the MWAHS expands on these topics to gather more detailed information on areas of current concern (e.g., use of electronic vapor products, marijuana use, and mental health) as well as to explore other priority topics relevant to the current challenges youth are facing (e.g., digital media use, protective factors like adult support and school connectedness, and access to mental health services).

Collecting self-report data from youth is an important way of determining the prevalence of health and risk behaviors. There is no evidence that asking students about their health behaviors will encourage them to engage in those behaviors. Students respond truthfully when they perceive the survey as important, that their privacy is being protected, and that their participation is anonymous.² Internal reliability checks identify the small number of students who provide a pattern of implausible responses.

The 2023 survey is the second online survey administration of the MWAHS, which is a voluntary and anonymous survey. Many other school-based surveillance studies have switched from paper-and-pencil to online surveys in recent years, including the *National YRBS*¹ and *Massachusetts YRBS*.³ Research has shown that findings from online and paper-and-pencil surveys of youth risk behaviors are generally equivalent.⁴

A census of students in grades 9 through 12 in 27 high schools in the MetroWest region participated in the 2023 High School MWAHS. The survey was available to all students in English, Spanish, and Portuguese, and students could choose which language to use. As in all prior survey waves, local procedures were followed to inform parents/guardians of the survey in advance and give them the choice to opt out their child(ren). Students were also informed that their participation was voluntary, that they could skip any question they did not wish to answer, and that no names or other identifying information were being collected. Data collection at each school was guided by a standard protocol that protected the privacy of students' responses, with extra precautions taken through classroom and online platform procedures to ensure that data being collected electronically would remain anonymous.

In total, 22,435 students in grades 9 through 12 completed the 2023 survey, representing 79.1% of youth. Respondents were split evenly by sex (50.1% female and 49.9% male). Participation by grade includes 26.9% in 9th grade, 26.3% in 10th grade, 25.0% in 11th grade, and 21.9% in 12th grade, mirroring grade patterns from prior surveys. Racial/ethnic composition included 9.3% Asian, 3.2% Black, 19.4% Hispanic/Latino, 61.6% White, and 6.5% other/multiracial. One in five students (20.6%) identify as LGBTQ+ based on their sexual identity and/or gender identity. 18.2% of students report having a learning and/or physical disability.

About this Report

This *Regional Highlights* report summarizes youth risk behaviors related to poor health among high school adolescents, including substance use, violence, bullying, mental health, unsafe sexual behaviors, physical activity, online behavior, as well as protective factors, such as adult support and school connectedness.

The MWAHS data allow for a valuable examination of behavioral and attitudinal trends across nine time points from 2006 to 2023, with emphasis in this report placed on recent trends. It is important to note that youth who participated in the 2023 survey are part of a cohort of youth that experienced the COVID-19 pandemic, resulting in substantial changes to their educational (e.g. remote learning), familial, and social environments as well as their health and risk behaviors, as noted in the 2021 MWAHS data. The 2023 data therefore may reflect cohort-specific patterns that began in earlier years.

This report also includes a description of risk and protective behaviors by grade and sex* for all key indicators. In addition, risk behaviors among youth based on race/ethnicity, sexual orientation/gender identity, and learning/physical disability status are provided when notable health disparities exist. Data on disparities in health and risk behaviors is provided in order to identify groups of students that may be in need of increased support, and are influenced by inequities in the forces and systems (e.g., economic, social, educational, health care) that influence the conditions of daily life.

* Sex is used to examine trends from 2006 to 2023 and not gender, as the survey didn't ask about gender identity until 2021.

Analyses looking at associations across various indicators are also described, most often focusing on the relationship between risk behaviors or protective factors with mental health given the attention that youth mental health has received locally and nationally in recent years. ***Note that these associations cannot be interpreted as causal***, meaning that it is not possible to tell the directionality based on cross-sectional survey data (data collected at one point in time that does not follow individuals over time). The associations are provided to increase understanding of the co-occurrence of risk behaviors, as well as associations of risk behaviors and protective factors, that will help in providing necessary supports to students.

Comparisons of MetroWest data with state and national trends are provided when similar data is available from other recent surveys. Comparisons with data from the most recent state and national YRBS are not provided as the most current state and national data available at the time of this report are from fall of 2021, two full years prior to the 2023 MWAHS and collected at a time when the immediate effects of the COVID-19 pandemic may have strongly impacted the data.

The 2023 MWAHS report provides important data to understand the current state of adolescent health, showing areas where progress is being made and highlighting areas needing continued efforts. The high school data will help to focus school and community attention on the most critical aspects of adolescent health.

Key Findings: Substance Use

Conventional Cigarette Smoking

The decline in cigarette smoking among MetroWest high school students has slowed in recent surveys, but smoking remains at an all-time low. In 2023, one in ten students had tried a cigarette in their lifetime (10%), down from a high of 35% in 2006 when the MWAHS began.

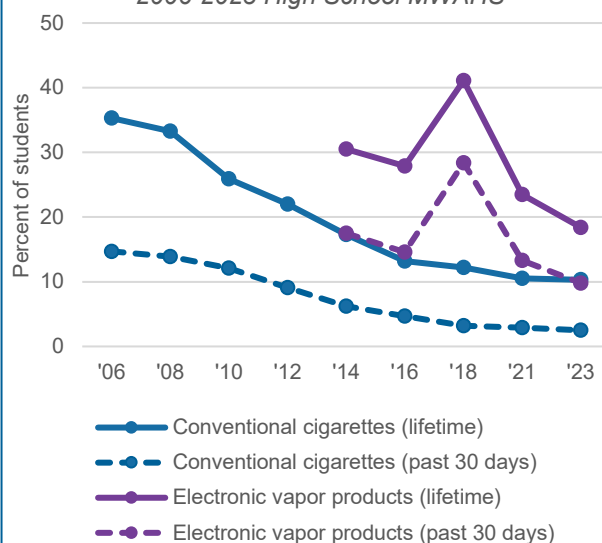
Trends in Conventional Cigarette Smoking (2006 to 2023)

- » Lifetime cigarette smoking decreased from 35% in 2006 to 12% in 2018, with reports in the 10-11% range since 2021 (Figure 1).
- » Current cigarette smoking (past 30 days) has remained at around 3% since 2018, down from 15% in 2006.
- » Lifetime and current cigarette smoking remained steady among both females and males from 2021 to 2023.

Sociodemographic Patterns in Conventional Cigarette Smoking (2023)

- » Ten percent of both females and males reported lifetime cigarette smoking in 2023.
- » Two percent of females and 3% of males smoked in the past 30 days.
- » Lifetime smoking initiation increases from 9th grade (5%) to 12th grade (17%).
- » Fifteen percent of Hispanic/Latino youth, 10% of White youth, 10% of other/multiracial youth, 8% of Black youth, and 4% of Asian youth report lifetime smoking. Current smoking is low across all racial/ethnic groups, in the range of 1-3%.
- » LGBTQ+ youth are more likely to report lifetime cigarette smoking (14% vs. 9%) and recent smoking (4% vs. 2%) than heterosexual cisgender youth.
- » Youth with physical and/or learning disabilities are more likely to have ever smoked a cigarette (14% vs. 9%) compared to youth without disabilities.

Figure 1. Trends in Smoking and Nicotine Vaping
2006-2023 High School MWAHS



Additional Findings Related to Conventional Cigarette Smoking

Comparisons with Other Data: Cigarette smoking in the MetroWest region is similar to national data collected in the Spring 2023 *Monitoring the Future* (MTF) study, which surveys youth in 8th, 10th, and 12th grades on an annual basis.⁵ For example, lifetime cigarette smoking is reported by 9% of 10th grade students in MetroWest and 9% of 10th grade students in MTF. Lifetime smoking among 12th grade students is at 17% in the region compared to 15% in MTF. Similar to trends in the MetroWest region, MTF also shows a continued decline in cigarette smoking nationally.

Data from the 2023 National Youth Tobacco Survey⁶ shows a decline in current cigarette smoking from 5% in 2022 to 4% in 2023 among high school youth, comparable to the sustained low levels of current smoking in the MetroWest region (3%).

Use of Electronic Vapor Products (EVPs) Containing Nicotine*

Reports of EVP use have declined by more than half since they peaked in 2018. Lifetime EVP use is reported by fewer than one in five high school students in 2023 (18%), with one in ten (10%) reporting current use. Consistent with the decline in EVP use, perceived risk of nicotine vaping has continued to increase.

Trends in Use of EVPs Containing Nicotine (2014 to 2023)[†]

- » Lifetime EVP use decreased from 24% in 2021 to 18% in 2023 (Figure 1) after peaking at 41% in 2018.
- » Current use of EVPs also declined, from a high of 28% in 2018 to 13% in 2021, and then declining further to 10% in 2023.
- » EVP use declined considerably for both females and males. For example, lifetime use decreased from 26% in 2021 to 20% in 2023 among females, and from 21% to 16% among males.
- » Daily EVP use has remained steady at 2% since 2021, down from 5% in 2018.
- » Four percent of youth report using EVPs on school property in 2023, down from 6% in 2021.

Sociodemographic Patterns in Use of EVPs Containing Nicotine (2023)

- » More females than males report lifetime EVP use (20% vs. 16%) and current EVP use (11% vs. 9%), consistent with 2021 patterns in EVP use.
- » Initiation of nicotine vaping increases from 11% in 9th grade to 28% in 12th grade.
- » Eight percent of youth used a flavored EVP in the past 30 days (10% of females and 7% of males).
- » Six percent of both females and males used a disposable (single-use) product in the past 30 days.
- » Eight percent of females and 7% of males have ever used EVPs daily, that is at least once a day for 30 days during their lifetime.
- » Two percent of both females and males used EVPs daily in the 30 days prior to the survey, indicating a likely addiction to nicotine. Daily EVP use increases from 1% in 9th grade to 4% in 12th grade.
- » EVP use is highest among Hispanic/Latino youth (25% for lifetime use), followed by Black youth (21%), White youth (18%), other/multiracial youth (18%), and Asian youth (7%). The same pattern exists for current EVP use.
- » EVP use is higher among LGBTQ+ youth than heterosexual cisgender youth (23% vs. 17% for lifetime use; 13% vs. 9% for current use).
- » Youth with learning and/or physical disabilities are also more likely to use EVPs (24% vs. 16% for lifetime use; 14% vs. 8% for current use).

* Defined as vaping nicotine using electronic vapor products, such as JUUL, Vuse, Logic, and MyBlu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods that contain nicotine. They also include disposable products that you can only use once, such as puff Vars, Stig, Viigo, and Fruyt Stik.

[†] 2014 was the first year that the MWAHS asked about use of electronic vapor products containing nicotine.

Additional Findings Related to Electronic Vapor Products Containing Nicotine

Perceived Risk of EVPs: Perceived risk of using EVPs (defined as responses of “moderate” or “great” risk) nearly doubled from 2014 (42%) to 2021 (83%), further increasing to 86% in 2023. Despite higher use of EVPs among females than males, perceived risk of EVP use is higher among females (89% vs. 83%). Perceived risk is somewhat similar across all high school grades, decreasing only slightly from 9th grade (88%) to 12th grade (85%). Youth who perceive no or slight risk of using EVPs are more than twice as likely to report current EVP use than youth who perceive moderate or great risk (19% vs. 8%).

Access to EVPs: Ease of obtaining EVPs has remained similar from 2021 to 2023 with 55-56% saying it would be fairly or very easy to access EVPs if they wanted to. Reports of ease of access are similar by sex (53% for females and 56% for males) and increase from 41% in 9th grade to 67% in 12th grade.

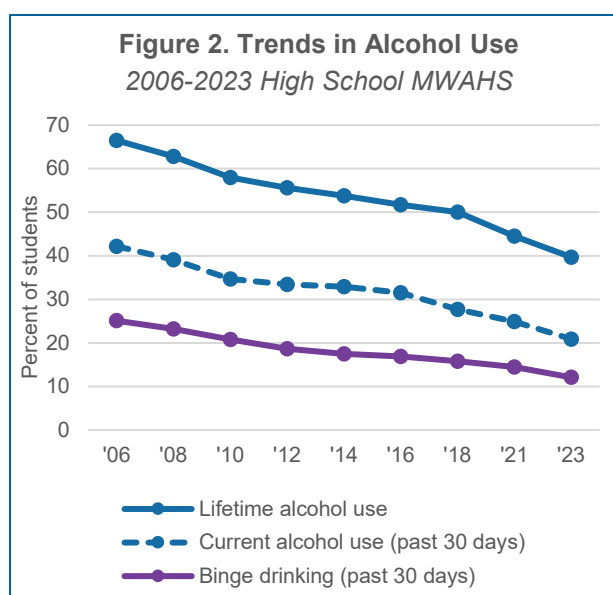
Comparisons with Other Data: Lifetime and current use of EVPs in MetroWest is lower than in the nation. For example, current use among 10th grade students is 9% in MetroWest and 12% in the MTF study,⁵ and current use among 12th grade students is 15% in MetroWest and 17% in MTF. Like in the MetroWest region, the MTF study also shows declines in lifetime and current EVP use in recent years. Similarly, the 2023 National Youth Tobacco Survey⁶ shows a decline in current e-cigarette use from 14% in 2022 to 10% in 2023, consistent with the decline in use in MetroWest, from 13% in 2021 to 10% in 2023.

Alcohol Use

Alcohol use among MetroWest high school youth has decreased at every time point since the MWAHS began, with prevalence of current and binge drinking cut in half since 2006. In 2023, 40% of high school drank alcohol in their lifetime, 21% drank in the past 30 days, and 12% reported recent binge drinking.

Trends in Alcohol Use (2006 to 2023)

- » Lifetime alcohol use decreased steadily from 67% in 2006 to 45% in 2021, further declining to 40% in 2023 (Figure 2).
- » Current drinking decreased from 25% in 2021 to 21% in 2023, down from a high of 42% in 2006.
- » Binge drinking* during the past 30 days declined steadily as well, from 25% in 2006 to 15% in 2021, dropping further in 2023 to 12%.
- » From 2021 to 2023, there were notable declines in lifetime and current alcohol use among both females and males. For example, current drinking decreased from 28% in 2021 to 23% in 2023 among females, and from 22% to 19% among males.



* Binge drinking in recent surveys is defined as four or more drinks in a row for females, or five or more drinks in a row for males at least once in the past 30 days. This does not take into account other factors, like body weight, that influence intoxication.

- » Binge drinking was higher among females than males in 2021; however, from 2021 to 2023, levels decreased more among females (from 16% to 13%) than males (from 13% to 12%).
- » Nearly one in twenty high school youth (4%) reports drinking alone in the past 30 days, down from 7% when this was first measured in 2010. Three percent of youth report that drinking has interfered with school, work, or other responsibilities, down from 7% in 2006.

Sociodemographic Patterns in Alcohol Use (2023)

- » Lifetime and current alcohol use are higher among females than among males, consistent with the past four survey administrations. In 2023, 42% of females and 38% of males reported lifetime drinking, and 23% of females and 19% of males reported recent drinking. However, binge drinking in 2023 is now similar among females (13%) and males (12%).
- » Lifetime alcohol use more than doubles from 9th grade (26%) to 12th grade (55%), and current use nearly quadruples from 9th grade (9%) to 12th grade (34%). By 12th grade, nearly one in four youth (23%) report binge drinking in the past 30 days.
- » Alcohol use is highest among White and other/multiracial youth. For example, current drinking is reported by 24% of White youth, 23% of other/multiracial youth, 17% of Hispanic/Latino youth, 12% of Black youth, and 10% of Asian youth.
- » Lifetime drinking is higher among LGBTQ+ youth compared with heterosexual cisgender youth (45% vs. 39%), but current and binge drinking do not differ by sexual/gender identity.
- » Alcohol use is slightly higher among students with disabilities than students without disabilities (for example, 25% vs. 20% for current drinking).

Additional Findings Related to Alcohol Use

Perceived Risk of Alcohol Use: Perceived risk of having five or more drinks once or twice a week (moderate/great risk) has been similar at 77-78% since this information was first collected in 2021. Despite the higher use of alcohol among females, they are also more likely to perceive alcohol as risky (83% for females vs. 71% for males). Perceived risk decreases by grade, from 79% in 9th grade to 74% in 12th grade. Youth who perceive heavy drinking as no/slight risk are more likely to report current drinking (31% vs. 18%) and binge drinking (22% vs. 9%) compared to those who perceive heavy drinking as moderate/great risk.

Associations Between Alcohol Use and Mental Health: Alcohol use is associated with a range of mental health problems. For example, youth who report current alcohol use are more likely to also report that life was “very” stressful in the past 30 days (38% vs. 23%) and to report depressive symptoms in the past 12 months (31% vs. 20%). Drinking alone is even more strongly associated with elevated risk of mental health problems, including more than double the risk of depressive symptoms (51% vs. 21%), and more than three times the risk of suicidal thoughts in the past 12 months (35% vs. 10%), compared with students who didn’t drink alone in the past 30 days.

Comparisons with Other Data: Current alcohol use is higher in MetroWest than in the most recent MTF study.⁵ For example, among 10th grade students, 18% of MetroWest students have had alcohol in the past 30 days compared with 14% of MTF 10th grade students. The disparity is even greater among 12th grade students (34% in MetroWest compared with 24% in MTF). Binge drinking is also higher in MetroWest compared with MTF national data. Both MetroWest and MTF show notable declines in alcohol use in recent surveys as well as over the long-term.

Marijuana Use

Following a sharp decline from 2018 to 2021, marijuana use continued to decrease in 2023 to the lowest levels since the MWAHS began. In 2023, fewer than one in five youth (18%) used marijuana in their lifetime, and one in ten (10%) used marijuana in the past 30 days.

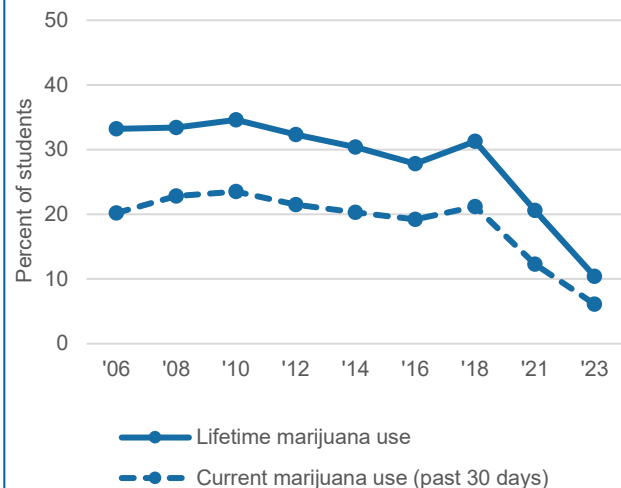
Trends in Marijuana Use (2006 to 2023)

- » After fluctuating from 28-33% from 2006 to 2016, lifetime marijuana use dropped from 31% in 2018 to 21% in 2021, and further declined to 18% in 2023 (Figure 3).
- » Current marijuana use dropped from 21% in 2018 to 12% in 2021, and further lowered to 10% in 2023.
- » Marijuana use declined for both females and males since 2021. For example, lifetime marijuana use decreased from 22% in 2021 to 18% in 2023 among females, and from 20% to 17% among males.
- » Marijuana use on school property was steady at 3% from 2021 to 2023, down from a high of 6% in 2010.

Sociodemographic Patterns in Marijuana Use (2023)

- » Marijuana use in 2023 is similar among females and males for both lifetime use (18% vs. 17%) and current use (10% vs. 11%), compared to 2021 when lifetime use was slightly higher among females.
- » The most common form of lifetime marijuana use is vaping (15%), followed by smoking (14%), using edibles (13%), and using concentrates/high potency products (5%). Types of marijuana use do not differ substantially by sex, with the exception of high potency products (6% for males and 4% for females).
- » Initiation of marijuana use increases from 7% in 9th grade to 32% in 12th grade. By 12th grade, one in five students report current use (19%).
- » Nine percent of youth have been offered, sold, or given marijuana on school property in the past 30 days, and 3% used marijuana on school property during this time. These reports do not differ substantially by sex but increase slightly by grade.
- » A small number of youth report behaviors indicative of addictive marijuana use: 3% have used marijuana while alone in the past 6 months, 2% have used marijuana before noon, and 2% report memory problems related to their use. These numbers are similar by sex, but increase by grade. For example, using marijuana while alone increases from 1% in 9th grade to 5% in 12th grade.
- » Marijuana use does not differ substantially by racial/ethnic group, with the exception of being lower for Asian youth. For example, lifetime use is reported by similar proportions of Black, Hispanic/Latino, White, and other/multiracial youth (18-20%), and 6% of Asian youth.
- » LGBTQ+ youth are more likely to use marijuana than heterosexual cisgender youth (for example, 23% vs. 16% for lifetime use).
- » Youth with disabilities are also more likely to use marijuana than youth without disabilities (for example, 24% vs. 16% for lifetime use).

Figure 3. Trends in Marijuana Use
2006-2023 High School MWAHS



Additional Findings Related to Marijuana Use

Perceived Risk of Marijuana Use: Perceived risk of marijuana use increased from 2021 to 2023, consistent with the decrease in use. For example, perceived risk of using marijuana once or twice a week (moderate/great risk) increased substantially from 51% in 2021 to 66% in 2023. Low risk perception is related to increased use: For example, youth who perceive using marijuana once or twice a week as no/slight risk are four times more likely to report current use as students who perceive moderate/great risk (19% vs. 5%).

Access to Marijuana: Ease of access to marijuana (fairly/very easy) decreased from 66% in 2016 to 46% in 2023, again in accordance with the decrease in use. Ease of access does not differ by sex, but increases by grade, from 29% in 9th grade to 61% in 12th grade.

Associations Between Marijuana and Mental Health: Marijuana use is associated with reports of mental health problems. For example, recent marijuana users are about twice as likely as non-users to report depressive symptoms (39% vs. 20%), and more than twice as likely to report self-injury (29% vs. 12%), and seriously considering suicide (24% vs. 9%) in the past 12 months.

Comparisons with Other Data: MetroWest youth report lower lifetime and current marijuana use than in MTF.⁵ For example, 8% of MetroWest 10th grade youth used marijuana in the past 30 days compared to 10% of MTF youth. The MTF data shows a sharp decrease in marijuana use since 2020, consistent with the MetroWest data. However, recent declines in MTF reports of marijuana use are not as great in magnitude as those in the MWAHS.

Prescription Drug Misuse*

After a slow and steady decline from 2006 to 2021, lifetime prescription drug misuse is slightly higher for the first time in 2023. About 1 in 20 (6%) of high school students report lifetime prescription drug misuse, and 3% have misused prescription drugs in the past 30 days.

Trends in Prescription Drug Misuse (2006 to 2023)

- » Lifetime prescription drug misuse decreased steadily from 11% in 2006 to 4% in 2021, with reports of 6% in 2023. Misuse increased more among males (from 3% in 2021 to 6% in 2023) than females (from 5% to 6%).
- » Current prescription drug misuse has been steady at 3% since 2016, down from 6% in 2008.
- » Three percent of youth misused prescription pain medicine[†] in their lifetime in 2023, down from 5% in 2021.

Sociodemographic Patterns in Prescription Drug Misuse (2023)

- » Lifetime misuse of prescription drugs is similar among females and males (6% for each) as is lifetime misuse of tranquilizers/sedatives (2% for each). Lifetime stimulant misuse is reported by 2% of females and 4% of males.
- » Lifetime prescription drug misuse is similar by grade at 6-7%, and current misuse is steady by grade at 3%.
- » Reports of lifetime prescription drug misuse are similar among racial/ethnic groups at 6-8%.
- » LGBTQ+ youth are twice as likely to misuse prescription drugs in their lifetime than heterosexual cisgender youth (10% vs. 5%).
- » Youth with disabilities are more likely to misuse prescription drugs in their lifetime than nondisabled youth (11% vs. 5%).

* Defined as using prescription drugs without a doctor's prescription or differently than how a doctor told you to use them; includes using someone else's prescription or obtaining the medicine illegally.

† Prescription pain medicine includes opioids like codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.

Additional Findings Related to Prescription Drug Misuse

Associations Between Prescription Drug Misuse and Mental Health: Youth who misuse prescription drugs are much more likely than nonusers to experience mental health problems, such as depressive symptoms (44% vs. 21%) and suicidal thoughts (29% vs. 9%).

Comparisons with Other Data: Reports of lifetime use of prescription drugs are slightly lower in MetroWest than in MTF⁵ (7% vs. 9% among 12th grade students), but reports are more similar for current use (3% in MetroWest vs. 2% in MTF). The overall decline in prescription drug misuse since the MWAHS began is consistent with findings from the MTF study, however, the recent increase in lifetime use in the MetroWest region from 2021 to 2023 is not reflected in the national data, which has remained steady since 2021. (Note that MTF only collects prescription drug misuse data in 12th grade.)

Key Findings: Impaired and Distracted Driving

Driving after using substances has continued to decline to the lowest levels since the MWAHS began, consistent with the declines in alcohol and marijuana use. In 2023, 3% of high school drivers drove when they had been drinking in the past 30 days, and 6% drove when they had been using marijuana.

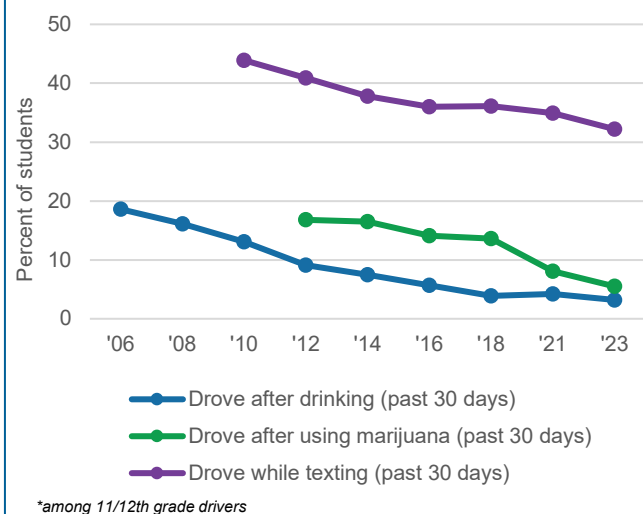
Texting while driving is slightly lower in 2023, after remaining similar in recent surveys. Still, nearly one in three high school drivers (32%) report texting while driving in the past 30 days.

Impaired Driving

Trends in Impaired Driving (2006 to 2023)

- » Driving after drinking (among 11th and 12th grade students who drive, in the past 30 days) declined from 19% in 2006 to 4% in 2021, with reports at a low of 3% in 2023 (Figure 4).
- » Three percent of students report riding as a passenger in a car with a high school driver who had been drinking in the past 30 days, just below 2016-2018 levels (4-5%), but much lower than the earliest reports in 2012 (10%).
- » Driving after using marijuana declined from 17% in 2012 (when this data was first collected) to 8% in 2021, further dropping to 6% in 2023.
- » Riding as passengers with a high school driver who had been using marijuana lowered from 18% in 2012 to 8% in 2021, and further lowered to 6% in 2023.

Figure 4. Trends in Impaired and Distracted Driving* 2006-2023 High School MWAHS



Sociodemographic Patterns in Impaired Driving (2023)

- » Driving after drinking is similar among females (3%) and males (4%), but driving after using marijuana remains higher among males than females (7% vs. 4%), as in past surveys.
- » Reports of recently riding as a passenger with a high school driver who has been using substances are similar among females and males with respect to alcohol (3% for each) and marijuana (5% for females, 6% for males).
- » Twelfth grade drivers are nearly twice as likely as 11th grade drivers to report driving when they had been using alcohol (4% vs. 2%) and marijuana (7% vs. 4%).
- » Reports of passenger and driver behaviors are relatively similar across most racial/ethnic groups, with the exception of lower reports among Asian youth. Riding with a high school driver who had been drinking ranges from 2-5% by racial/ethnic group, and driving after drinking ranges from 2-6%. Riding with a high school driver who had been using marijuana ranges from 2-7% and driving after using marijuana ranges from 3-8%.
- » Riding with an impaired driver or driving while impaired does not differ notably by sexual/gender identity.
- » Youth with learning and/or physical disabilities are slightly more likely to report behaviors related to impaired driving. The most notable difference is for driving when using marijuana (8% for youth with disabilities vs. 4% for youth without disabilities).

Additional Findings Related to Impaired Driving

Perceived Risk of Impaired Driving: Sixty percent of youth believe that riding in a car driven by a high school student who had been using marijuana is “very dangerous, down from 65% in 2021, despite the decline in impaired driving involving marijuana. Reports of perceived risk are higher among females than males (67% vs. 54%) and decrease from 9th grade (62%) to 12th grade (55%).

Distracted Driving

Trends in Distracted Driving (2010 to 2023)

- » Texting, messaging, or emailing while driving in the past 30 days decreased from a high of 41% in 2012 to 35-36% in 2016-2021, with reports even lower in 2023 at 32%.
- » Riding as a passenger in a vehicle with a high school driver who was texting decreased from 30% in 2018 to 23% in 2021, with reports at 22% in 2023.

Sociodemographic Patterns in Distracted Driving (2023)

- » Females are slightly more likely to text while driving than males (33% vs. 31%), or to be a passenger with a driver who was texting (24% vs. 20%).
- » Texting while driving more than doubles from 11th grade (21%) to 12th grade (43%).
- » White and other/multiracial youth are more likely to report behaviors related to riding and driving with someone who had been texting than students in other racial/ethnic groups. For example, driving when texting is reported by 34% of White youth, 34% of other/multiracial youth, 29% of Hispanic/Latino youth, 23% of Asian youth, and 21% of Black youth.
- » Driving while texting does not differ notably by sexual/gender identity.
- » Youth with learning and/or physical disabilities are slightly more likely to report driving when texting than youth without disabilities (36% vs. 31%). Passenger behaviors related to texting and driving do not differ notably by disability status.

Key Findings: Violence

Physical fighting in 2023 is similar to recent surveys, but down by more than half since the MWAHS began, with 12% of youth reporting being in a physical fight in the past 12 months in 2023. Weapon carrying continues a slow and steady decline, with 4% carrying weapons in the past 30 days, also down by half since 2006. Reports of physical and sexual dating violence have also declined since the MWAHS began.

Physical Fighting

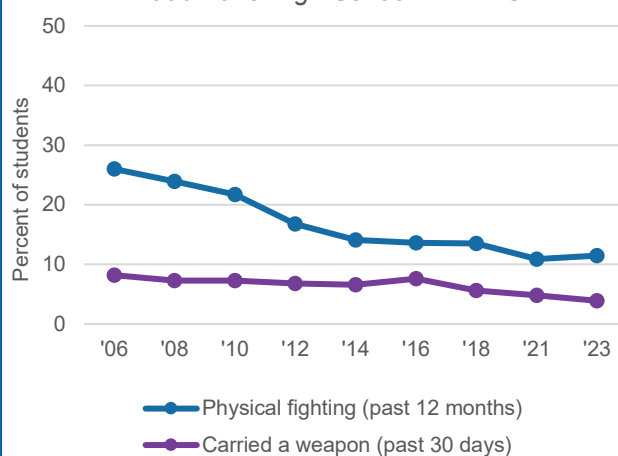
Trends in Physical Fighting (2006 to 2023)

- » Overall reports of fighting in the past 12 months decreased from a high of 26% in 2006 to 11% in 2021, with reports at 12% in 2023 (Figure 5).
- » Fighting among females has been similar at 6-7% since 2016, whereas fighting among males declined from 20% in 2016 to 17% in 2023.
- » Fighting on school property in the past 12 months decreased from 9% in 2006 to 4% in 2014, and has remained at 3-4% over the last four surveys.

Sociodemographic Patterns in Physical Fighting (2023)

- » Males are more likely than females to report fighting overall (17% vs. 6%) and on school property (6% vs. 2%), consistent with all prior survey waves.
- » Physical fighting decreases from 15% in 9th grade to 9% in 12th grade. Fighting on school property also declines by grade, from 6% to 3%.
- » Physical fighting is highest among Black youth (19%), followed by other/multiracial youth (15%), Hispanic/Latino youth (14%), White youth (11%) and Asian youth (7%). Fighting at school follows a similar pattern.
- » LGBTQ+ and heterosexual cisgender youth report similar levels of physical fighting, overall and on school property.
- » Youth with physical and/or learning disabilities are more likely to report physical fighting overall (16% vs. 9%) and at school (6% vs. 3%) than youth without disabilities.

Figure 5. Trends in Fighting and Weapon Carrying
2006-2023 High School MWAHS



Weapon Carrying

Trends in Weapon Carrying (2006 to 2023)

- » Weapon carrying in the past 30 days declined from 8% in 2006 to 5% in 2021, with 2023 reports at 4%.
- » Weapon carrying decreased from 13% in 2006 to 6% in 2023 among males, whereas weapon carrying has been steady at 2-3% among females since the MWAHS began.
- » Weapon carrying on school property declined from 3% in 2006 to 1% in 2018 and has remained at that level over the past two surveys.

- » Reports of being threatened or injured with a weapon decreased from 9% in 2006 to 5% in 2021, with slightly higher reports at 7% in 2023. Four percent of youth report being threatened or injured with a weapon at school in the past 12 months, which has not changed substantially in recent surveys.

Sociodemographic Patterns in Weapon Carrying (2023)

- » Recent weapon carrying is much higher among males (6%) than females (2%), consistent with physical fighting.
- » Reports of weapon carrying are steady at 4% across grades 9 through 12.
- » Weapon carrying is low across all groups, reported by 6% of other/multiracial youth, 5% of Hispanic/Latino youth, 4% of White youth, 3% of Black youth, and 2% of Asian youth.
- » LGBTQ+ youth are more likely to carry weapons than heterosexual cisgender youth (7% vs. 3%).
- » Youth with disabilities are also more likely to carry weapons (7% vs. 3%) than nondisabled peers.

Dating Violence*

Trends in Dating Violence (2006 to 2023)

- » Reports of lifetime physical and sexual dating violence have decreased somewhat since these behaviors were first measured. In 2023, 5% of all youth were physically hurt on purpose by a date (down from 9% in 2006) and 4% were forced to have sexual intercourse by a date (down from 6% in 2006). Reports of being forced to do other sexual things (not intercourse) have ranged from 6-7% since 2012, down from a high of 9% in 2010.
- » Verbal forms of dating violence have been similar in recent years. Reports of being sworn at, cursed at, or insulted have been similar in the range of 11-12% since 2014, down from 15% in 2012 when this was first measured. Threats of physical harm have been steady at 3-4% since 2012.

Sociodemographic Patterns in Dating Violence (2023)

- » Four percent of both females and males report being threatened with physical harm by a date in their lifetime. Four percent of females and 5% of males report being physically hurt on purpose.
- » More females than males report being forced to have sexual intercourse (5% vs. 3%) and forced to do other sexual things in their lifetime (11% vs. 4%).
- » Lifetime reports of physical and sexual dating violence increase from 9th grade to 12th grade, as do the proportion of youth involved in dating relationships.
- » Dating violence patterns do not differ substantially by race/ethnicity, though reports are generally lower among Asian youth than other groups.[†]
- » LGBTQ+ youth are more likely to report dating violence than heterosexual cisgender youth, including being physically hurt (8% vs. 4%) and being forced to do other sexual things besides intercourse (15% vs. 5%).
- » Youth with disabilities are more likely than youth without disabilities to be physically hurt (8% vs. 4%) and to be forced to do other sexual things (13% vs. 6%).

Additional Findings Related to Dating Violence

Associations Between Dating Violence and Mental Health: Students who experience dating violence are more likely than those who have not to report mental health problems like depressive symptoms (52% vs. 21%) and suicidal thoughts (34% vs. 9%); a similar pattern exists for sexual dating violence.

* Dating violence includes negative experiences involving a "boyfriend, girlfriend, date, or someone you were going out with." All indicators are lifetime measures.

† Note that fewer Asian youth report dating in general than youth in other racial/ethnic groups, which is associated with the overall prevalence of dating violence.

Key Findings: Bullying and Cyberbullying

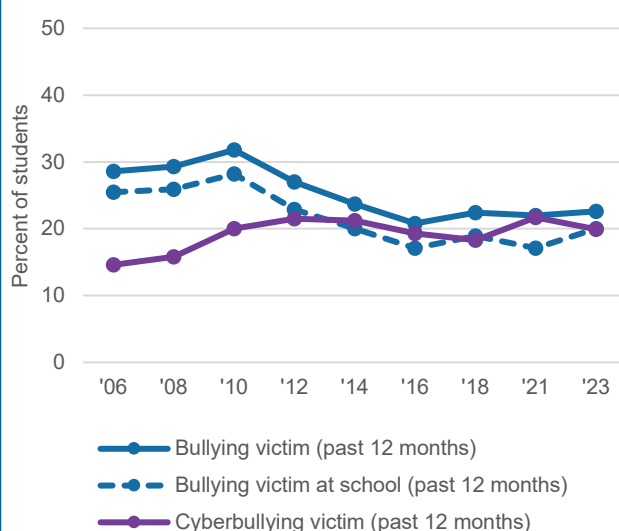
Cyberbullying had surpassed school bullying in 2021. However, reports of cyberbullying declined in 2023 whereas reports of school bullying increased, bringing them to the same levels in 2023. One in five students (20%) were bullied in the past 12 months, and the same proportion (20%) were cyberbullied during this time.

Bullying

Trends in Bullying (2006 to 2023)

- » Overall reports of bullying victimization in the past 12 months decreased from a high of 32% in 2010 to 22% in 2018, remaining similar over the last three surveys at 22-23% (Figure 6). Reports among females and males follow similar trends.
- » School bullying victimization decreased from a high of 28% in 2010 to 17% in 2021, increasing to 20% in 2023. There were recent increases in school bullying among females (from 19% in 2021 to 23% in 2023) and males (from 15% to 17%).
- » Identity-based bullying reports are slightly higher in 2023, including bullying due to: race or ethnicity (from 10% to 13%), religion or culture (from 7% to 9%), disability (from 5% to 7%) and appearance (from 22% to 24%). Reports of being bullied due to sexual orientation remained similar from 2021 to 2023 at 7-8%.
- » There is also a slight increase in reports of bullying others at school, from 8% in 2021 to 10% in 2023, consistent with the increase in school bullying victimization.

Figure 6. Trends in Bullying and Cyberbullying
2006-2023 High School MWAHS



Sociodemographic Patterns in Bullying (2023)

- » Females are more likely than males to be bullied in general (27% vs. 19%) and on school property (23% vs. 17%), but males are more likely to report bullying someone else at school (9% vs. 6%).
- » Females are more likely than males to be bullied based on their gender (11% vs. 4%), sexual orientation (9% vs. 6%), and appearance (26% vs. 22%).
- » Bullying victimization at school decreases by grade, from 25% in 9th grade to 16% in 12th grade.
- » School bullying victimization in 2023 is similar among White (21%), other/multiracial youth (22%), and Hispanic/Latino youth (20%), and lower among Black youth (18%) and Asian youth (14%).
- » LGBTQ+ youth are particularly vulnerable to harassment and bullying: 32% of LGBTQ+ youth have been bullied at school in the past year, compared to 17% of heterosexual cisgender youth. Twenty-nine percent of LGBTQ+ youth report being bullied or verbally harassed specifically due to their sexual identity.
- » Youth with physical and/or learning disabilities are also at heightened risk of bullying victimization: 34% have been bullied at school in the past year, compared with 17% of youth without disabilities. Twenty-one percent of youth with disabilities have been bullied/verbally harassed specifically due to their disability.

Additional Findings Related to Bullying

Help-Seeking Among Bullying Victims: Many bullying victims do not seek help from adults: Among students who were bullied at school in the past 12 months, only 33% talked to a school adult and 51% talked to a parent/adult outside of school about being bullied. These reports are consistent with prior years.

Associations Between Bullying and Mental Health: Youth who are bullied at school are more than twice as likely to report depressive symptoms (42% vs. 17%) and more than three times more likely to report self-injury (31% vs. 10%) and suicidal thoughts (24% vs. 7%) than those who weren't bullied.

Cyberbullying

Trends in Cyberbullying (2006 to 2023)

- » Cyberbullying victimization in the past 12 months decreased from 22% in 2021 to 20% in 2023. Earlier reports since 2010 were in the range of 18-22%. There were slight decreases in cyberbullying from 2021 to 2023 among both females and males.
- » Eight percent of youth reported cyberbullying someone else, consistent with reports of 8-9% since 2014.
- » Five percent of all students reported being bullied or verbally harassed online in the past 12 months due to their race or ethnicity, 4% due to their religion or culture, 4% due to their sexual orientation, 3% due to a disability, 3% due to their gender, and 11% due to their appearance. These numbers do not differ notably from 2021 reports, when this data was first collected.

Sociodemographic Patterns in Cyberbullying (2023)

- » Females report being cyberbullied more than males (24% vs. 16%), as in all prior surveys. Reports of cyberbullying someone else were 8% among females and males.
- » Reports of being cyberbullied are slightly higher in grades 9 and 10 (21-22%) than in grades 11 and 12 (18%).
- » Cyberbullying victimization is similar among Black, Hispanic/Latino, White, and other/multiracial youth (20-21%) and lower among Asian youth (14%).
- » LGBTQ+ youth are more likely to be cyberbullied than heterosexual cisgender youth (27% vs. 18%).
- » Youth with learning and/or physical disabilities are more likely to be cyberbullied than youth without disabilities (31% vs. 17%).

Additional Findings Related to Cyberbullying

Help-Seeking Among Cyberbullying Victims: Among students who were cyberbullied in the past 12 months, only 20% talked to an adult at school and 31% talked to a parent or other adult outside of school about being cyberbullied. These numbers are lower than those reported by school bullying victims.

Associations Between Cyberbullying and Mental Health: Consistent with findings for school bullying, cyberbullying victims are more likely than nonvictims to report depressive symptoms (41% vs. 17%), self-injury (30% vs. 10%), and suicidal thoughts (23% vs. 7%).

Comparisons with Other Data: The small, recent decrease in cyberbullying in the MetroWest region is in contrast to reports on cyberbullying from the Cyberbullying Research Center⁷, which show a continued increase in past 30-day cyberbullying from 2016 to 2023 among a national sample of 13-17 year-old youth.

Key Findings: Mental Health

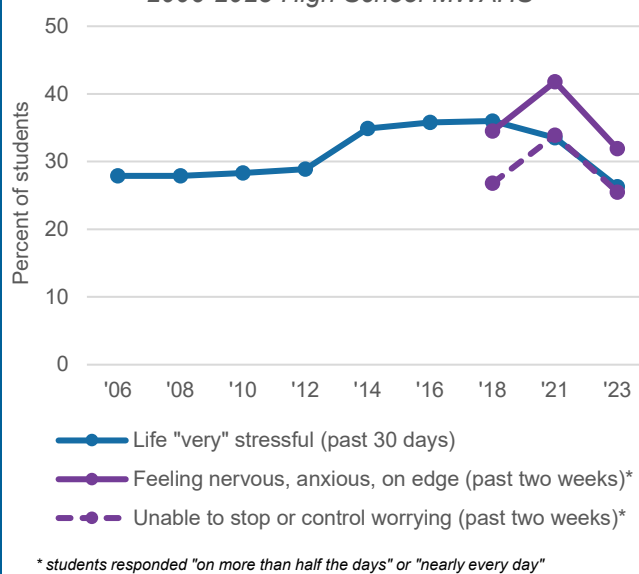
After having peaked in the 2021 survey following the COVID-19 pandemic, reports of mental health problems – ranging from anxiety to depressive symptoms and suicidality – have decreased notably in 2023 to levels indicative of earlier years of the MWAHS. Reports of stress are also lower in 2023, after peaking prior to the pandemic. While mental health indicators remain higher among females than males, there were notable improvements among both sexes.

Stress and Anxiety

Trends in Stress and Anxiety (2006 to 2023)

- » Reports of life being “very” stressful in the past 30 days decreased from a high of 36% in 2016–2018 to 34% in 2021, and lowered further to 26% in 2023 (Figure 7).
- » Stress decreased among both females (from 45% in 2021 to 36% in 2023) and males (from 21% to 16%).
- » There were declines in stress related to: school (from 67% in 2021 to 62% in 2023), social issues (39% to 33%), family issues (26% to 22%), appearance issues (39% to 34%), and physical and/or emotional health (41% to 31%). Stress due to safety issues has been steady at 4–5% since the MWAHS began.
- » Reports of anxiety symptoms also decreased since the last survey. In 2023, one out of three students (32%) reported feeling nervous, anxious, or on edge on “more than half the days” or “nearly every day” in the past two weeks, down from 42% in 2021. Twenty-six percent reported feeling unable to stop or control worrying in 2023, down from 34% in 2021. Anxiety levels in 2023 are at or slightly below 2018 numbers, when these symptoms were first measured.
- » Anxiety decreased among both sexes: for example, reports of feeling nervous, anxious, or on edge decreased from 58% in 2021 to 46% in 2023 among females, and from 24% to 17% among males.
- » There are also decreases in reports of symptoms related to stress, anxiety, and worrying that impact daily functioning at and outside of school, as well as physical and mental well-being. Thirty-two percent of youth report feeling tired or having little energy (down from 43% in 2018), 25% report sleeping problems (down from 32%), 26% report having trouble concentrating in school (down from 34%), and 23% report having a poor appetite or eating too much (down from 31%) “often” or “very often” in the past two weeks.

Figure 7. Trends in Stress and Anxiety Symptoms 2006–2023 High School MWAHS



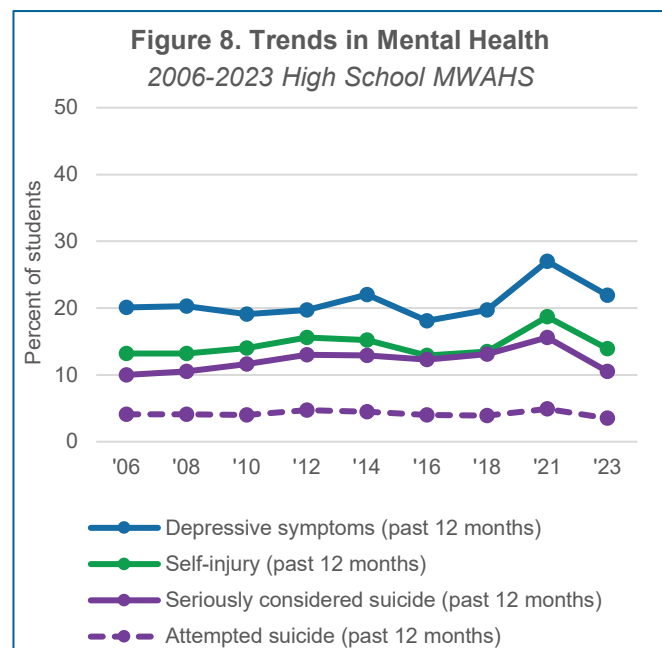
Sociodemographic Patterns in Stress and Anxiety (2023)

- » More than twice as many females (36%) as males (16%) report that life has been “very stressful” in the past 30 days.
- » Stress increases during the high school years, nearly doubling from 19% in 9th grade to 37% in 12th grade.
- » Anxiety symptoms are more than twice as high among females as males. For example, feeling nervous, anxious, or on edge for at least half the days in the past two weeks is reported by 46% of females and 17% of males.
- » Anxiety symptoms increase by grade during high school: for example, reports of being unable to stop or control worrying increase steadily from 22% in 9th grade to 29% in 12th grade.
- » Reports of overall stress in the past 30 days do not vary substantially by race/ethnicity: they range from 23% to 27% by racial/ethnic group and are highest among White and Asian youth. Reports of anxiety are similar across most racial/ethnic groups with the exception of being lower for Black youth.
- » LGBTQ+ youth are more likely than heterosexual cisgender youth to report stress and anxiety. For example, more LGBTQ+ youth report that life was “very” stressful (41% vs. 23%) and that they were unable to stop or control worrying in the past two weeks (43% vs. 21%) compared to heterosexual cisgender youth.
- » Youth with disabilities are also more likely to report current stress (37% vs. 24%) and being unable to control worrying (39% vs. 23%) than youth without disabilities.

Depressive Symptoms, Self-Injury, and Suicidality

Trends in Depressive Symptoms, Self-Injury and Suicidality (2006 to 2023)

- » Serious mental health problems decreased notably from their peak in 2021. Depressive symptoms dropped from 27% in 2021 to 22% in 2023, intentional self-injury dropped from 19% to 14%, and seriously considering suicide dropped from 16% to 11%. Suicide attempts have been in the 4-5% range since the MWAHS began, with 2023 reports at just under 4% (Figure 8).
- » Mental health problems decreased among both sexes, with greater declines among females than males. For example, depressive symptoms decreased from 36% in 2021 to 29% in 2023 among females and from 17% to 15% among males, and serious suicidal thoughts decreased from 20% to 13% among females and from 11% to 8% among males. Reports of self-injury follow a similar pattern.



Sociodemographic Patterns in Depressive Symptoms, Self-Injury and Suicidality (2006 to 2023)

- » Females continue to report far more mental health problems than males (e.g., 29% vs. 15% for depressive symptoms, 20% vs. 8% for self-injury, and 13% vs. 8% for serious suicidal thoughts). However, due to the greater decline from 2021 to 2023 among females, the disparity between females and males has narrowed since 2021.
- » Reports of depressive symptoms increase by grade, from 20% in 9th grade to 25% in 12th grade. Other mental health problems are more similar across grades.
- » Depressive symptoms are highest among Hispanic/Latino youth (28%), followed by Black youth (25%), other/multiracial youth (23%), White youth (21%) and Asian youth (18%). Serious suicidal thoughts and attempts follow a somewhat similar pattern, but the disparity in reports is not as large due to the lower prevalence of these indicators.
- » LGBTQ+ youth report highly elevated levels of mental health problems compared with heterosexual cisgender youth. They are more than twice as likely to report depressive symptoms (41% vs. 17%) and over three times as likely to report self-injury (32% vs. 9%), to seriously consider suicide (24% vs. 7%) and to attempt suicide (8% vs. 2%).
- » Youth with physical and/or learning disabilities are also at much higher risk of mental health problems than youth with disabilities, including depressive symptoms (36% vs. 19%), self-injury (26% vs. 11%), considering suicide (21% vs. 8%), and attempting suicide (8% vs. 2%).

Additional Findings Related to Mental Health

Mental Health Services Use: Many students who report mental health problems are not receiving mental health services. Among students reporting depressive symptoms in the past 12 months, 39% talked to a school counselor, therapist, or psychologist at school and 11% talked to a school nurse. Forty-three percent of students with depressive symptoms talked to a therapist, psychologist, or other mental health professional outside of school.

Barriers to School-Based Mental Health Services Use: The most common barriers to not seeking help for emotional challenges or problems at school include: not having time/not wanting to miss class (43%) and feeling like they should handle problems on their own (39%). Additionally, 34% don't believe that counseling at school would help, 33% don't trust anyone enough at school to discuss their emotional problems, 32% would be embarrassed or scared to discuss their emotional problems, and 32% wouldn't want other students to know they were meeting with a counselor or therapist.

Comparisons with Other Data: The decrease in mental health issues in the MWAHS are consistent with findings of decreased emergency department visits among adolescents aged 12-17 (and especially, girls) for mental health conditions overall as well as suicide-related behaviors from fall 2021 to fall 2022, based on data from the National Syndromic Surveillance Program (NSSP).⁸

Key Findings: Sexual Behaviors

Reports of ever having sexual intercourse among high school youth have decreased at every survey since 2006. In 2023, 17% of youth report lifetime sexual intercourse, and about two-thirds of currently sexually active students used a condom the last time they had intercourse.

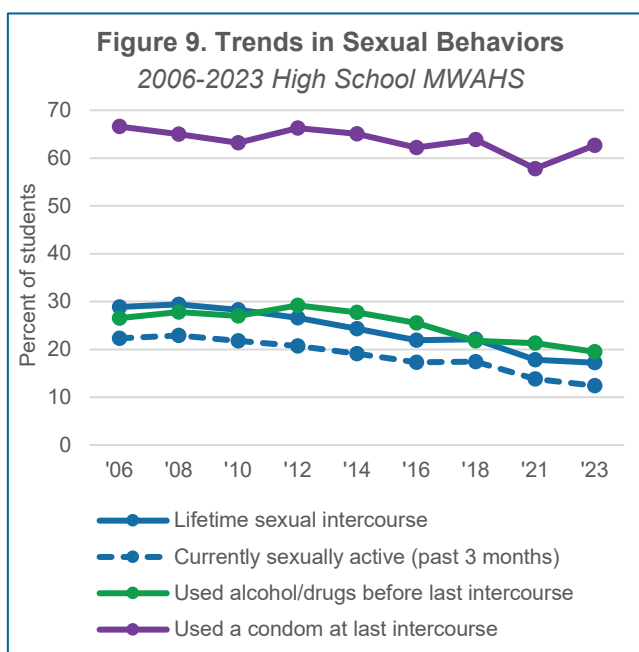
Sexual Intercourse and Related Behaviors

Trends in Sexual Behavior (2006 to 2023)

- » Lifetime sexual intercourse dropped from 29% in 2006 to 18% in 2021, with 2023 reports at 17% (Figure 9).
- » The proportion of youth who are currently sexually active (had intercourse in the past 3 months) decreased from 22% in 2006 to 14% in 2021, declining further to 12% in 2023.
- » Condom use at last intercourse (among currently sexually active youth) increased from a low of 58% in 2021 to 63% in 2023; prior reports ranged from 62-67%.
- » Use of alcohol or drugs before sexual intercourse the last time decreased from a high of 29% in 2012 to 20% in 2023. This is consistent with the overall decline in substance use.

Sociodemographic Patterns in Sexual Behavior (2023)

- » Lifetime sexual intercourse is higher among males than females (18% vs. 16%).
- » Reports of lifetime intercourse increase from 6% in 9th grade to 33% in 12th grade. About one in four 12th grade youth (26%) are currently sexually active.
- » More males than females report using alcohol or drugs before sex the last time (22% vs. 18% among currently sexually active youth). Use of alcohol or drugs before sex is slightly higher in 9th and 10th grades (22% than in 11th and 12th grades (18-19%).
- » Reports of lifetime sexual intercourse are highest among Hispanic/Latino youth (24%), followed by Black youth (20%), other/multiracial youth (18%), White youth (17%) and Asian youth (6%). Condom use at last intercourse among sexually active youth is highest among Asian youth (73%), followed by Black youth (65%), White youth (65%), other/multiracial youth (60%) and Hispanic/Latino youth (57%).
- » LGBTQ+ youth are slightly more likely to report lifetime intercourse than heterosexual cisgender youth (20% vs. 17%).
- » Youth with disabilities are more likely to report lifetime sexual intercourse than youth without disabilities (22% vs. 16%), and less likely to report condom use (59% vs. 65%).



Key Findings: Physical Activity, Weight, and Sleep

Just under half of MetroWest high school youth (47%) report exercising moderately on at least five days in the past week, slightly lower than in 2021 but up considerably from early years of the MWAHS. Nearly one in three youth (32%) get eight or more hours of sleep on the average school night, up from the prior two surveys.

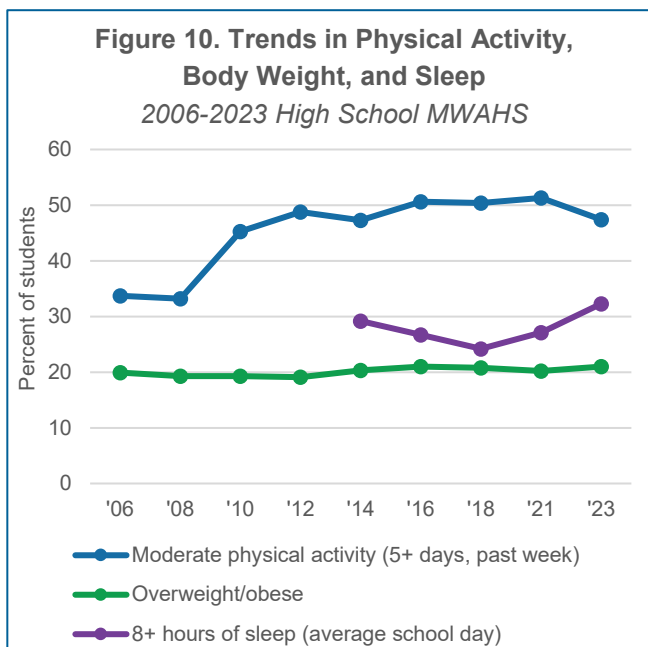
Physical Activity

Trends in Physical Activity (2006 to 2023)

- » Moderate physical activity* on five or more days in the past week decreased from 51% in 2021 to 47% in 2023 (Figure 10). There were small declines among females and males.
- » However, reports of vigorous physical activity† on three or more days in the past week were similar in 2021 and 2023 at 65-66% and have not changed notably since the MWAHS began.
- » Participation in one or more sports teams in the past 12 months is slightly higher, increasing from 61% in 2021 to 64% in 2023; prior reports ranged from 66-68%.

Sociodemographic Patterns in Physical Activity (2006)

- » More males than females engage in moderate (55% vs. 41%) and vigorous (71% vs. 60%) physical activity, consistent with prior surveys.
- » Students report less physical activity as they get older: for example, reports of moderate physical activity decrease steadily from 51% in 9th grade to 43% in 12th grade, and sports team participation decreases from 68% to 57%.
- » Physical activity varies substantially by racial/ethnic group with the lowest reports among Black and Hispanic/Latino youth. For example, moderate physical activity is reported by 33% of Hispanic/Latino youth, 34% of Black youth, 39% of Asian youth, 49% of other/multiracial youth, and 53% of White youth.
- » LGBTQ+ youth are less likely to report physical activity than heterosexual cisgender youth (for example, 30% vs. 52% for moderate physical activity).
- » Youth with disabilities are slightly less likely to report physical activity (for example, 43% vs. 48% for moderate physical activity).



* Moderate physical activity increases your heart rate and makes you breathe hard for at least one hour on 5 or more of the past 7 days.

† Vigorous physical activity is exercising for at least 20 minutes that makes you sweat and breathe hard on 3+ of the past 7 days.

Additional Findings Related to Physical Activity

Associations Between Physical Activity and Mental Health: Youth who exercise regularly report lower levels of mental health problems. For example, youth who report moderate exercise on five or more days/week are less likely to report depressive symptoms (17% vs. 26%) than youth who do not exercise this amount. Sports team participation is also related to lower mental health problems compared with youth who do not play sports (e.g., 18% vs. 29% for depressive symptoms).

Weight and Weight Control Behaviors

Trends in Weight and Related Indicators (2006 to 2023)

- » Overweight/obesity has not changed substantially since 2006. In 2023, one in five youth (21%) were overweight or obese, with prior surveys in the range of 19-21% (Figure 10).*
- » 24% of youth describe themselves as slightly or very overweight, similar to 2021 (23%).

Sociodemographic Patterns in Weight and Related Indicators (2006 to 2023)

- » More males (24%) than females (18%) are overweight/obese, consistent with earlier surveys. However, many more females than males are trying to lose weight (48% vs. 25%).
- » Overweight/obesity is similar throughout the high school years.
- » 66% of both males and females report exercising to lose weight or keep from gaining weight. However, other weight control behaviors are much more prevalent among females, including: restricting food or calories (51% vs. 34%), skipping meals (37% vs. 19%), fasting (13% vs. 8%), or vomiting/taking laxatives (7% vs. 5%).
- » Overweight/obesity is highest among Black youth (35%) and Hispanic/Latino youth (32%), with much lower rates among other/multiracial youth (20%), White youth (19%), and Asian youth (14%). More Hispanic/Latino youth report they are trying to lose weight (46%) compared to other racial/ethnic groups (35-38%).
- » LGBTQ+ youth are more likely than heterosexual cisgender youth to be overweight/obese (26% vs. 20%), and to report that they are trying to lose weight (46% vs. 35%).
- » Overweight/obesity is also slightly higher among youth with disabilities than those without (24% vs. 20%), and more youth with disabilities are trying to lose weight (42% vs. 36%).

Sleep

Trends in Sleep (2014 to 2023)

- » Thirty-two percent of youth sleep for 8 or more hours on the average school night, up steadily from a low of 24% in 2018 (Figure 10). From 2021 to 2023, hours of sleep increased among both females (from 24% to 28%) and males (from 31% to 37%).

Sociodemographic Patterns in Sleep (2023)

- » Males are more likely to sleep for 8 or more hours per night than females (37% vs. 28%).
- » The proportion of youth who get adequate sleep on an average school night decreases substantially from 9th grade (42%) to 12th grade (25%).
- » As noted earlier, 25% of youth (33% of females and 16% of males) report sleep issues related to being stressed, anxious, or worried “often” or “very often” in the past two weeks.

* Overweight/obesity is based on self-reported height and weight, which is used to calculate body mass index. Overweight/obesity is defined as being in the 85th percentile or above for body mass index by age and gender, based on reference data.

- » Over half of youth (53%) believe that use of digital media makes their sleep a little or a lot worse (56% of females and 50% of males).
- » White youth are most likely to get adequate sleep (34%), followed by Hispanic/Latino youth and other/multiracial youth (30% for each), Asian youth (27%) and Black youth (26%).
- » LGBTQ+ youth are less likely to get adequate sleep than heterosexual cisgender youth (23% vs. 34%).
- » Youth with disabilities are less likely to get adequate sleep than youth without disabilities (28% vs. 33%).

Additional Findings Related to Sleep

Associations Between Sleep and Mental Health: Youth who sleep less than eight hours per night are more likely to report poor mental health, including stress (31% vs. 16%) and depressive symptoms (26% vs. 14%) than youth who get adequate sleep.

Key Findings: Online Behavior

From 2021 to 2023, there have been increases in time spent on social media as well as gaming. One in three youth (33%) now spend 3 or more hours on social media daily, and one in seven youth (16%) spend 3 or more hours on gaming daily. Over half of youth (52%) spend at least three hours a day on their smartphone (not for school or homework).

Time Spent Online

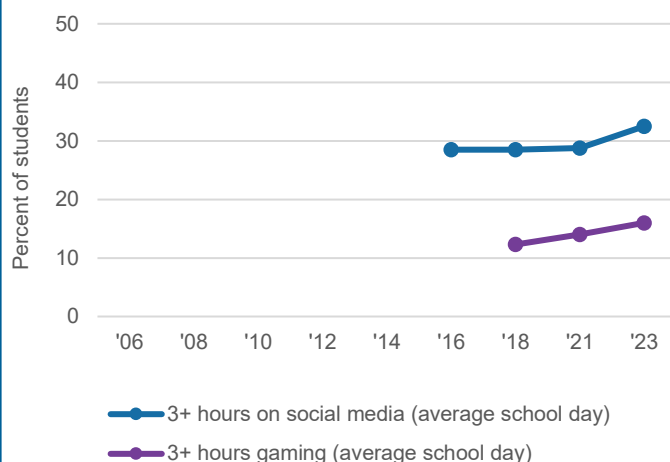
Trends in Time Spent Online (2016 to 2023)

- » Reports of spending three or more hours on social media on an average school day increased from 29% in 2016-2021 to 33% in 2023 (Figure 11). There were recent increases among both females (from 35% in 2021 to 39% in 2023) and males (from 22% to 26%).
- » Reports of gaming for 3 or more hours daily increased steadily from 12% in 2018 to 16% in 2023. Reports increased slightly among males (from 22% to 24%) but increased from 3% to 8% among females.

Sociodemographic Patterns in Time Spent Online (2023)

- » Females are more likely to spend 3 or more hours on social media daily than males (39% vs. 26%), but males are more likely to spend 3 or more hours daily gaming (24% vs. 8%).
- » High use of social media does not change substantially during the high school years (varying from 31-34% by grade), but high time spent gaming decreases from 19% in 9th grade to 13% in 12th grade.

Figure 11. Trends in Online Behavior
2016-2023 High School MWAHS



- » More than half of youth (52%) spend three or more hours daily on their smartphones (not for school or homework). High smartphone use is reported by 56% of females and 46% of males.
- » Fifty-eight percent of high school youth check their smartphones at least a few times an hour while in school (61% of females and 55% of males), with reports increasing from 47% in 9th grade to 66% in 12th grade.
- » High social media use is highest among Black youth (43%) and Hispanic/Latino youth (40%), with lower reports among White youth (32%), other/multiracial youth (31%) and Asian youth (22%). Reports of frequent gaming follow a similar pattern by race/ethnicity.
- » LGBTQ+ youth spend more time on social media (36% vs. 32%) and gaming (21% vs. 15%) than heterosexual cisgender youth.
- » Youth with disabilities spend more time on social media (39% vs. 31%) and gaming (22% vs. 15%) than youth without disabilities.

Additional Findings Related to Online Behavior

Social Media Experiences: Youth report both positive and negative experiences and perceptions related to social media. On the positive side, social media helps youth feel more connected to peers (63% in 2023, similar to 2021 levels), find people with shared interests/hobbies (56%, down from 64%), get support during a challenging time (24%, down from 28%), and speaking up on issues that are important (21%, down from 33%). On the negative side, a sizeable minority of students feel like social media keeps them from other important things, like homework or family responsibilities (39%, up from 32%), makes them feel badly about themselves or excluded (26%, down from 31%), makes them feel badly about their appearance or body (24%; no earlier data available) and has hurt relationships with peers (10%, down from 13%). Nearly half of youth (48%) feel they spend too much time on social media (54% of females and 41% of males), with no overall change from 2021.

Negative Impacts of Digital Media Use: Negative effects of digital media use include worsening of: sleep (53%), attention in school (39%), academic performance (30%), mental health (30%), and overall mood (23%). Reports are relatively similar by sex, with the exception of worsening mental health, reported by more females (34%) than males (25%).

Sexting: Sexting has been measured in MetroWest since 2010.* Eight percent of youth (11% of females and 4% of males) report feeling pressured by a boyfriend, girlfriend, or date to send a “sext” of themselves, down from a high of 12% in 2018. One in ten youth (11%) sent a sext of themselves in 2023, down from a high of 18% in 2018, with reports increasing from 6% in 9th grade to 16% in 12th grade.

Associations Between Social Media Use and Cyberbullying: Youth who spend three or more hours on social media daily are more likely to report cyberbullying victimization (27% vs. 16%) and perpetration (12% vs. 5%).

Associations Between Social Media Use and Mental Health: Youth who spend three or more hours on social media daily are more likely to report mental health problems, such as depressive symptoms (30% vs. 18%) and seriously considering suicide (14% vs. 9%).

* Sexting is defined as sending or forwarding nude, sexually suggestive, or explicit photos or videos of someone you know using the Internet, cell phones or other electronic communications in the past 12 months.

Key Findings: Protective Factors

After declining in 2021, reports of adult support at school have nearly returned to pre-pandemic levels, with 73% of youth reporting that they have an adult at school they can talk to if they have a problem. However, indicators of school connectedness did not improve from 2021 to 2023, and remain lower than in prior surveys.

Outside of school, more than nine out of ten youth (92%) have a supportive parent or other adult to talk with about things that are important, up from 2021 reports.

Adult Support

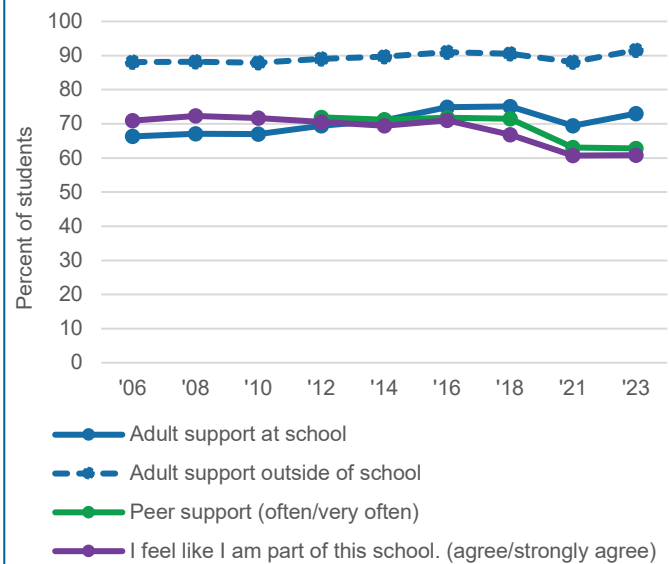
Trends in Adult Support (2006 to 2023)

- » Adult support at school dropped from a high of 75% in 2016-2018 to 69% in 2021, with an increase to 73% in 2023. Over the past two surveys, reports increased among females (from 70% in 2021 to 75% in 2023) and males (from 69% to 71%) (Figure 12).
- » Adult support outside of school increased from 88% in 2021 to 92% in 2023, with similar increases among females and males.

Sociodemographic Patterns in Adult Support (2023)

- » Adult support at school is higher among females than males (75% vs. 71%), whereas adult support outside of school is similar among females and males at 91-92%.
- » Adult support at school increases from 65% in 9th grade to 81% in 12th grade. Adult support outside of school is similar across grades.
- » White youth are most likely to have adult support at school (77%), followed by other/multiracial youth (71%), Black youth (69%), Asian youth (67%) and Hispanic/Latino youth (66%). Adult support outside of school is also higher among White youth (94%) and other/multiracial youth (89%) with reports at 87% for Asian, Black, and Hispanic/Latino youth.
- » LGBTQ+ youth are slightly less likely to have adult support at school than heterosexual cisgender youth (71% vs. 74%); the difference is greater for having adult support outside of school (85% vs. 94%).
- » Youth with disabilities are slightly more likely to have a supportive adult at school than youth without disabilities (77% vs. 73%). Adult support outside of school does not differ by disability status.

Figure 12. Trends in Protective Factors
2006-2023 High School MWAHS



Additional Findings Related to Adult Support

Associations Between Adult Support, Risk Behaviors, and Mental Health: While most MetroWest youth have adult support in their lives, 6% of high school youth do not have any adult support at home nor at school. Youth without any adult support are more likely to report a variety of risk behaviors. For example, youth without adult support at home are more likely to report use of some substances, such as current EVP use (15% vs. 10%), and lifetime prescription drug misuse (11% vs. 6%). They are also far more likely to report mental health problems including depressive symptoms (44% vs. 21%) and having seriously considered suicide (26% vs. 10%).

School Connectedness and Engagement

Trends in School Connectedness (2006 to 2023)

- » About three out of five youth feel engaged in and connected with their school, as indicated by their agreement with statements such as: “I feel like I am part of this school” (61%) and “I am happy to be at this school” (58%).
- » Several indicators of school connectedness dropped notably in 2021 and have remained at these lower levels. For example, feeling “close to people at school” declined from 72% in 2018 to 60% in 2021, remaining similar in 2023 at 61%. Feeling like “part of this school” decreased from 67% in 2018 to 61% in 2021, with no change in 2023 (Figure 12).
- » Agreement with the statement “I feel safe in my school” declined from a high of 85% in 2012 to 74% in 2018-2021, with 2023 reports even lower at 72%.

Sociodemographic Patterns in School Connectedness (2006 to 2023)

- » Males consistently report higher levels of school connectedness than females. For example, more males are happy to be at their school than females (64% vs. 53%).
- » School connectedness does not vary substantially by grade.
- » School connectedness is generally higher among White, Asian, and other/multiracial youth and lowest among Black and Hispanic/Latino youth. For example, feeling close to people at school is reported by 65% of White youth, 61% of Asian and other/multiracial youth, 50% of Hispanic/Latino youth, and 48% of Black youth.
- » LGBTQ+ youth report lower school connectedness. For example, they are less likely than heterosexual cisgender youth to feel close to people at school (51% vs. 64%), feel like a part of their school (46% vs. 65%), or to feel safe at their school (61% vs. 74%).
- » School connectedness is lower among youth with disabilities than youth without disabilities. For example, youth with disabilities are less likely to feel like a part of their school (54% vs. 62%) or feel happy at their school (52% vs. 59%).

Additional Findings Related to School Connectedness

Associations between School Connectedness and Bullying: Youth who feel less connected to their school are more likely to also experience bullying. For example, youth who don’t feel like part of their school are more likely to report being bullied at school in the past 12 months (27%) than youth who feel like part of their school (16%).

Associations between School Connectedness and Mental Health: Youth with lower levels of school connectedness are around twice as likely to report mental health issues. For example, youth who don’t feel like part of their school are more likely to report depressive symptoms (33% vs. 15%) and seriously considering suicide (17% vs. 7%) than students who feel like part of their school.

Peer Support

Trends in Peer Support (2012 to 2023)

- » After remaining steady from 2012-2018 at 71-72%, reports of having a friend to talk to if you have a problem declined to 63% in 2021 and remained at that level in 2023 (Figure 12).
- » Reports of feeling lonely often/very often decreased from a high of 30% in 2021 to 24% in 2023.
- » Other indicators of peer support remained similar from 2021 to 2023, including feeling like a part of a group of friends (64% in 2023), feeling like you have a lot in common with the people around you (54%) and feeling like there are people who understand you (54%).

Sociodemographic Patterns in Peer Support (2023)

- » Females are more likely than males to feel like they have a friend to talk to (68% vs. 57%) but also more likely to feel lonely (29% vs. 19%) or left out/excluded (22% vs. 13%).
- » Reports of having a supportive peer increase from 59% in 9th grade to 67% in 12th grade.
- » Having peer support is highest among White youth (67%), followed by Asian youth and other/multiracial youth (62% for each), Hispanic/Latino youth (52%) and Black youth (50%).
- » Peer support does not differ notably based on gender/sexual identity or disability status.

Additional Findings Related to Peer Support

Associations Between Peer Support and Mental Health: High school youth without consistent peer support are more likely to report mental health issues, including depressive symptoms (27% vs. 19%) and self-injury (17% vs. 12%), compared with those who report having peer support.

Conclusions

The 2023 MWAHS represents the second round of data collection since the COVID-19 pandemic. The 2021 survey, administered soon after students returned to in-person schooling, showed unprecedented decreases in substance use and alarming increases in mental health issues. Two important questions resulting from these findings were: (1) Would the rise in mental health problems continue? and (2) Would decreases in substance use be sustained once students returned to pre-pandemic social settings? The 2023 high school MWAHS, on the whole, shows several positive findings to indicate that adolescent physical and mental health is improving following the pandemic.

Substance use continued to decline, with nicotine vaping, alcohol use, and marijuana use reaching their lowest levels since the MWAHS began. These changes may coincide with school and community-based efforts to increase education about the harmful effects of substances, consistent with the MWAHS increases in perceived risk of substance use for nicotine vaping and marijuana use. Decreased use of nicotine vape products, in addition to being impacted by educational programs and other school-based efforts, such as diversion programs for students caught vaping at school, may also be related to state and local policies that went into effect, such as the 2019 ban on flavored vape products that appeal to youth.

Continued decreases in substance use may be related to a cohort effect. The 2023 data reflects a population of students who experienced a unique period of time – COVID-19 – that resulted in lower substance use initiation and less frequent use, and this diminished behavior may be maintained as the cohort of students grows older. This cohort effect could be related to pandemic-specific contextual factors, such as fewer in-person social interactions for adolescents, contributing to decreased access to substances as well as reduced social pressures and opportunities in which to engage in substance use with peers.

The alarming rise in mental health problems that preceded and continued through the pandemic receded in 2023. Reports of stress, depressive symptoms, self-injury, and suicidality have now lowered to levels indicative of earlier MWAHS administrations. It is likely that these reductions are an indication of a return to “normalcy” following the pandemic, as youth returned to in-person school, social isolation was reduced, support systems and health services became more accessible, and family and economic stress lessened. The findings may also reflect increased efforts to connect youth who were suffering to needed mental health services, along with a decrease in mental health stigma given the public attention to the “youth mental health crisis”. The 2023 findings are encouraging in light of the increased attention by schools and communities to provide needed mental health literacy education and supports to youth. This includes increasing use of the multi-tiered systems of support (MTSS) framework, which provides universal programming for all students, targeted supports for students at elevated risk (as informed by MWAHS and other sources of data), and intensive supports for students in greatest need. The data may also reflect increased efforts related to mental health screening, wellness programming, and better coordination of school and community mental health programs and services. Nonetheless, there is a clear need for continued efforts to address youth mental health and potential influences, such as the role of digital media use and experiences of bullying.

Despite the encouraging decrease in mental health issues, girls remain far more likely to suffer from poor mental wellbeing. They are also more likely to vape nicotine and drink alcohol, and report more negative consequences of online behavior, including cyberbullying victimization and negative mental health

impacts. Girls, in particular, experience pressures related to negative social comparisons and feelings of exclusion and isolation, which can be exacerbated in online settings, particularly through social media, as emphasized in the *U.S. Surgeon General's Advisory on Social Media and Youth Mental Health*.⁹ It is therefore critical to continue to address their elevated mental health problems and related behaviors, like substance use, and provide necessary supports.

School connectedness, which decreased notably in the years preceding and during the pandemic, remains at all-time low levels, along with a small increase in school bullying. This may be impacted by a number of factors related to school climate, ranging from: feelings of safety (or lack of safety); quality of peer and adult interactions at school; perceptions related to diversity, equity, and inclusion at school; and engagement from students, staff, and parents. Students' use of digital media and smartphones at and outside of school may also affect their engagement in school as well as their relationships with peers. On a positive note, there was an increase in adult support at school following the 2021 survey, indicative of rebuilding of relationships with school adults following the pandemic.

Online behavior continues to be a concern, as time spent on social media increased and many students report negative consequences of digital media use on their academics, physical health, mental health, sleep, and relationships. While youth report many positive online experiences – like feeling more connected to peers, getting emotional support, and engaging in advocacy – they also express feelings of exclusion, lower self-esteem, negative body image, and harm to relationships. This indicates continued need not only for strategies to minimize the negative consequences of digital media use, but also to promote digital wellness, defined as “a positive state of mental, physical, and social-emotional health pursued through intentional, authentic, and balanced engagement with technology and interactive media.”¹⁰ This is particularly important for girls, who report more negative experiences online, including cyberbullying, as well as worsening of their mental health related to their digital media use.

The data highlight concerning health disparities based on students' sexual orientation/gender identity, race/ethnicity, and disability status, indicating the need for targeted supports to address elevated levels of risk. For example, LGBTQ+ youth and youth with disabilities report elevated mental health problems, substance use (nicotine vaping, marijuana, and prescription drug misuse), and bullying victimization compared to heterosexual cisgender youth and youth without disabilities. Black and Hispanic/Latino youth report more mental health problems, physical fighting, and obesity than youth in other racial/ethnic groups. In addition, LGBTQ+ youth and Black and Hispanic/Latino youth report lower levels of protective factors, like adult support and school connectedness. These examples of health disparities reflect historical and current inequities in distribution of social, political, economic and other types of resources as well as discrimination that impact the conditions of daily life, ultimately impacting health outcomes as well. Understanding health disparities allows school and communities to provide the necessary supports to youth at elevated risk of poor mental and physical health.

The 9th administration of the MWAHS in 2023 provides critical information to support data-driven decision making and programming across the region. The data helps to identify overall health priorities for communities, while also drawing attention to groups of youth who face disproportionate challenges to their health. By understanding the evolving physical and mental health needs of youth, schools and communities can work together to improve educational outcomes and address the most pressing adolescent health issues facing youth today.

References

- ¹ Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System. Available at: www.cdc.gov/healthyyouth/data/index.htm. Accessed on March 1, 2024.
- ² Centers for Disease Control and Prevention. YRBSS Frequently Asked Questions. Available at: www.cdc.gov/healthyyouth/data/yrbss/fax.htm. Accessed on March 1, 2024.
- ³ Massachusetts Department of Elementary and Secondary Education. Massachusetts Youth Risk Behavior Survey. Available at: <https://www.doe.mass.edu/sfs/yrbss/?msclid=6ee02298ad8011ec816a570fa5acd40e>. Accessed on March 1, 2024.
- ⁴ Eaton, D.K., Brener, N.D., Kann, L., Denniston, M.M., McManus, T., Kyle, T.M., Roberts, A.M., Flint, K.H., & Ross, J.G. (2010). Comparison of paper-and-pencil versus Web administration of the Youth Risk Behavior Survey (YRBS): Risk behavior prevalence estimates. *Evaluation Review*, 34(2): 137-53. doi: [10.1177/0193841X10362491](https://doi.org/10.1177/0193841X10362491).
- ⁵ Miech, R. A., Johnston, L. D., Patrick, M. E., O'Malley, P. M., & Bachman, J. G. (2024). Monitoring the Future national survey results on drug use, 1975–2023: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports>.
- ⁶ Birdsey, J., Cornelius, M., Jamal, A. et al. Tobacco Product Use Among Middle and High School Students – National Youth Tobacco Survey, 2023. *MMWR Morb Mortal Wkly Rep* 2023; 72. Available at: www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7244a1-H.pdf. Accessed March 1, 2024.
- ⁷ Cyberbullying Research Center. Cyberbullying continues to rise among youth in the United States. Available at: <https://cyberbullying.org/cyberbullying-continues-to-rise-among-youth-in-the-united-states-2023>. Accessed March 1, 2024.
- ⁸ Anderson, K.N., Johns, D., Holland, K.M., et al. Emergency Department Visits Involving Mental Health Conditions, Suicide-Related Behaviors, and Drug Overdoses Among Adolescents – United States, January 2019-February 2023. *MMWR Morb Mortal Wkly Rep* 2023; 72: 502-512. DOI: <http://dx.doi.org/10.15585/mmwr.mm7219a1>.
- ⁹ Office of the U.S. Surgeon General. Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory. Available at: www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf. Accessed March 1, 2024.
- ¹⁰ Boston Children's Hospital Digital Wellness Lab. What is Digital Wellness? Available at: <https://digitalwellnesslab.org/about>. Accessed March 1, 2024.

High School Key Indicators

2006–2023 Trends
2023 Patterns by Sex
2023 Patterns by Grade

MetroWest Region High School Students (Grades 9-12)

2006-2023 Trends in Key Indicators

MetroWest Adolescent Health Survey

	Year of Survey (%)								
	2006	2008	2010	2012	2014	2016	2018	2021	2023
	(16,680)	(20,406)	(23,187)	(24,459)	(24,355)	(24,385)	(24,746)	(22,903)	(22,435)
SUBSTANCE USE									
Lifetime cigarette smoking	35.3	33.3	25.9	22.0	17.3	13.2	12.2	10.5	10.3
Current cigarette smoking (past 30 days)	14.7	13.9	12.1	9.1	6.2	4.7	3.2	2.9	2.5
Lifetime electronic vapor product use*	—	—	—	—	30.5	27.9	41.1	23.5	18.4
Current electronic vapor product use (past 30 days)*	—	—	—	—	17.5	14.6	28.4	13.3	9.8
Lifetime alcohol use	66.5	62.8	58.0	55.6	53.8	51.7	50.0	44.5	39.7
Current alcohol use (past 30 days)	42.2	39.1	34.7	33.4	32.9	31.5	27.7	24.9	20.9
Binge drinking (past 30 days) [†]	25.1	23.2	20.8	18.7	17.5	16.9	15.8	14.5	12.1
Rode with driver who had been drinking (past 30 days)	25.2	25.8	22.5	19.5	16.7	14.1	13.5	12.2	9.9
Lifetime marijuana use	33.2	33.4	34.6	32.3	30.4	27.8	31.3	20.6	17.6
Current marijuana use (past 30 days)	20.2	22.8	23.5	21.5	20.3	19.2	21.2	12.3	10.4
Lifetime prescription drug misuse [‡]	11.0	10.1	10.1	8.8	7.3	5.8	4.8	4.2	6.1
VIOLENCE									
Physical fighting (past 12 months)	26.0	23.9	21.7	16.8	14.1	13.6	13.5	10.9	11.5
Physical fighting on school property (past 12 months)	8.7	8.3	7.4	5.5	4.2	3.9	4.0	3.1	4.3
Carried a weapon (past 30 days)	8.2	7.3	7.3	6.8	6.6	7.6	5.6	4.8	3.9
Carried a weapon on school property (past 30 days)	3.3	3.1	3.0	2.5	2.0	1.9	1.4	1.2	1.1
BULLYING VICTIMIZATION									
Bullying victim (past 12 months)	28.6	29.3	31.8	27.0	23.7	20.8	22.4	22.0	22.6
Bullying victim on school property (past 12 months)	25.5	25.9	28.2	22.9	20.0	17.1	18.9	17.1	20.0
Cyberbullying victim (past 12 months)	14.6	15.8	20.0	21.5	21.2	19.3	18.3	21.7	19.9
MENTAL HEALTH									
Life "very" stressful (past 30 days)	27.9	27.9	28.3	28.9	34.9	35.8	36.0	33.5	26.3
Depressive symptoms (past 12 months)	20.1	20.3	19.1	19.7	22.0	18.1	19.7	27.0	21.9
Self-injury (past 12 months)	13.2	13.2	14.0	15.6	15.2	12.9	13.5	18.7	13.9
Considered suicide (past 12 months)	10.0	10.5	11.6	13.0	12.9	12.3	13.1	15.6	10.5
Attempted suicide (past 12 months)	4.1	4.1	4.0	4.7	4.5	4.0	3.9	4.9	3.5
SEXUAL BEHAVIOR									
Lifetime sexual intercourse	28.9	29.4	28.3	26.6	24.3	21.9	22.1	17.8	17.2
Currently sexually active (past 3 months)	22.3	22.9	21.8	20.7	19.1	17.3	17.4	13.8	12.4
Condom use at last intercourse [§]	66.6	65.0	63.2	66.3	65.1	62.2	63.9	57.8	62.7
PHYSICAL ACTIVITY AND BODY WEIGHT									
Exercised for ≥60 minutes on 5 or more days/week	33.7	33.2	45.3	48.8	47.3	50.6	50.4	51.3	47.4
Overweight or obese**	19.9	19.3	19.3	19.2	20.3	21.0	20.7	20.2	21.0

* Includes vaping nicotine using electronic cigarettes (e-cigarettes) and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription; in 2021, added "or differently than how a doctor told you to use it"

§ Among currently sexually active youth

**Students who were ≥85th percentile for body mass index by age and gender, based on reference data

MetroWest Region High School Students (Grades 9-12)

2023 Key Indicator Patterns by Sex

MetroWest Adolescent Health Survey

	Sex (%)		Total (%)
	Female (11,192)	Male (11,154)	(22,435)
SUBSTANCE USE			
Lifetime cigarette smoking	10.2	10.3	10.3
Current cigarette smoking (past 30 days)	2.1	2.9	2.5
Lifetime electronic vapor product use*	20.4	16.2	18.4
Current electronic vapor product use (past 30 days)*	10.8	8.8	9.8
Lifetime alcohol use	41.7	37.7	39.7
Current alcohol use (past 30 days)	23.2	18.5	20.9
Binge drinking (past 30 days) [†]	12.5	11.8	12.1
Rode with driver who had been drinking (past 30 days)	10.6	9.1	9.9
Lifetime marijuana use	18.2	17.0	17.6
Current marijuana use (past 30 days)	9.9	11.1	10.4
Lifetime prescription drug misuse [‡]	6.1	6.2	6.1
VIOLENCE			
Physical fighting (past 12 months)	6.3	16.8	11.5
Physical fighting on school property (past 12 months)	2.3	6.3	4.3
Carried a weapon (past 30 days)	2.2	5.5	3.9
Carried a weapon on school property (past 30 days)	0.9	1.4	1.1
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	26.5	18.7	22.6
Bullying victim on school property (past 12 months)	22.6	17.3	20.0
Cyberbullying victim (past 12 months)	23.5	16.3	19.9
MENTAL HEALTH			
Life "very" stressful (past 30 days)	36.4	15.8	26.3
Depressive symptoms (past 12 months)	28.7	14.9	21.9
Self-injury (past 12 months)	19.5	8.2	13.9
Considered suicide (past 12 months)	13.3	7.6	10.5
Attempted suicide (past 12 months)	4.5	2.5	3.5
SEXUAL BEHAVIOR			
Lifetime sexual intercourse	16.3	18.2	17.2
Currently sexually active (past 3 months)	12.5	12.3	12.4
Condom use at last intercourse [§]	57.7	68.1	62.7
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥60 minutes on 5 or more days/week	40.8	54.5	47.4
Overweight or obese**	17.7	24.2	21.0

* Includes vaping nicotine using electronic cigarettes (e-cigarettes) and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription or differently than how a doctor told you to use it

§ Among currently sexually active youth

**Students who were ≥85th percentile for body mass index by age and gender, based on reference data

MetroWest Region High School Students (Grades 9-12)

2023 Key Indicator Patterns by Grade

MetroWest Adolescent Health Survey

	Grade (%)				Total (%)
	9 th (6,007)	10 th (5,872)	11 th (5,581)	12 th (4,902)	(22,435)
SUBSTANCE USE					
Lifetime cigarette smoking	5.2	8.5	12.1	16.6	10.3
Current cigarette smoking (past 30 days)	1.1	1.9	2.8	4.7	2.5
Lifetime electronic vapor product use*	10.9	15.1	21.7	27.7	18.4
Current electronic vapor product use (past 30 days)*	5.4	8.6	11.2	15.1	9.8
Lifetime alcohol use	25.5	36.4	46.1	54.5	39.7
Current alcohol use (past 30 days)	8.7	18.1	25.5	34.3	20.9
Binge drinking (past 30 days) [†]	3.2	9.4	15.3	23.0	12.1
Rode with driver who had been drinking (past 30 days)	9.8	9.7	9.4	10.3	9.9
Lifetime marijuana use	7.1	13.1	21.7	31.9	17.6
Current marijuana use (past 30 days)	3.5	8.3	12.9	19.0	10.4
Lifetime prescription drug misuse [‡]	5.9	5.9	5.9	6.8	6.1
VIOLENCE					
Physical fighting (past 12 months)	14.5	12.6	9.4	8.5	11.5
Physical fighting on school property (past 12 months)	5.7	4.5	3.5	2.7	4.3
Carried a weapon (past 30 days)	3.6	4.0	3.6	4.0	3.9
Carried a weapon on school property (past 30 days)	0.8	1.1	1.1	1.4	1.1
BULLYING VICTIMIZATION					
Bullying victim (past 12 months)	28.0	23.4	19.3	18.4	22.6
Bullying victim on school property (past 12 months)	24.7	21.1	16.9	15.8	20.0
Cyberbullying victim (past 12 months)	21.9	21.1	17.8	18.1	19.9
MENTAL HEALTH					
Life "very" stressful (past 30 days)	19.3	21.6	29.1	37.4	26.3
Depressive symptoms (past 12 months)	20.1	21.4	22.3	24.5	21.9
Self-injury (past 12 months)	15.0	14.1	13.0	13.4	13.9
Considered suicide (past 12 months)	10.6	10.3	10.2	10.6	10.5
Attempted suicide (past 12 months)	4.0	3.6	3.4	2.9	3.5
SEXUAL BEHAVIOR					
Lifetime sexual intercourse	6.1	12.6	20.5	33.3	17.2
Currently sexually active (past 3 months)	3.9	8.1	14.7	25.8	12.4
Condom use at last intercourse [§]	58.4	64.0	64.2	62.3	62.7
PHYSICAL ACTIVITY AND BODY WEIGHT					
Exercised for ≥60 minutes on 5 or more days/week	51.4	49.0	44.8	43.4	47.4
Overweight or obese**	21.1	22.3	20.7	19.5	21.0

* Includes vaping nicotine using electronic cigarettes (e-cigarettes) and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription or differently than how a doctor told you to use it

§ Among currently sexually active youth

**Students who were ≥85th percentile for body mass index by age and gender, based on reference data

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