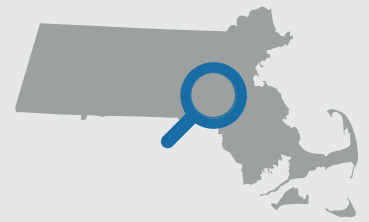


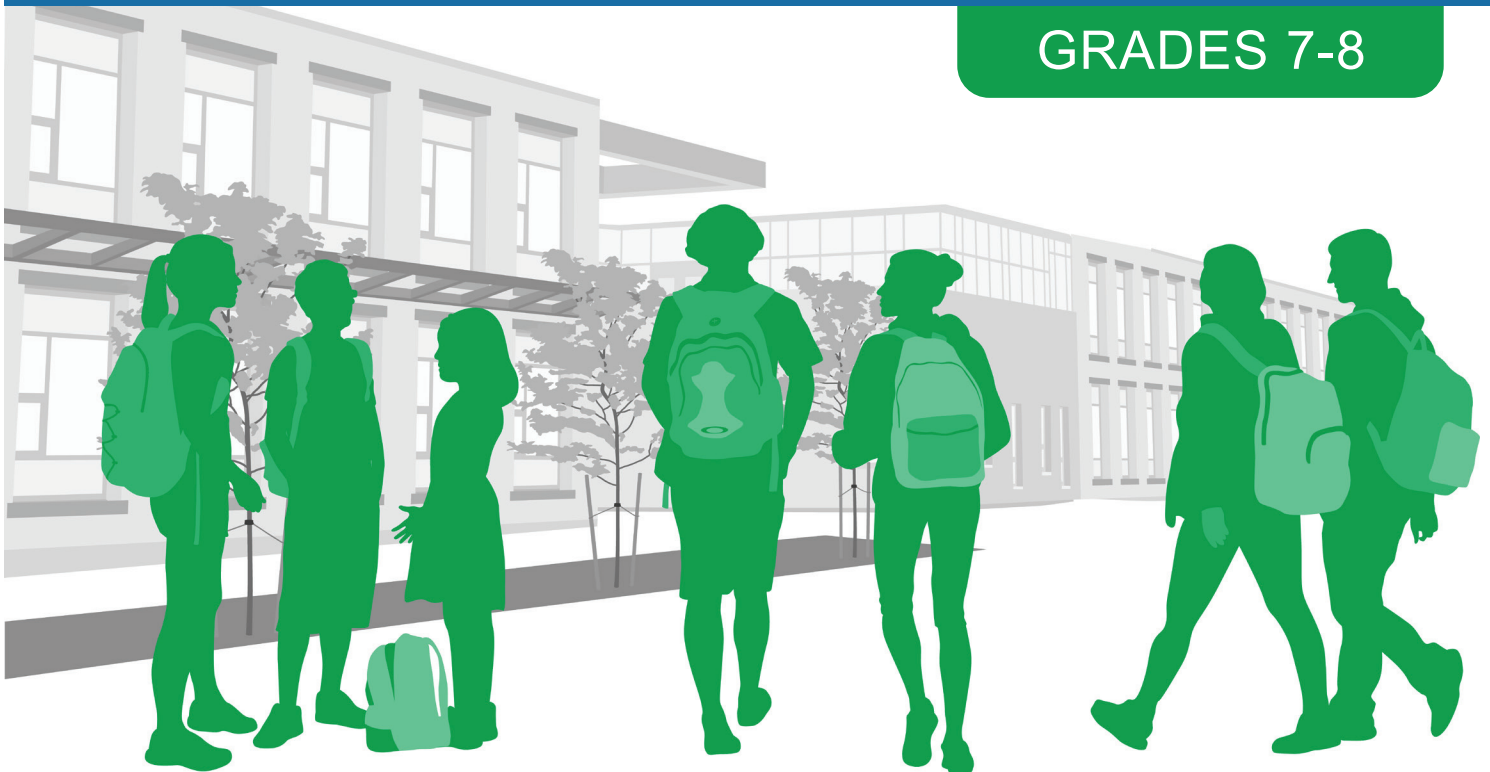
MetroWest Adolescent Health Survey Regional Highlights Report

*Informing data-driven school and community
health policies and practices*



2021 | MetroWest Region Middle School Youth

GRADES 7-8



METROWEST
HEALTH
FOUNDATION



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Regional Highlights from the 2021 MetroWest Adolescent Health Survey

MetroWest Region Middle School Report

Background

The MetroWest Adolescent Health Survey (MWHAS), an initiative of the MetroWest Health Foundation, has been monitoring trends in adolescent health and risk behaviors since 2006. The need for data to drive advancements in prevention efforts, programs, and policies has been made even more apparent during the COVID-19 pandemic. By providing timely, local data on pressing adolescent health issues, schools and communities are better equipped to understand and prioritize the challenges facing youth today. The MetroWest Health Foundation is deeply committed to supporting data-driven activities and strategies that can best support youth physical and mental wellbeing.

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 the leading causes of morbidity and mortality among youth, including substance misuse, violence, behaviors related to unintentional injury, and physical activity, as well as mental health. The MWAHS expands on these topics and includes additional topics (e.g., protective factors, social media use, school climate, and mental health services) based on the priorities and concerns of stakeholders in the MetroWest region.

The 2021 survey is the 8th administration of the MWAHS, and the first online survey administration. Many other school-based surveillance studies have switched from paper-and-pencil to online surveys in recent years, including the 2021 *Massachusetts YRBS*.² Research has shown that findings from online and paper-and-pencil surveys of youth risk behaviors are generally equivalent.³

While the MWAHS was administered every other year from 2006 to 2018, there was a one-year delay in the administration of the most recent survey in the fall of 2021 due to the challenges of surveying youth during remote learning. Reports of some behaviors that reflect longer time periods (e.g., "past 12 months") and ask about risk behaviors that took place "on school property" may include a time when some students were not attending school in person for a portion of the time.

In 2021, 39,293 middle and high school students participated in the survey across all 25 communities in the MetroWest region that are served by the MetroWest Health Foundation. The 2021 Middle School MWAHS was administered to a census of students in 7th and 8th grades in 32 middle schools in the region. A separate report includes 6th grade student outcomes from the 20 schools that chose to survey 6th grade. As in previous survey waves, local procedures were followed to inform parents/guardians of the survey and

give them the choice to opt out their child(ren). Students were also informed that their participation was voluntary and that no names or other identifying information were being collected. Data collection at each school was guided by a protocol that protected the privacy of students' responses, with extra precautions taken in classroom and online platform procedures to ensure that data being collected electronically would remain anonymous.

In total, 11,975 students in grades 7 and 8 completed the 2021 survey, representing 91% of youth. This report summarizes current youth behaviors on key health indicators in the areas of substance use, violence, bullying, mental health, physical activity, and protective factors. The data allow for an examination of behavioral trends across eight time points from 2006 to 2021 as well as an analysis of patterns in risk behaviors by grade and sex for all key indicators. In addition, risk behaviors among youth based on disability status and sexual/gender identity are provided when considerable disparities exist; note that 2021 was the first time that questions on gender identity and sexual identity appeared on the core middle school survey. Bivariate analyses looking at associations across various indicators are described, most often focusing on the relationship between risk behaviors and mental health given the local concerns about mental health problems that have existed in the region in recent years and have been elevated in light of COVID-19. Note that these associations cannot be interpreted as causal, meaning that it is not possible to tell from this cross-sectional data whether one behavior leads to the other. Lastly, comparisons of MetroWest data with state and national trends are provided when analogous data is available, considering disruptions and delays in surveillance studies due to COVID-19. Comparisons with data from the most recent state and national YRBS are not provided as they were in past reports due the large timing gap between the most recent YRBS data available (from spring 2019) and the fall 2021 MWAHS, as well as the emergence of COVID-19 during this time.

Given the one-year delay in survey administration due to COVID-19, this report provides important data to guide health-related programming and policy-making following an unprecedented time period that undoubtedly had some influence on adolescents' perceptions and behaviors. The findings will inform, stimulate, and focus school and community efforts in the areas needing the most attention in order to improve adolescent health across the MetroWest region.

Key Findings: Substance Use

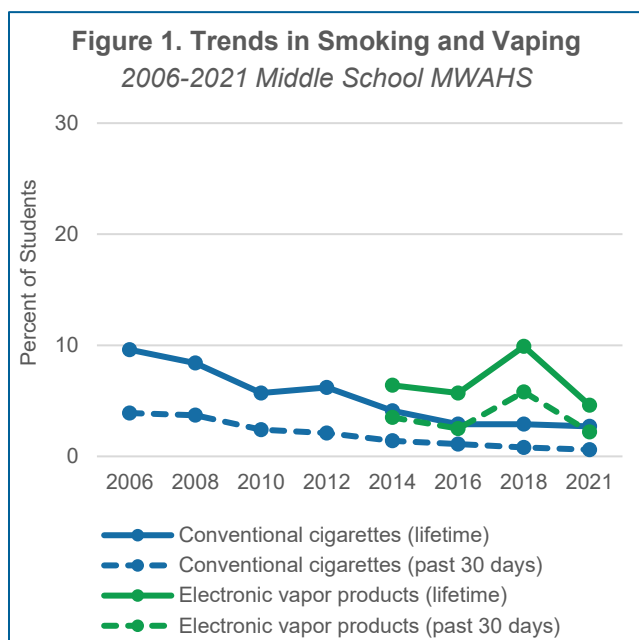
Cigarette Smoking and Use of Electronic Vapor Products*

Conventional cigarette smoking continues to be low among middle school youth, with 3% of middle school youth reporting lifetime cigarette smoking in 2021.

Vaping among middle school youth in the MetroWest region has decreased substantially in the last three years. After a concerning rise from 2014 to 2018, lifetime use of electronic vapor products (EVPs) declined by half, from 10% in 2018 to 5% in 2021. At the same time, perceived risk of using EVPs has increased. The sharp decline in EVP use is consistent with national trends.⁴

Cigarette Smoking (Conventional)

- » Lifetime cigarette smoking decreased from 10% in 2006 to 3% in 2016 and has remained similar over the last two surveys [Figure 1].
- » Current cigarette smoking (in the past 30 days) decreased steadily from 4% in 2006 to just under 1% in 2018, declining further to 0.6% in 2021.
- » Smoking is similarly low among females and males. For example, 0.5% of females and 0.7% of males report current smoking.
- » Despite the overall decline in conventional cigarette smoking, some youth do initiate smoking in middle school, with lifetime prevalence increasing from 2% in 7th grade to 4% in 8th grade.
- » Lifetime smoking is lower among MetroWest 8th grade students (4%) compared with 8th grade students in the nation (7%), according to the *Monitoring the Future* (MTF) study, which surveys 8th, 10th, and 12th grade students annually. The continued decline in cigarette smoking is consistent with national trends among 8th grade youth from the 2021 MTF survey.⁴



Electronic Vapor Products

- » One in 20 middle school youth (5%) have tried EVPs at least once, down from 10% in 2018 [Figure 1].
- » Two percent of youth have used EVPs in the past 30 days, declining from 6% in 2016.
- » Vaping has decreased substantially among both females and males. From 2018 to 2021, lifetime use decreased from 9% to 5% among females, and from 11% to 4% among males. During the same time period, current use decreased from 6% to 3% among females and from 6% to 2% among males.

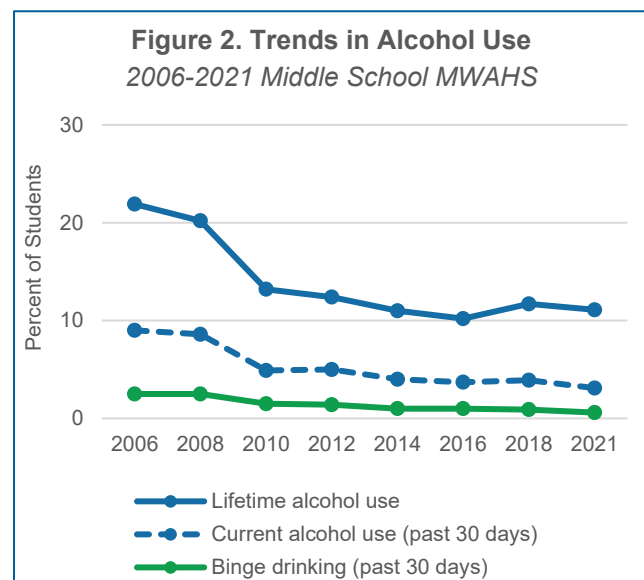
* Electronic vapor products (EVPs) include electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods. They also include disposable products that are only used once, such as Puff Bars, Stig, or Viigo.

- » One percent of middle school youth have used EVPs on school property in the past 30 days.
- » Despite the overall declines in EVP use, a small number of students initiate vaping in middle school, with lifetime use doubling from 7th grade (3%) to 8th grade (6%).
- » One in five youth (21%) feel it would be “fairly easy” or “very easy” to obtain EVPs if they wanted to; reports increase notably from 7th grade (16%) to 8th grade (26%).
- » Consistent with the recent and substantial decline in vaping, there has been an increase in perceived risk of EVP use: the proportion of youth who perceive “moderate” or “great” risk of using EVPs increased steadily from 64% in 2014 to 80% in 2018, further increasing to 92% in 2021. Perceived risk does not differ notably by sex or grade.
- » Reports of lifetime EVP use are higher among LGBTQ youth compared to heterosexual cisgender youth (8% vs. 4%) and among youth with physical and/or learning disabilities compared to youth without disabilities (8% vs. 4%).
- » Vaping is associated with mental health problems among youth. For example, youth who report lifetime EVP use are more likely to also report depressive symptoms in the past 12 months (56% vs. 18%) and seriously considering suicide in their lifetime (53% vs. 15%).
- » Lifetime EVP use among 8th grade youth in MetroWest (6%) is lower than national levels from MTF (17%). The substantial decline in EVP use among middle school youth in the region in recent years is consistent with findings from the 2021 MTF study.⁴

Alcohol Use

After dropping by more than half in the first ten years of the MWAHS, reports of alcohol use among MetroWest middle school youth have not changed substantially in recent surveys, with about one in ten students reporting lifetime use (11%) and 3% reporting current use in 2021.

- » Lifetime alcohol use declined from 22% in 2006 to 12% in 2012, and has remained similar over the last four surveys in the 10-12% range [Figure 2].
- » Current alcohol use has remained similar at 3-4% since 2014, after decreasing from 9% in 2006.
- » Binge drinking is reported by less than 1% of middle school youth in 2021, down from 3% in 2006.
- » There is a notable difference in lifetime drinking trends by sex: lifetime use among females increased from 8% in 2016 to 11% in 2021, whereas reports among males are slightly lower in 2021 (11%) than in the last two surveys (12-13%); this difference in lifetime drinking trends by sex is not reflected in measures of current drinking and binge drinking trends.
- » Initiation of alcohol use increases from 9% in 7th grade to 13% in 8th grade.
- » Two percent of youth have ever ridden in a car driven by a high school student who had been drinking.



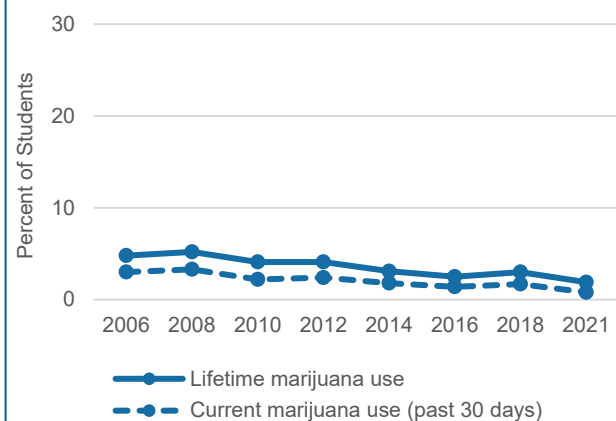
- » Nearly 9 out of 10 middle school youth (87%) perceive having five or more drinks of alcohol once or twice a week as “moderate” or “great” risk. Perceived risk is slightly higher among females than males (89% vs. 85%) but does not differ by grade.
- » Alcohol use in middle school is associated with higher reports of mental health problems. For example, youth who report drinking in their lifetime are more likely to report depressive symptoms in the past 12 months (46% vs. 17%) and self-injury in their lifetime (35% vs. 10%).
- » Reports of drinking among MetroWest middle school youth continue to be lower than national data. For example, 13% of 8th grade youth in the region report ever drinking alcohol, compared with 22% of 8th grade youth nationally based on the MTF study.⁴

Marijuana Use

Marijuana use among middle school youth has continued its steady decline since the early years of the MWAHS, with only 2% of youth reporting lifetime use in 2021, and fewer than 1% reporting current use.

- » There has been a notable decrease in lifetime marijuana use among males (from 6% in 2006 to 2% in 2021), whereas use among females has been similar at 2-3% across all surveys.
- » Current marijuana use is now just under 1%, after having decreased from 3% in 2006 [Figure 3].
- » 2021 reports of lifetime and current marijuana use are similarly low among both females and males.
- » A small proportion of youth initiate marijuana use in middle school: From 7th grade to 8th grade, lifetime use increases from 1% to 3%.
- » Surprisingly, along with declines in marijuana use, there were decreases in perceived risk of use: 79% of youth believe that using marijuana once or twice a week is of “moderate” or “great” risk, down from 84% in 2021. Perceived risk is higher among females than males (82% vs. 76%) and decreases from 7th grade (83%) to 8th grade (75%).
- » Twelve percent of youth believe it would be fairly easy or very easy to get marijuana if they wanted to, down from 19% in 2021.
- » Youth who report lifetime marijuana use are more likely to also report mental health problems, such as depressive symptoms in the past 12 months (51% vs. 13%) and seriously considering suicide in their lifetime (57% vs. 16%).
- » A smaller proportion of MetroWest 8th grade youth have used marijuana in their lifetime (3%) compared with the nation (10%) from the MTF study.⁴ The decline in marijuana use in MetroWest is consistent with national middle school data from MTF.

Figure 3. Trends in Marijuana Use
2006-2021 Middle School MWAHS



Key Findings: Violence

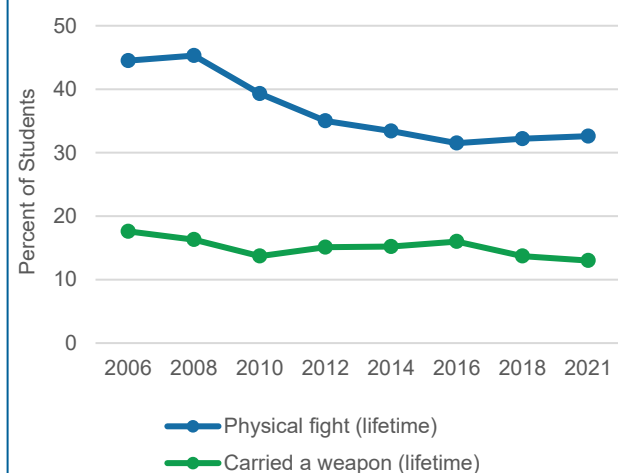
After declining substantially in the early years of the MWAHS, lifetime reports of physical fighting have been steady since 2014 at 32-33%. Reports of recent weapon carrying in 2021 are similar to 2018 levels (13-14%), having also declined since 2006.

Physical Fighting

- » The proportion of youth who have ever been in a physical fight decreased from a high of 45% in 2006-2008 to 33% in 2014, and has remained steady at 32-33% over the last four surveys. [Figure 4].
- » Eleven percent of youth report fighting on school property in their lifetime, consistent with 2018 reports. This is slightly higher than 2012-2016 levels (9-10%), but still substantially lower than in 2006 (19%).
- » Overall reports of lifetime fighting are more than twice as high among males (46%) as females (19%). Reports of fighting on school property are more than three times higher among males (18%) than females (5%).
- » Despite these differences in fighting by sex, there are substantial declines in fighting among both females and males since the beginning of the MWAHS. For example, lifetime fighting decreased from 63% in 2006 to 46% in 2021 among males, and from 26% to 19% among females.
- » Lifetime reports of fighting do not differ notably by grade in middle school.
- » Youth with disabilities are more likely to report having been in a physical fight in their lifetime (46% vs. 30%) and on school property (18% vs. 9%) compared to youth without disabilities.

Figure 4. Trends in Physical Fighting and Weapon Carrying

2006-2021 Middle School MWAHS



Weapon Carrying

- » Thirteen percent of youth have carried a weapon in their lifetime; this is similar to 2018 levels (14%), and substantially lower than when the MWAHS began in 2006 (18%). [Figure 4].
- » Five percent of youth have carried a weapon in the past 30 days, with little change from 2018.
- » Lifetime weapon carrying has declined notably among males (from 28% in 2006 to 21% in 2018, further declining to 17% in 2021). Among females, reports ranged from 5-7% from 2006 to 2018, with 8% reporting weapon carrying in 2021. There appears to be a narrowing of the gap by sex, but future surveys will determine whether this is a trend that will continue.
- » Weapon carrying on school property declined from 3% in 2006 to less than 1% in 2018, remaining steady in 2021.
- » Consistent with gender patterns for physical fighting, overall reports of weapon carrying are higher among males than females (17% vs. 8%).
- » Lifetime reports of carrying a weapon are similar by grade.

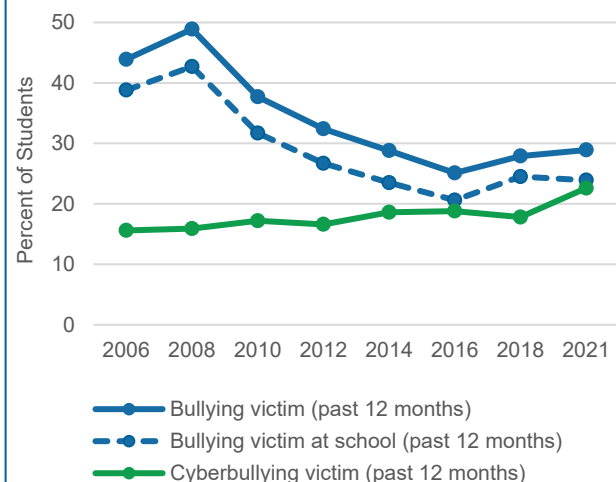
Key Findings: Bullying and Cyberbullying

After declining substantially from a high of 49% in 2008 to a low of 25% in 2006, overall reports of 12-month bullying have been similar since 2018 at 28-29%. However, there is a concerning increase in cyberbullying since the last survey, rising from 18% in 2018 to 23% in 2021, with similar increases reported among females and males. The 2021 reports of cyberbullying are notably higher than in any previous year of the MWAHS.

Bullying

- » While overall reports of bullying in the past 12 months have not changed substantially since 2018, there is an increase in reports among females, from 32% to 35%, whereas reports among males have been similar at 23-24%.
- » Reports of bullying on school property have been steady at 24-25% since 2018, after declining from a high of 43% in 2018 to a low of 21% in 2016 [Figure 5].
- » Bullying victimization continues to be higher among females than males. For example, 28% of females and 20% of males report being bullied on school property in the past year.
- » Victimization is slightly higher in 7th grade (30%) than 8th grade (28%).
- » Nearly one in ten youth (9%) report bullying someone else in the past 12 months, and 6% of students did so on school property.
- » Nine percent of youth report being bullied or verbally harassed in the past 12 months due to their race or ethnicity, 7% due to their religion or culture, 7% due to their gender, 8% due to their sexual orientation or gender identity (up from 6% in 2018), 6% due to a disability, and 30% due to their appearance (height, weight, or how they look).
- » Youth with physical and/or learning disabilities are at heightened risk of victimization. For example, 38% have been bullied at school in the past year, compared to 22% of youth without disabilities. Twenty percent of youth with disabilities have been bullied or verbally harassed specifically due to their disability.
- » LGBTQ youth are also more likely to be bullied: Reports of being bullied at school are substantially higher among LGBTQ youth (38%) compared with heterosexual cisgender youth (20%). Thirty-one percent of LGBTQ youth have been bullied or verbally harassed specifically due to their sexual orientation or gender identity.
- » Many victims do not seek help from adults. For example, among students bullied at school in the past year, only one in three (35%) talked to a school adult and 55% talked to a parent or adult outside of school about being bullied.
- » Bullying victimization is linked with reports of poor mental health. For example, youth who report being bullied in the past 12 months are more likely to report depressive symptoms during this time (38% vs. 12%) and to report self-injury (26% vs. 8%), seriously considering suicide (33% vs. 10%), and making a suicide attempt (11% vs. 2%) in their lifetime.

Figure 5. Trends in Bullying and Cyberbullying
2006-2021 Middle School MWAHS



Cyberbullying

- » After remaining similar at 18-19% from 2014 to 2018, reports of cyberbullying in the past 12 months increased to 23% in 2021 [Figure 5]. There was an increase in electronic victimization among both females (from 22% in 2018 to 27% in 2021) and males (from 13% to 19%).
- » Cyberbullying victimization is similar in 7th and 8th grades at 22-23%.
- » Seven percent of youth report cyberbullying someone else in the past year.
- » The vast majority of cyberbullying victims do not seek help from adults: Among students who were cyberbullied in the past year, only 15% had talked to an adult at school and 31% had talked to a parent or other adult outside of school about being cyberbullied. These numbers are substantially lower than those reported by school bullying victims and consistent with patterns found in prior surveys.
- » Youth with physical and/or learning disabilities are more likely to be cyberbullied than youth without learning disabilities (34% vs. 21%).
- » Cyberbullying victimization is higher among LGBTQ youth than heterosexual cisgender youth (33% vs. 20%).
- » Youth who were cyberbullied are more likely to report mental health problems than nonvictims, including depressive symptoms in the past 12 months (42% vs. 14%), and self-injury (30% vs. 9%), seriously considering suicide (36% vs. 11%), and attempting suicide (13% vs. 2%) in their lifetime.
- » The increase in cyberbullying in the MetroWest region is consistent with reports from the *Cyberbullying Research Center*, which show an increase in cyberbullying from 2019⁵ to 2021⁶ among a national sample of 12-17 year-old youth.

Key Findings: Mental Health

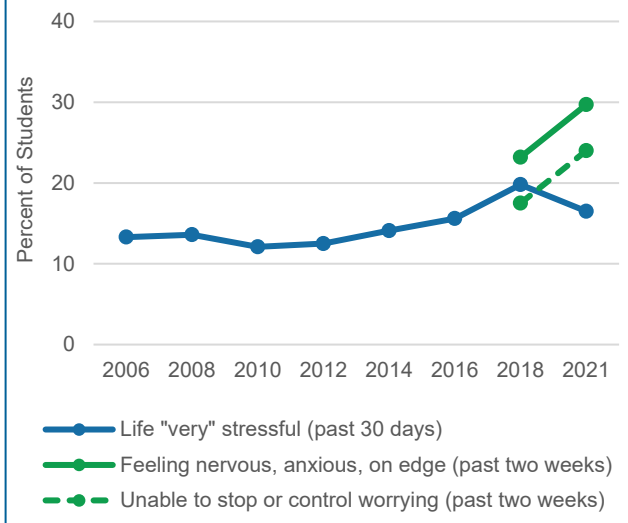
After increasing in recent surveys, reports of stress are slightly lower in 2021. However, since 2018, there are considerable and concerning increases in reports of more serious mental health problems, including anxiety, depressive symptoms, self-injury, and suicidal ideation and attempts. While there are increases in reports among both sexes, the increases are largely driven by increases among females. Further, the overall prevalence of mental health problems are substantially higher in 2021 than in any prior surveys. The increase in mental health problems in MetroWest is consistent with national reports of a youth mental health crisis that is believed to have worsened during the COVID-19 pandemic.⁷

Stress and Anxiety

- » After increasing from 13% in 2006 to a high of 20% in 2018, reports of life being “very” stressful in the past 30 days decreased to 17% in 2021 [Figure 6].
- » From 2018 to 2021, there were decreases in reports of stress among both females (from 27% to 24%) and males (from 12% to 10%).
- » Stress increases by grade, from 14% in 7th grade to 19% in 8th grade.
- » Stress related to school issues is most common, reported by 51% of youth, which is consistent with 2018 reports. Stress due to family issues (19%) and safety issues (6%) have also not changed notably since 2018. However, there are increases in stress due to: appearance issues (33%, up from 23% in 2018), social issues (31%, up from 25% in 2018), and physical and/or emotional health (28%, up from 17% in 2018).

- » Reports of overall stress are more than twice as high among females as males (24% vs. 10%). Females are also more likely than males to report stress due to specific issues, such as school issues (63% vs. 39%), social issues (43% vs. 19%), and family issues (28% vs. 11%).
- » More middle school students are reporting frequent symptoms of anxiety. Nearly one in three students (30%) reports feeling nervous, anxious, or on edge on “at least half the days” or “nearly every day” in the past two weeks, up from 23% in 2018. Similarly, there has also been an increase in reports of feeling unable to stop or control worrying, from 18% in 2018 to 24% in 2021.
- » Consistent with reports of stress, females are more than twice as likely to report anxiety as males. Further, while there have been increases in anxiety among both sexes, the increases are greater among females. For example, reports of feeling nervous, anxious, or on edge on at least half the days in the past two weeks increased from 32% in 2018 to 43% in 2021 among females, and from 14% to 17% among males.
- » Reports of anxiety increase by grade; for example, frequent reports of feeling unable to stop or control worrying increase from 22% in 7th grade to 26% in 8th grade.
- » There are increases in students reports of symptoms related to stress, anxiety, and worrying that impact their daily functioning at and outside of school, as well as their physical and mental well-being. Nearly one in three youth (30%) report feeling tired or having little energy, 27% report having trouble falling/staying asleep or sleeping too much, 27% having trouble concentrating in school, and 23% report eating problems (having a poor appetite or eating too much) “often” or “very often” in the past two weeks. Reports of these and other symptoms have increased steadily since 2016, with increases of 6-8 percentage points from 2018 to 2021 alone.
- » Youth with disabilities are more likely to experience stress and anxiety than youth without disabilities. For example, reports of life being “very” stressful in the past 30 days are twice as high among youth with disabilities (29% vs. 15%).
- » LGBTQ youth are nearly three times more likely to report stress than heterosexual cisgender youth (34% vs. 12%). Reports of anxiety among LGBTQ youth are also higher, with 47% of LGBTQ youth reporting being unable to stop or control worrying, vs. 18% of heterosexual cisgender youth.

Figure 6. Trends in Stress and Anxiety
2006-2021 Middle School MWAHS



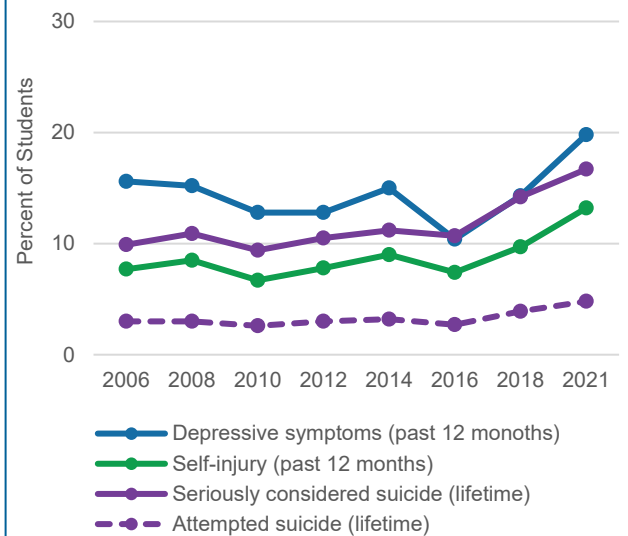
Depressive Symptoms, Self-Injury, and Suicidality

- » One in five (20%) middle school youth report depressive symptoms in the past two weeks, up from 14% in 2018 [Figure 7]. From 2018 to 2021, reports rose much more among females (from 18% to 27%) than among males (from 10% to 12%).
- » Self-injury, which ranged from 7-9% in past surveys, was reported by 13% of youth in 2021.* Reports increased substantially more among females (from 13% in 2018 to 19% in 2021) than males, which remained similar in the range of 6-7%.
- » After remaining steady at 11% since 2012, lifetime reports of seriously considering suicide increased to 14% in 2018, further increasing to 17% in 2021. Reports increased from 17% in 2018 to 23% in 2021 among females, whereas they stayed similar at 10-11% among males during this time.

* Self-injury is defined as cutting, burning, or bruising oneself on purpose in the past 12 months.

- » Five percent of youth report attempting suicide in their lifetime in 2021, up from 4% in 2018, with prior reports at 2-3%. Similar to the data on suicidal ideation, reports increased among females (from 5% in 2018 to 7% in 2021) whereas they were steady at 3% among males.
- » Given the disproportionate increases in mental health problems among females in comparison to males, the gap in reports by sex which always existed is widening. In 2021, females were over twice as likely as males to report depressive symptoms, self-injury, considering suicide, and attempting suicide.
- » Reports of mental health problems increase from 7th grade to 8th grade.
- » Youth with physical and/or learning disabilities are at higher risk of mental health problems. These youth are about twice as likely as youth without disabilities to report depressive symptoms (33% vs. 18%), self-injury (24% vs. 12%), seriously considering suicide (31% vs. 15%), and attempting suicide (11% vs. 4%).
- » Risks of serious mental health problems are also elevated among LGBTQ middle school youth. LGBTQ youth are nearly three times more likely than heterosexual cisgender youth to report depressive symptoms (41% vs. 14%), and four times more likely to report self-injury (34% vs. 8%), seriously considering suicide (40% vs. 11%), and attempting suicide (13% vs. 3%).
- » Many students experiencing mental health problems are not receiving mental health services. Among students reporting depressive symptoms, 35% talked to a school counselor, therapist, or psychologist at school, and 8% talked to a school nurse. Thirty-three percent of students with depressive symptoms talked to a therapist, psychologist, or other mental health professional outside of school.
- » The most common barriers to not seeking help for emotional challenges or problems at school include: feeling like they should handle problems on their own (40%), being too embarrassed or scared to talk about it (39%), feeling like counseling at school wouldn't help (38%), not having time/not wanting to miss class (38%), and not wanting other students to know they were seeking help at school (38%).
- » Nearly one in four middle school students (23.1%) reported experiencing poor mental health during the COVID-19 pandemic "most of the time" or "always", including 35% of females and 12% of males. Two in five students (41%) said their mental health has gotten "a little worse" or "a lot worse" since the beginning of the pandemic (51% of females and 30% of males).
- » The concerning increases in mental health problems among MetroWest youth are consistent with reports of elevated depressive symptoms among youth in Massachusetts during COVID-19.⁸ The increase in self-injury and suicidality, particularly among girls, is consistent with reports from the Centers for Disease Control and Prevention, which indicate a 51% increase in suspected suicide attempt visits to hospital emergency departments from 2019 to 2021 among girls ages 12-17, and a 4% increase among boys.⁹

Figure 7. Trends in Mental Health
2006-2021 Middle School MWAHS



Key Findings: Physical Activity, Overweight/Obesity, and Sleep

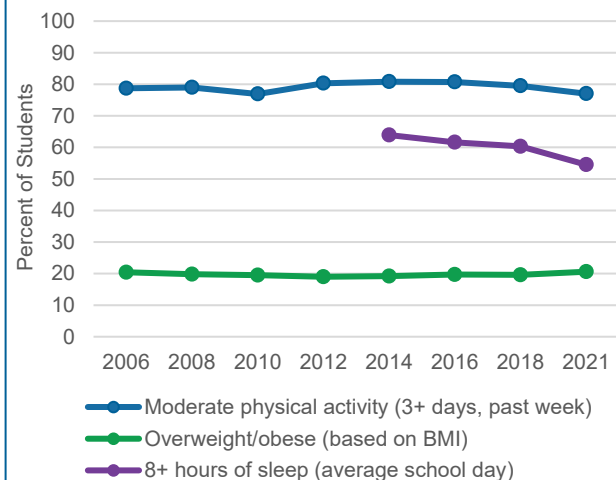
Since the MWAHS began in 2006, student reports of physical activity and overweight/obesity have been relatively stable. In 2021, 77% of students engaged in vigorous physical activity on 3 or more days per week, down slightly from 80% in 2018. One in five youth (21%) were overweight or obese based on self-reported height and weight.

Only 55% of middle school youth get eight or more hours of sleep per night, having steadily decreased from 64% when this data was first collected in 2014.

Physical Activity

- » Reports of vigorous physical activity on three or more days per week have fluctuated from 77-81% since 2006, with current reports at 77% [Figure 8]. The recent decrease from 80% to 77% over the last two surveys is attributed to a decrease among females, from 77% in 2018 to 72% in 2021. Reports among males remained stable at 82-83%.
- » Fifty-eight percent of youth report moderate physical activity for at least 60 minutes per day on five or more days per week (66% of males, and 51% of females).*
- » Participation on one or more sports teams in the past 12 months declined from 76% in 2018 to 69% in 2021, perhaps impacted by the COVID-19 pandemic and more limited opportunities.
- » Nine percent of females and 7% of males report no days of moderate physical activity in the past seven days.

Figure 8. Trends in Physical Activity, Body Weight, and Sleep
2006-2021 Middle School MWAHS



Overweight/Obesity

- » The proportion of youth who are overweight or obese has been similar in the range of 19-21% since 2006 [Figure 8].†
- » Consistent with prior years, males are more likely than females to be overweight/obese (24% vs. 17%).
- » The prevalence of overweight/obesity does not vary substantially by grade in middle school.

Sleep

- » Just over half of middle school youth (55%) get eight or more hours of sleep on an average school night. Reports have steadily declined since 2014 (64%), when these data were first collected [Figure 8].
- » Males are more likely to get eight or more hours of sleep (60%) than females (50%), but reports have declined similarly among both sexes over the past three surveys.

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

† Reports of overweight/obesity are 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.

- » The proportion of youth that get eight or more hours of sleep decreases notably in middle school from 61% in 7th grade to 49% in 8th grade.
- » As noted earlier, 27% of youth – representing 37% of females and 17% of males – report sleep issues related to being stressed, anxious, or worried.
- » Youth who sleep less than eight hours per night are around three times more likely than youth who sleep eight or more hours per night to report poor mental health, including depressive symptoms (30% vs. 11%), self-injury (20% vs. 8%), and seriously considering suicide (25% vs. 10%).

Key Findings: Online Behavior

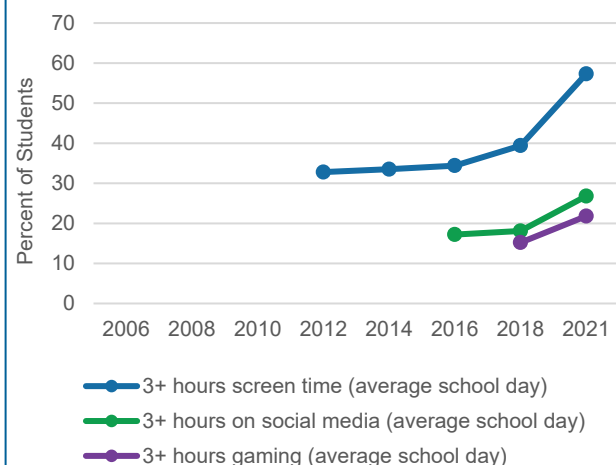
On the average school day, 57% of youth spend three or more hours on “screen time” (including time spent watching television and/or using a computer, tablet, or smartphone not for school/homework) – a dramatic increase from 39% in 2018 – and 43% spend three or more hours online, specifically. More than one in four (27%) spend 3 or more hours a day on social media alone, up from 18% just three years ago.

Screen Time and Online Time

- » While screen time has been gradually increasing since data was first collected in 2012 (33%), there was a sharp increase from 2018 to 2021 (39% to 57%) [Figure 9].
- » Increases in screen time are substantial for both sexes: High use (three or more hours daily) rose from 38% in 2018 to 60% in 2021 among females and from 40% to 55% among males.
- » From 2018 to 2021, reports of high use of social media (3 or more hours daily) increased notably among both sexes, from 23% to 34% among females and from 14% to 20% among males.
- » While females are more likely to spend time on social media than males, males are more likely to report gaming for 3 or more hours daily (30% vs. 13%).
- » The increase in social media use appears to bring increases in both positive and more negative experiences. On the positive side, social media helps youth feel more connected to peers (61%, up from 54% in 2018), helps them find people with common interests and hobbies (65%, up from 53%), and provides a source of social support (30%, similar to 2018 levels). On the negative side, social media makes a sizeable minority of students feel badly about themselves or excluded (23%, up from 20% in 2018), keeps them from doing important things like homework or family responsibilities (25%, up from 20%), and has caused serious conflicts with family members (11%, up from 8%).
- » Forty percent of all youth feel they spend too much time on social media, an increase from 30% in 2018. Forty-six percent of females and 33% of males report this.
- » Youth who spend three or more hours on social media daily are twice as likely as youth who spend less time to report cyberbullying victimization (36% vs. 18%) and perpetration (11% vs. 4%).

Figure 9. Trends in Screen Time and Online Behavior

2006-2021 Middle School MWAHS



- » Youth who spend more time on social media are more likely to report substance use and mental health problems. For example, high users of social media are more likely to report lifetime alcohol use (19% vs. 8%) and lifetime use of EVPs (9% vs. 3%) than lower users. They are also more than twice as likely to report depressive symptoms (33% vs. 15%) and seriously considering suicide (28% vs. 13%).
- » The rise in total screen time per day in the MetroWest region is consistent with a 17% rise in screen time from 2019 to 2021 found by Common Sense Media among 13-18 year-old youth.¹⁰

Key Findings: Protective Factors

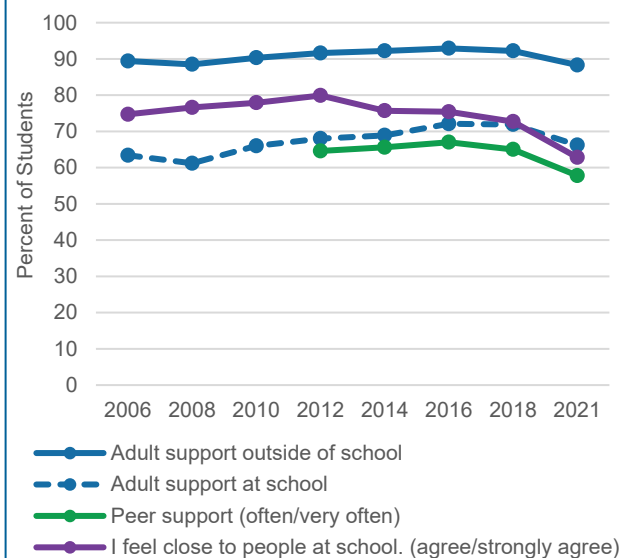
After increasing from 53% in 2006 to 72% in 2018, the proportion of youth who have an adult at school to talk to if they have a problem decreased to 66% in 2021. Reports of school connectedness are also slightly lower in 2021. These decreases in protective factors at school are likely related to the time students spent away from school during remote learning due to the COVID-19 pandemic.

Outside of school, 88% of youth have a supportive parent or other adult, down slightly from 2018 reports (92%). Reports of peer support also declined since the last survey.

Adult Support

- » From 2018 to 2021, reports of adult support at school decreased among both females (from 73% to 66%) and males (from 71% to 67%).
- » After rising slowly from 89% in 2006 to a high of 92-93% in 2014-2018, reports of adult support outside of school were lower in 2021 at 88% [Figure 10]. This decrease was largely due to a decrease among females (from 92% in 2018 to 85% in 2021), whereas reports were similar among males (91-92%).
- » Adult support, both at school and outside of school, is similar by grade.
- » LGBTQ youth are less likely to have adult support at school (61% vs. 68%) and outside of school (76% vs. 92%) than heterosexual cisgender youth.
- » Eight percent of middle school youth do not have a supportive adult either at school or outside of school. These youth are more likely to engage in multiple risk behaviors. For example, youth lacking adult support outside of school are more likely to report lifetime EVP use (12% vs. 4%), lifetime alcohol use (24% vs. 10%), cyberbullying victimization (38% vs. 21%), depressive symptoms (48% vs. 18%), and seriously considering suicide (43% vs. 15%).

Figure 10. Trends in Protective Factors
2006-2021 Middle School MWAHS



School Connectedness and Engagement

- » Around three out of five youth report being 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” (65%) and “I am happy to be at this school” (58%).
- » From 2018 to 2021, there were notable declines in several measures of school connectedness, most notably a decrease in agreement with the statement “I feel close to people at school,” which declined from 73% to 63% [Figure 10]. The decrease in these reports was greater among females (from 71% to 59%) than males (from 75% to 67%).
- » Student reports of feeling safe in school remained similar from 2018 to 2021 at 73-74%, after having dropped from 84% in 2016.
- » Across earlier time points, reports of school connectedness have not differed substantially by sex. However, the declines from 2016 to 2021 have been greater among females than males. As a result, the disparity in reports of school connectedness between females and males has widened.
- » Reports of school connectedness are lower in 8th grade than 7th grade, consistent with prior years.
- » Youth with disabilities are less likely to feel connected to their school than youth without disabilities. For example, only 55% of youth with disabilities feel like part of their school, compared to 66% of youth without disabilities.
- » LGBTQ youth also report lower feelings of school connectedness. For example, 47% of LGBTQ youth feel close to people at school, compared to 67% of heterosexual cisgender youth.
- » Youth with lower levels of school connectedness are more likely to report harmful behaviors, including substance use, fighting, bullying, and mental health problems. For example, youth who don't feel like a part of their school are more likely to report lifetime EVP use (7% vs. 3%), lifetime alcohol use (16% vs. 8%), physical fighting at school in the past 12 months (14% vs. 9%), bullying victimization at school in the past 12 months (34% vs. 19%), depressive symptoms in the past 12 months (34% vs. 12%), and seriously considering suicide in their lifetime (28% vs. 11%), compared to youth who do feel like a part of their school.

Peer Support

- » After remaining similar over several surveys, peer support among middle school youth has declined in the last three years. Reports of having a friend to talk to about a personal problem “often” or “very often” decreased from 65% in 2018 to 58% in 2021. The decrease in peer support over the last three years was greater among females (from 74% to 62%) than among males (56% to 54%).
- » Reports of feeling lonely were steady at 8-9% from 2012-2016, but then more than doubled over the last two surveys to 22% in 2021. Over the last three years, reports increased more among females (from 21% to 31%) than males (from 11% to 15%).
- » Feelings of being left out or excluded increased from 13% in 2018 to 17% in 2021; these feelings increased among both sexes, but the increase was greater among females (from 17% to 24%) than males (from 8% to 11%).
- » Females are more likely than males to feel like they have a friend to talk to (62% vs. 54%) but twice as likely to feel lonely (31% vs. 15%) or excluded (24% vs. 11%).
- » Reports of having a supportive peer increase slightly from 56% in 7th grade to 59% in 12th grade.
- » Middle school youth without consistent peer support are more likely to report victimization and mental health issues. For example, youth without peer support report more bullying victimization at school (28% vs. 21%), depressive symptoms (26% vs. 16%), and self-injury (17% vs. 11%) compared with those who do not report having peer support “often” or “very often.”

Conclusions

The 2021 administration of the MWAHS was the first round of data collection since the beginning of the COVID-19 pandemic, capturing changes in youth health and risk behaviors that occurred over an unprecedented period that encompassed major shifts in adolescents' school, family, community, and peer environments. The data reflects some of the largest shifts in adolescent behaviors we have observed over contiguous survey administrations – some which suggest reductions in harmful behaviors, such as substance use, while others point to alarming trends, including sharp increases in mental health problems.

Considerable improvements are reported in several areas related to substance use:

- » Despite serious concerns relating to a previous sharp rise in use of electronic vapor products, reports were down substantially in 2021, matching levels reported in earlier surveys when EVPs were first being introduced and marketed in ways that appealed to adolescents. Concern that flavored products and single-use disposable products would lead to increased use and even addiction among some younger adolescents does not appear to be reflected in the data. On the other hand, efforts to educate youth on the dangers of vaping appear to be successful, with the MWAHS data showing a substantial increase in perceived risk over the past three years. Important policy initiatives, such as those banning sales of flavored products, may also be contributing to the notable declines in use.
- » Marijuana use has also decreased considerably in the last three years, continuing its steady decline among middle school youth. This has occurred despite the 2016 approval of recreational marijuana use, and the opening of retail outlets in the MetroWest region and across the state. While these contextual changes were purported by some to increase youth's access to marijuana and lower their perceived risk, the data shows a decrease in perceived access and use despite decreases in perceived risk. Increased prevention education within schools and communities is likely to have played a substantial role in the lower reports of marijuana use.
- » Despite the declines in vaping and marijuana use, alcohol use has remained steady in recent surveys, including measures of lifetime use, current use, and binge drinking. Some have argued that the COVID-19 pandemic – by limiting youths' in-person peer interactions – may also limit their access to substances and reduce social pressures to initiate and engage in substance use. However, this does not appear to be the case for alcohol use.

In contrast to the substance use findings, the 2021 data points to concerning trends in adolescent mental health, particularly among females:

- » The 2021 MWAHS shows the highest levels of depressive symptoms, self-injury, and suicidal thoughts ever reported at the middle school level since the survey began in 2006. These unprecedented levels are largely attributable to rises among early adolescent females. Further, they occurred in parallel with the COVID-19 pandemic, a sharp rise in social media use, an increase in reports of cyberbullying victimization, lower reports of peer support, and a decrease in adequate sleep (see below). While the rise in mental health problems is undoubtedly complex in nature and cannot be attributed to any one or two factors, the social isolation associated with COVID-19 and remote learning and the increase in online interactions and influences have likely played a role. Programs to support youth mental health and wellness – such as social

emotional learning, mental health screening, wellness programming, transition programs for students returning to school after hospitalization, and coordination of school and community mental health programs and services – and treatment for those are suffering are more important than ever before.

- » Screen time, and in particular, time spent on social media, has increased since 2018, with more than one in four middle school youth reporting spending more than three hours a day on social media. This is not surprising in light of the limited in-person interactions associated with COVID-19 along with the rise in several popular social media platforms, such as Instagram and TikTok. While youth report some benefits of social media, like increased social support and connections, they also report increased negative experiences, such as feeling excluded or badly about themselves in comparison to what they see posted by others.
- » Along with the rise in time spent online is an increase in cyberbullying, which reached its highest level in middle school since the MWAHS began, with rises among both females and males. The increase in cyberbullying is consistent with the overall increase in time spent online and may also be related to the negative impact that COVID-19 has likely had on peer social interactions. School bullying did not increase despite the rise in online victimization.
- » There is also a decrease in the number of adolescents reporting that they get at least 8 hours of sleep. This is likely related to the increase in screen time and social media use, and potentially also connected with poor mental health, which can affect adolescent sleep.

Alongside these changes in youth risk behaviors, there are also important changes in protective factors within the school setting:

- » After several years of improvement, the 2021 data shows recent decreases in several indicators of school connectedness as well as adult support at school. This is undoubtedly related to the school disruptions and remote learning due to COVID-19. However, given the rise in mental health problems and the importance of schools in helping to provide and/or link students with appropriate services, it will be important for schools to address these changes and work to help students reconnect with adults and peers at school to benefit both their health and their learning.

The 8th administration of the MWAHS in 2021 identifies areas of both progress and concern, all occurring within the context of COVID-19. This data is crucial to helping to schools and communities understand where to focus their efforts after the unprecedented disruptions brought on by the pandemic, so that they can engage in data-driven decision-making and programming to best meet the physical and emotional needs of youth locally and across the region.

References

- ¹ Centers for Disease Control and Prevention. 2021 Youth Risk Behavior Survey. Available at: www.cdc.gov/YRBSS. Accessed on March 1, 2022.
- ² Massachusetts Department of Elementary and Secondary Education. Massachusetts Youth Risk Behavior Survey. Available at: <https://www.doe.mass.edu/sfs/yrbs/?msclid=6ee02298ad8011ec816a570fa5acd40e>. Accessed on March 1, 2022.
- ³ 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).
- ⁴ Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2022). Monitoring the Future national survey results on drug use 1975-2021: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, University of Michigan. Available at: www.monitoringthefuture.org/pubs/monographs/mtf-overview2021.pdf. Accessed on March 20, 2022.
- ⁵ Hinduja, S. & Patchin, J.W. (2019). 2019 Cyberbullying Data. Cyberbullying Research Center. Available at: <https://cyberbullying.org/2019-cyberbullying-data>. Retrieved March 1, 2022.
- ⁶ Hinduja, S. & Patchin, J.W. (2021). Cyberbullying in 2021 by age, gender, sexual orientation, and race. Cyberbullying Research Center. Available at: <https://cyberbullying.org/cyberbullying-statistics-age-gender-sexual-orientation-race>. Retrieved March 20, 2022.
- ⁷ Office of the Surgeon General (2021). Protecting Youth Mental Health: The U.S. Surgeon General's Advisory. Available at: <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>. Accessed March 1, 2022.
- ⁸ Massachusetts Department of Public Health (2022). COVID-19 Community Impact Survey (CCIS). Available at: <https://www.mass.gov/doc/covid-19-community-impact-survey-ccis-preliminary-analysis-results-full-report/download>. Accessed March 20, 2022.
- ⁹ Yard, E., Radharkrishnan, L., Ballesteros, M.F., et al. (2021). Emergency department visits for suspected suicide attempts among persons aged 12-25 years before and during the COVID-19 pandemic – United States, January 2019-May 2021. *MMWR Morbidity and Mortality Weekly Report*, 70: 888-894. DOI: <http://dx.doi.org/10.15585/mmwr.mm7024e1>.
- ¹⁰ Rideout, V., Peebles, A., Mann, S., & Robb, M.B. (2022). Common Sense census: Media use by tweens and teens, 2021. San Francisco, CA: Common Sense. Available at: http://www.common sense media.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf. Retrieved March 20, 2022.

Middle School

Key Indicators

2006–2021 Trends
2021 Patterns by Sex
2021 Patterns by Grade

MetroWest Region Middle School Students (Grades 7-8)

2006-2021 Trends in Key Indicators

MetroWest Adolescent Health Survey

	Year of Survey (%)							
	2006	2008	2010	2012	2014	2016	2018	2021
	(6,875)	(10,650)	(11,597)	(12,224)	(12,191)	(12,307)	(12,107)	(11,975)
SUBSTANCE USE								
Lifetime cigarette smoking	9.6	8.4	5.7	6.2	4.1	2.9	2.9	2.7
Current cigarette smoking (past 30 days)	3.9	3.7	2.4	2.1	1.4	1.1	0.8	0.6
Lifetime electronic vapor product use*	–	–	–	–	6.4	5.7	9.9	4.6
Current electronic vapor product use (past 30 days)*	–	–	–	–	3.5	2.5	5.8	2.2
Lifetime alcohol use	21.9	20.2	13.2	12.4	11.0	10.2	11.7	11.1
Current alcohol use (past 30 days)	9.0	8.6	4.9	5.0	4.0	3.7	3.9	3.1
Binge drinking (past 30 days) [†]	2.5	2.5	1.5	1.4	1.0	1.0	0.9	0.6
Lifetime marijuana use	4.8	5.2	4.1	4.1	3.1	2.5	3.0	1.9
Current marijuana use (past 30 days)	3.0	3.3	2.2	2.4	1.8	1.4	1.7	0.8
Lifetime inhalant use	8.3	7.1	5.2	4.2	3.0	2.6	3.5	3.3
VIOLENCE								
Physical fighting (lifetime)	44.5	45.3	39.3	35.0	33.4	31.5	32.2	32.6
Physical fighting on school property (lifetime)	18.9	16.8	12.4	9.8	9.4	9.4	11.1	11.2
Carried a weapon (lifetime)	17.6	16.3	13.7	15.1	15.2	16.0	13.7	13.0
Carried a weapon on school property (lifetime)	3.3	2.5	1.4	1.4	1.1	1.0	0.8	0.7
BULLYING VICTIMIZATION								
Bullying victim (past 12 months)	43.9	48.9	37.7	32.4	28.8	25.1	27.9	28.9
Bullying victim on school property (past 12 months)	38.8	42.7	31.7	26.7	23.5	20.6	24.5	23.9
Cyberbullying victim (past 12 months)	15.6	15.9	17.2	16.6	18.6	18.8	17.8	22.6
MENTAL HEALTH								
Life "very" stressful (past 30 days)	13.3	13.6	12.1	12.5	14.1	15.6	19.8	16.5
Depressive symptoms (past 12 months)	15.6	15.2	12.8	12.8	15.0	10.4	14.3	19.8
Self-injury (past 12 months)	7.7	8.5	6.7	7.8	9.0	7.4	9.7	13.2
Considered suicide (lifetime)	9.9	10.9	9.4	10.5	11.2	10.7	14.2	16.7
Attempted suicide (lifetime)	3.0	3.0	2.6	3.0	3.2	2.7	3.9	4.8
PHYSICAL ACTIVITY AND BODY WEIGHT								
Exercised for ≥20 minutes on 3 or more days/week	78.7	79.0	76.9	80.3	80.8	80.7	79.5	77.0
Overweight or obese [‡]	20.4	19.8	19.5	19.0	19.2	19.7	19.6	20.6

* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigs, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo 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.

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

MetroWest Region Middle School Students (Grades 7-8)

2021 Key Indicator Patterns by Sex

MetroWest Adolescent Health Survey

	Sex (%)		Total (%)
	Female (5,878)	Male (6,057)	(11,975)
SUBSTANCE USE			
Lifetime cigarette smoking	3.1	2.4	2.7
Current cigarette smoking (past 30 days)	0.5	0.7	0.6
Lifetime electronic vapor product use*	5.3	4.0	4.6
Current electronic vapor product use (past 30 days)*	2.6	1.9	2.2
Lifetime alcohol use	11.1	11.1	11.1
Current alcohol use (past 30 days)	3.2	3.0	3.1
Binge drinking (past 30 days) [†]	0.5	0.7	0.6
Lifetime marijuana use	1.9	2.0	1.9
Current marijuana use (past 30 days)	0.8	0.8	0.8
Lifetime inhalant use	3.5	3.1	3.3
VIOLENCE			
Physical fighting (lifetime)	18.6	46.1	32.6
Physical fighting on school property (lifetime)	4.5	17.7	11.2
Carried a weapon (lifetime)	8.4	17.4	13.0
Carried a weapon on school property (lifetime)	0.6	0.9	0.7
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	34.6	23.4	28.9
Bullying victim on school property (past 12 months)	28.0	19.8	23.9
Cyberbullying victim (past 12 months)	26.8	18.5	22.6
MENTAL HEALTH			
Life "very" stressful (past 30 days)	23.5	9.5	16.5
Depressive symptoms (past 12 months)	27.4	12.2	19.8
Self-injury (past 12 months)	19.4	7.0	13.2
Considered suicide (lifetime)	23.4	10.3	16.7
Attempted suicide (lifetime)	7.0	2.6	4.8
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	71.5	82.6	77.0
Overweight or obese [‡]	17.3	23.6	20.6

* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo 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.

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

MetroWest Region Middle School Students (Grades 7-8)

2021 Key Indicator Patterns by Grade

MetroWest Adolescent Health Survey

	Grade (%)		Total (%)
	7 th (5,803)	8 th (6,172)	(11,975)
SUBSTANCE USE			
Lifetime cigarette smoking	1.8	3.6	2.7
Current cigarette smoking (past 30 days)	0.4	0.9	0.6
Lifetime electronic vapor product use*	2.8	6.3	4.6
Current electronic vapor product use (past 30 days)*	1.4	3.0	2.2
Lifetime alcohol use	8.8	13.2	11.1
Current alcohol use (past 30 days)	2.1	4.0	3.1
Binge drinking (past 30 days) [†]	0.4	0.8	0.6
Lifetime marijuana use	1.2	2.7	1.9
Current marijuana use (past 30 days)	0.5	1.2	0.8
Lifetime inhalant use	2.9	3.6	3.3
VIOLENCE			
Physical fighting (lifetime)	32.4	32.8	32.6
Physical fighting on school property (lifetime)	11.2	11.2	11.2
Carried a weapon (lifetime)	12.2	13.7	13.0
Carried a weapon on school property (lifetime)	0.6	0.8	0.7
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	30.3	27.6	28.9
Bullying victim on school property (past 12 months)	24.6	23.2	23.9
Cyberbullying victim (past 12 months)	21.7	23.4	22.6
MENTAL HEALTH			
Life "very" stressful (past 30 days)	14.2	18.7	16.5
Depressive symptoms (past 12 months)	18.0	21.5	19.8
Self-injury (past 12 months)	11.8	14.4	13.2
Considered suicide (lifetime)	15.4	17.9	16.7
Attempted suicide (lifetime)	4.1	5.4	4.8
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	76.7	77.2	77.0
Overweight or obese [‡]	19.8	21.4	20.6

* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo 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.

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

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