



MetroWest Adolescent Health Survey

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HIGHLIGHTS FROM THE METROWEST ADOLESCENT HEALTH SURVEY

METROWEST REGION HIGH SCHOOL REPORT

2012

**METROWEST
HEALTH
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Highlights from the 2012 MetroWest Adolescent Health Survey MetroWest Region High School Report

Background and Methodology

2012 marked the fourth administration of the MetroWest Adolescent Health Survey (MWHAS), an important initiative of the MetroWest Health Foundation (MHF) that supports community efforts to improve the health of youth in the region. Since 2006, the MWAHS has been administered every other year to monitor trends in health and risk behaviors and identify emerging health issues at the local and regional levels.

For the first time in 2012, the survey included all 25 communities served by the MHF. With over 40,000 students surveyed, this regional census is one of the largest adolescent health surveys in the country. The findings are widely used by schools and communities to improve policies and programs, inform prevention efforts, and set priorities for achieving a healthier youth population.

The 2012 high school MWAHS was administered to a census of students in grades 9 through 12 in all 26 high schools in the region. As in previous survey waves, local procedures were followed to inform parents 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.

In total, 24,459 students in grades 9 through 12 completed the 2012 survey, representing 90% of the youth in all 26 high schools. The data allow for an examination of behavioral trends across four time points from 2006 to 2012. This report summarizes current youth behaviors on key health indicators in the areas of substance use, violence, bullying, mental health, sexual behavior, and physical activity. Current data from 2012 is provided by gender and grade, and trends over the four waves of the MWAHS are highlighted.

Substance Use

CIGARETTE SMOKING

Cigarette smoking among MetroWest high school students has steadily decreased over the last 7 years. From 2006 to 2010, lifetime smoking decreased from 35% to 26%; it further declined to 22% in 2012. Both females and males are smoking less.

- Current smoking (in the past 30 days) has also declined substantially, from 15% in 2006 to 9% in 2012.
- There are similar declines in smoking among both females and males. For example, current smoking decreased from 13% in 2006 to 7% in 2012 among females, and from 16% to 11% among males.
- Consistent with prior years, males are more likely to smoke than females.
- While overall initiation of smoking is down in the region, many youth continue to initiate smoking in high school. From 9th to 12th grade, lifetime smoking increases from 14% to 32%. By 12th grade, 14% of youth report smoking in the past 30 days.
- Cigarette smoking among MetroWest youth continues to be substantially lower than in Massachusetts and the United States: 9% of MetroWest youth report current smoking, compared with 14% of Massachusetts youth and 18% of youth in the nation. The regional decline in cigarette smoking is consistent with state and national trends.

ALCOHOL USE AND DRINKING AND DRIVING

Fewer high school students are drinking alcohol. Measures of lifetime drinking, recent drinking, and binge drinking all show steady declines at each timepoint from 2006 to 2012. Consistent with these declines, there is also a decrease in drinking and driving in the region.

- The following measures show a drop in alcohol use in the region from 2006 to 2012:
 - Lifetime alcohol use decreased from 67% to 56%.
 - Current alcohol use (in the past 30 days) decreased from 42% to 33%.
 - Binge drinking decreased from 25% to 19%. (Binge drinking is defined as consuming five or more drinks in a row on one or more occasions during the past 30 days.)
 - Reports of riding in a car with a driver who had been drinking in the past 30 days decreased from 25% to 20%.
- Alcohol use and drinking and driving decreased similarly among females and males. For example, lifetime alcohol use decreased from 67% in 2006 to 56% in 2012 among females, and from 66% to 55% among males.
- 2012 reports of lifetime and current alcohol use are similar among females and males. Reports of binge drinking are higher among males (21%) than females (17%), though this does not take into account body weight or other factors that influence intoxication levels.
- A concerning number of youth initiate alcohol use from 9th grade to 12th grade: Current drinking triples from 17% to 51%, and binge drinking quadruples from 8% to 33%.
- Drinking among MetroWest youth continues to be lower than in Massachusetts and the nation.
- The regional decline in drinking is consistent with state and national trends. For example, current drinking decreased from 42% to 33% in MetroWest, compared with a similar decrease in the state (from 48% in 2005 to 40% in 2011)¹ and a smaller decrease in the U.S. (from 43% to 39%).²

MARIJUANA USE

There have been small fluctuations in marijuana use over the survey waves. In 2012, 32% of youth reported lifetime marijuana use and 22% reported current use. These figures are slightly lower than in 2010, and similar to 2006-2008 levels.

- The slight decrease in current marijuana use from 2010 to 2012 is driven by a decrease among males. During this two-year period, current use remained at 17% among females, but decreased from 30% to 26% among males.
- Despite this decrease among males, marijuana use continues to be higher among males than females: For example, 37% of males and 28% of females have used marijuana in their lifetime.
- Marijuana use more than triples from 9th grade to 12th grade. By 12th grade, half of youth (51%) have used marijuana in their lifetime, and 33% have used marijuana in the past 30 days.
- Nearly one in five youth (18%) rode in a car driven by a high school student who had been using marijuana in the past 30 days.
- Marijuana use is lower in MetroWest than in the state and the nation. For example, 32% of MetroWest youth have used marijuana in their lifetime, compared with 43% in Massachusetts and 40% in the U.S.

PRESCRIPTION DRUG MISUSE

About one in ten high school youth has misused prescription drugs in their lifetime. The data suggests a small decrease in lifetime prescription drug misuse, from 11% in 2006 to 9% in 2012.

- Similar declines were reported among both females and males.
- Misuse of prescription drugs continues to be higher among males (10%) than females (7%).
- Prescription drug misuse triples during the high school years. By 12th grade, one in seven youth (14%) has misused prescription drugs in their lifetime.
- Lifetime misuse of prescription drugs is substantially lower in MetroWest (9%) compared with Massachusetts (15%) and the nation (21%).

Violence

Physical fighting, both on and off school property, has declined steadily since 2006. In 2012, 17% of youth reported being in a fight in the past 12 months, compared with 26% in 2006. However, during the same time period, reports of weapon carrying have remained similar.

PHYSICAL FIGHTING

- Reports of physical fighting on school property also decreased, from 9% in 2006 to 6% in 2012.
- There are substantial decreases in fighting among both males and females: From 2006 to 2012, reports of fighting in the past 12 months decreased from 36% to 25% among males and from 16% to 9% among females.
- Older youth are less likely to engage in fighting: Reports of fighting decrease from 19% in 9th grade to 15% in 12th grade.
- Physical fighting in MetroWest (17%) continues to be lower than in the state (25%) and nation (33%). The decline in fighting in MetroWest is consistent with a decline in Massachusetts, though nationally there has been no recent change in reports of physical fighting.

WEAPON CARRYING

- Despite the decrease in physical fighting, overall reports of weapon carrying have remained in the range of 7-8% since 2006.
- Weapon carrying on school property has remained steady at around 3%.
- Consistent with gender patterns for physical fighting, more males than females report carrying weapons overall (11% compared with 2%) and on school property (4% compared with 1%).
- Reports of weapon carrying are similar throughout the high school years.
- Fewer MetroWest youth report weapon carrying (7%) than in the state (12%) and nation (17%).

Bullying and Cyberbullying

After peaking in 2010 at 28%, reports of bullying on school property in the past 12 months have decreased to 23% in 2012 and are the lowest they have been since the MWAHS began in 2006. In contrast, reports of cyberbullying continue to rise steadily, from 15% in 2006 to 22% in 2012.

BULLYING

- Reports of overall bullying victimization in the past 12 months also decreased, from a high of 32% in 2010 to 27% in 2012. The decrease in bullying is greater among males (from 27% in 2010 to 20% in 2012) than among females (from 37% to 34%).
- One in six youth (16%) report that they bullied someone else in the past 12 months; this represents 15% of females and 17% of males.
- Bullying victimization is highest in 9th grade at 31% and decreases to 23% by 12th grade.
- Many bullying victims do not seek help from adults: Among students who were bullied at school in the past year, only 28% had talked to a school adult and 42% had talked to a parent or other adult outside of school about being bullied.
- One-third of youth (34%) have intervened as bystanders by trying to stop a student from bullying someone else at school in the past 12 months, and 10% have told an adult at school that someone else was being bullied.
- School bullying in MetroWest (23%) remains higher than in the state (18%) and the nation (20%).

CYBERBULLYING

- Reports of cyberbullying victimization in the past 12 months have increased steadily from 15% in 2006 to 22% in 2012. The increase in cyberbullying victimization is greater among females (from 17% in 2006 to 28% in 2012) than males (from 12% to 15%). Over one in four female students now report being recent victims of cyberbullying.
- One in ten youth (10%) report that they cyberbullied someone else in the past 12 months; this represents 11% of females and 9% of males.
- Reports of cyberbullying victimization decrease slightly from 9th grade (23%) to 12th grade (20%).
- The majority of cyberbullying victims do not seek help from adults: Among students who were cyberbullied, only 17% had talked to an adult at school and 29% had talked to a parent or other adult outside of school.
- 15% of youth have tried to stop a student from cyberbullying someone else. Twice as many females as males (20% vs. 10%) have tried to intervene in this way as active bystanders.
- Cyberbullying reports in MetroWest (22%) are higher than in the state (17%) and nation (16%).

Mental Health

Reports of mental health problems among high school youth have remained similar over each wave of the survey. In 2012, one in five youth (20%) reported depressive symptoms and one in twenty youth (5%) attempted suicide in the past year.

- Overall reports of feeling “very” stressed in the past 30 days have been steady at 28-29% since 2006. When the data is broken down by gender, there is an increase among females from 35% in 2006 to 39% in 2012, whereas there is a decrease among males, from 21% to 18%.
- There are no notable changes in reports of depressive symptoms or suicide attempts among either gender.
- There may be a slight increase in self-injury (from 13% in 2006 to 16% in 2012) and suicidal ideation (from 10% to 13%). These increases are driven largely by females: Reports of self-injury among females increased from 18% in 2006 to 22% in 2012, and suicidal ideation increased from 12% to 17%.
- As in previous surveys, reports of stress increase through the high school years, doubling from 20% in 9th grade to 39% in 12th grade. There is also a slight increase in depressive symptoms by grade, from 17% to 21%.
- 13% of youth have talked to a parent/adult outside of school about feeling sad or hopeless, or having thoughts about hurting themselves in the past 12 months. 7% of youth have spoken to a teacher or other adult at school, and 7% have talked to a doctor, nurse, or health care provider.
- Levels of suicidality are concerning across the region and the state, with more than one in seven youth (13%) both in MetroWest and in Massachusetts reporting that they seriously considered suicide in the past year.

Sexual Behavior

In 2012, 27% of youth reported engaging in sexual intercourse in their lifetime, compared with 29% in 2006. There also appears to be a slight increase in sexual safety, with more youth who are sexually active reporting condom use. However, one-third of youth who have sex are not using condoms.

- In 2012, 21% of youth reported that they are currently sexually active (had intercourse in the past three months), compared with 23% in 2008.
- By 12th grade, nearly half of youth (47%) have had sexual intercourse and 38% are currently sexually active.
- Frequency of condom use, which decreased slightly over the past two survey waves, returned to levels reported in 2006, with 66% of sexually active youth reporting they used a condom the last time they had intercourse.
- Nearly one in three sexually active youth (29%) used alcohol or drugs before they had sexual intercourse the last time.
- The proportion of youth who have had sexual intercourse in their lifetime continues to be substantially lower in MetroWest (27%) compared with the state (42%) and the nation (47%).
- Sexting (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) has been measured in MetroWest since 2010. In 2012, 23% of youth reported receiving a sext image, 5% report sending a sext image of someone else, and 11% report sending a sext image of themselves.

Physical Activity, Nutrition, and Body Weight

The proportion of youth meeting national recommendations for physical activity has continued to increase steadily since 2006. However, the proportion of youth who are overweight or obese has remained similar at 19-20%.

PHYSICAL ACTIVITY

- In 2012, nearly half of all high school youth (49%) reported moderate exercise on five or more days in the past week, compared with 34% in 2006. There were substantial increases in physical activity among both females and males.
- As in prior surveys, more males than females are physically active (56% compared with 42%).
- There is a substantial decrease in physical activity from 9th grade (55%) to 12th grade (43%).
- 39% of youth (representing 35% of females and 42% of males) report spending three or more hours a day on “screen time” that is not for school or homework. This may be an indicator of unhealthy sedentary behavior, as well as an opportunity for becoming involved in cyberbullying.
- The proportion of students who exercised moderately on five or more days in the past week is higher in MetroWest (49%) compared with the state (43%).

NUTRITION

- There has been a decline in reports of drinking one or more non-diet sodas per day in the week prior to the survey, from 24% in 2006 to 14% in 2012.
- During this time, fruit and vegetable consumption remained relatively similar, with 43% of youth eating fruit daily and 52% consuming vegetables or green salad daily over the past week.

BODY WEIGHT

- Although there have been improvements in physical activity and nutrition, overweight/obesity have remained in the range of 19-20% since 2006. (Reports of overweight/obesity are based on self-reported height and weight, which is used to calculate body mass index.)
- While overweight/obesity remained similar among females, there was a slight decline among males (from 26% in 2006 to 23% in 2012).
- More males (23%) than females (15%) are overweight/obese.
- Overweight/obesity is relatively similar throughout the high school years.
- Fewer youth in MetroWest are overweight/obese (19%) compared with Massachusetts (25%) and the nation (28%).

Conclusions

The 2012 high school survey has documented a number of important findings to inform regional and local policies, practices, and programs. There has been notable progress made over the past seven years in several key areas:

- Cigarette smoking and alcohol use have decreased substantially since 2006. While these declines are consistent with state and national trends, they have occurred alongside important local and regional initiatives to reduce substance use.
- There has been a recent decline in the number of youth who report being victims of bullying at school after reaching its peak in 2010. This drop coincides with the passing of the Massachusetts anti-bullying legislation in 2010, although there may be many factors that influence students' reports of school bullying victimization.

The following behaviors show some improvement or stabilization:

- After a slight increase in marijuana use, there may be a slight lowering or stabilization to levels reported in earlier waves of the survey. It is unclear how recent reports of marijuana use may relate to the decriminalization of marijuana in 2009.
- Reports of physical fighting, both on and off school property, have lowered substantially while weapon carrying has remained similar. The lack of change in weapon carrying is noteworthy in the context of heightened concerns regarding school safety.
- Slightly fewer youth are sexually active. While condom use may be increasing among sexually active youth after several years of decline, many youth are not protecting themselves against sexually transmitted infections, including HIV, and may also be at risk of unintended pregnancy.
- There has been an increase in physical activity and a decrease in reports of unhealthy eating, though the data does not show a decline in obesity among youth.

Increases in harmful behaviors are noted in the following areas:

- Despite a steady decline in school bullying reports, cyberbullying victimization has risen steadily since 2006. Cyberbullying is especially a problem for females, who are particularly vulnerable to involvement in relational forms of bullying that often occur online.
- Mental health problems, including stress, depressive symptoms, and suicidality, continue to affect substantial proportions of youth. Among girls, there are concerning increases in reports of stress, self-injury, and suicidal ideation.

The 2012 MWAHS shows substantial progress in reducing several concerning behaviors, including cigarette smoking, alcohol use, and school bullying. However, many high school youth continue to engage in unhealthy behaviors and report mental health problems. Continued education, programmatic, and policy initiatives are important to further improving the health of adolescents in the region.

REFERENCES

¹ Massachusetts Department of Elementary and Secondary Education and Massachusetts Department of Public Health (2012). 2011 Health and Risk Behaviors of Massachusetts Youth. See: <http://www.doe.mass.edu/cnp/hprograms/yrbs/2011Report.pdf>

² Centers for Disease Control and Prevention (2012). Morbidity and Mortality Weekly Report 2012; 61(No. SS-4). See: <http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>.

Metrowest Region High School (Grades 9-12)

2006-2012 Trends in Key Indicators*

	Year of Survey (%)			
	2006 (16,680)	2008 (20,406)	2010 (23,187)	2012 (24,459)
SUBSTANCE USE				
Lifetime cigarette smoking	35.3	33.3	25.9	22.0
Current cigarette smoking (past 30 days)	14.7	13.9	12.1	9.1
Lifetime alcohol use	66.5	62.8	58.0	55.6
Current alcohol use (past 30 days)	42.2	39.1	34.7	33.4
Binge drinking (past 30 days) [†]	25.1	23.2	20.8	18.7
Rode with driver who had been drinking (past 30 days)	25.2	25.8	22.5	19.5
Lifetime marijuana use	33.2	33.4	34.6	32.3
Current marijuana use (past 30 days)	20.2	22.8	23.5	21.5
Lifetime prescription drug misuse [‡]	11.0	10.1	10.1	8.8
VIOLENCE				
Physical fighting (past 12 months)	26.0	23.9	21.7	16.8
Physical fighting on school property (past 12 months)	8.7	8.3	7.4	5.5
Carried a weapon (past 30 days)	8.2	7.3	7.3	6.8
Carried a weapon on school property (past 30 days)	3.3	3.1	3.0	2.5
BULLYING VICTIMIZATION				
Bullying victim (past 12 months)	28.6	29.3	31.8	27.0
Bullying victim on school property (past 12 months)	25.5	25.9	28.2	22.9
Cyberbullying victim (past 12 months)	14.6	15.8	20.0	21.5
MENTAL HEALTH				
Life "very" stressful (past 30 days)	27.9	27.9	28.3	28.9
Depressive symptoms (past 12 months)	20.1	20.3	19.1	19.7
Self-injury (past 12 months)	13.2	13.2	14.0	15.6
Considered suicide (past 12 months)	10.0	10.5	11.6	13.0
Attempted suicide (past 12 months)	4.1	4.1	4.0	4.7
SEXUAL BEHAVIOR				
Lifetime sexual intercourse	28.9	29.4	28.3	26.6
Currently sexually active (past 3 months)	22.3	22.9	21.8	20.7
Condom use at last intercourse (among sexually active youth)	66.6	65.0	63.2	66.3
PHYSICAL ACTIVITY AND BODY WEIGHT				
Exercised for ≥60 minutes on 5 or more days/week	33.7	33.2	45.3	48.8
Overweight or obese [§]	19.9	19.3	19.3	19.2

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

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

Metrowest Region High Schools (Grades 9-12)

2012 Gender Patterns for Key Indicators*

	Gender (%)		Total (%)
	Female 12307	Male 11886	(24,459)
SUBSTANCE USE			
Lifetime cigarette smoking	19.2	24.8	22.0
Current cigarette smoking (past 30 days)	7.0	11.1	9.1
Lifetime alcohol use	55.8	55.4	55.6
Current alcohol use (past 30 days)	33.3	33.4	33.4
Binge drinking (past 30 days) [†]	16.8	20.6	18.7
Rode with driver who had been drinking (past 30 days)	19.4	19.6	19.5
Lifetime marijuana use	27.7	37.1	32.3
Current marijuana use (past 30 days)	16.9	26.2	21.5
Lifetime prescription drug misuse [‡]	7.3	10.4	8.8
VIOLENCE			
Physical fighting (past 12 months)	9.0	24.9	16.8
Physical fighting on school property (past 12 months)	2.4	8.7	5.5
Carried a weapon (past 30 days)	2.4	11.3	6.8
Carried a weapon on school property (past 30 days)	1.1	4.0	2.5
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	33.5	20.0	27.0
Bullying victim on school property (past 12 months)	27.2	18.3	22.9
Cyberbullying victim (past 12 months)	28.1	14.7	21.5
MENTAL HEALTH			
Life "very" stressful (past 30 days)	39.2	18.1	28.9
Depressive symptoms (past 12 months)	25.9	13.1	19.7
Self-injury (past 12 months)	22.3	8.5	15.6
Considered suicide (past 12 months)	16.5	9.3	13.0
Attempted suicide (past 12 months)	5.6	3.7	4.7
SEXUAL BEHAVIOR			
Lifetime sexual intercourse	24.5	28.6	26.6
Currently sexually active (past 3 months)	19.6	21.6	20.7
Condom use at last intercourse (among sexually active youth)	65.5	67.4	66.3
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥60 minutes on 5 or more days/week	41.7	56.3	48.8
Overweight or obese [§]	15.1	23.3	19.2

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

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

Metrowest Region High School (Grades 9-12)

2012 Grade Patterns for Key Indicators*

	Grade (%)				Total (%)
	9 th	10 th	11 th	12 th	
	6554	6143	6055	5489	(24,459)
SUBSTANCE USE					
Lifetime cigarette smoking	13.9	19.1	24.0	32.4	22.0
Current cigarette smoking (past 30 days)	5.6	7.4	9.4	14.4	9.1
Lifetime alcohol use	36.9	52.0	63.6	73.1	55.6
Current alcohol use (past 30 days)	17.4	28.8	39.3	50.7	33.4
Binge drinking (past 30 days) [†]	7.5	13.9	22.6	32.8	18.7
Rode with driver who had been drinking (past 30 days)	16.0	17.5	20.0	25.1	19.5
Lifetime marijuana use	15.3	27.1	39.4	50.7	32.3
Current marijuana use (past 30 days)	10.0	18.8	26.3	32.7	21.5
Lifetime prescription drug misuse [‡]	4.5	6.8	10.3	14.3	8.8
VIOLENCE					
Physical fighting (past 12 months)	19.0	16.7	16.2	14.7	16.8
Physical fighting on school property (past 12 months)	6.4	5.6	4.9	4.8	5.5
Carried a weapon (past 30 days)	6.1	6.7	6.9	7.2	6.8
Carried a weapon on school property (past 30 days)	1.7	2.4	2.9	3.1	2.5
BULLYING VICTIMIZATION					
Bullying victim (past 12 months)	30.8	29.4	23.9	22.9	27.0
Bullying victim on school property (past 12 months)	25.9	25.4	20.3	19.1	22.9
Cyberbullying victim (past 12 months)	23.3	22.7	20.2	19.5	21.5
MENTAL HEALTH					
Life "very" stressful (past 30 days)	20.4	25.7	31.8	39.3	28.9
Depressive symptoms (past 12 months)	17.3	19.6	21.0	21.0	19.7
Self-injury (past 12 months)	15.2	16.8	15.6	14.6	15.6
Considered suicide (past 12 months)	11.8	14.0	13.3	12.7	13.0
Attempted suicide (past 12 months)	4.8	4.9	4.4	4.4	4.7
SEXUAL BEHAVIOR					
Lifetime sexual intercourse	11.8	19.1	31.4	46.9	26.6
Currently sexually active (past 3 months)	8.4	13.8	25.0	37.9	20.7
Condom use at last intercourse (among sexually active youth)	63.2	68.5	68.4	65.3	66.3
PHYSICAL ACTIVITY AND BODY WEIGHT					
Exercised for ≥60 minutes on 5 or more days/week	55.2	50.1	45.8	43.0	48.8
Overweight or obese [§]	18.7	20.7	18.6	18.4	19.2

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

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

This report was prepared by the Health and Human Development Division at Education Development Center, Inc. (EDC) in Waltham, MA. For technical assistance in interpreting and utilizing the MWAHS data, please contact:

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