

# HIGHLIGHTS FROM THE METROWEST ADOLESCENT HEALTH SURVEY

# METROWEST REGION MIDDLE SCHOOL REPORT

2012



Funded by: MetroWest Health Foundation



Submitted by: Education Development Center, Inc. Health & Human Development Division

**Spring 2013** 

# Highlights from the 2012 MetroWest Adolescent Health Survey MetroWest Region Middle 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 middle school MWAHS was administered to a census of students in grades 7 and 8 in all 24 school districts in the region that contain middle schools. 14 school districts chose to include 6<sup>th</sup> grade students; these findings are described in a separate report. 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, 12,224 students in grades 7 and 8 completed the 2012 survey, representing over 90% of the youth in the 24 school districts. 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, 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**

Few middle school youth are initiating smoking. After declining from 10% in 2006 to 6% in 2010, reports of lifetime smoking remained at 6% in 2012.

- Current cigarette smoking (in the past 30 days) decreased from 4% in 2006 to 2% in 2010 and remained at 2% in 2012. This trend was similar for both females and males.
- Reports of lifetime smoking are slightly higher among males (7%) compared with females (5%).
- Initiation of smoking doubles from 4% in 7<sup>th</sup> grade to 8% in 8<sup>th</sup> grade.
- Fewer MetroWest middle school youth report smoking compared with Massachusetts youth: For example, fewer than half as many MetroWest 8<sup>th</sup> grade youth have smoked a cigarette in their lifetime (6%) compared with Massachusetts 8<sup>th</sup> grade youth (16%).<sup>1</sup>

#### **ALCOHOL USE AND DRINKING AND DRIVING**

Alcohol use among middle school youth remained steady from 2010 to 2012. After decreasing substantially from 22% in 2006 to 13% in 2010, 12% of youth reported lifetime drinking in 2012.

- Current drinking (in the past 30 days) follows a similar pattern: Reports of current drinking decreased from 9% in 2006 to 5% in 2010, and remained at 5% in 2012.
- Alcohol use was steady from 2010 to 2012 among both females and males.
- Reports of riding in a car with a driver who had been drinking decreased from a high of 21% in 2008 to 15% in 2010; in 2012, 14% of youth reported being at risk.
- The proportion of students who reported binge drinking has remained low since 2006. In 2012, only 1% of middle school youth reported binge drinking. (Binge drinking is defined as consuming five or more drinks in a row on one or more occasions in the past 30 days.)
- More males than females initiate alcohol use in middle school (14% vs. 11%). Current drinking is similar among males and females.
- Initiation of drinking doubles from 8% in 7<sup>th</sup> grade to 17% in 8<sup>th</sup> grade, and current alcohol use also doubles from 3% to 7%.
- Riding in a car with a driver who had been drinking also increases by grade, from 11% in 7<sup>th</sup> grade to 17% in 8<sup>th</sup> grade.
- MetroWest middle school youth report less alcohol use than youth statewide: For example, 7% of 8<sup>th</sup> grade youth in the MetroWest region report current alcohol use, compared with 14% of 8<sup>th</sup> grade youth statewide.<sup>1</sup>

#### **MARIJUANA USE**

Reports of lifetime marijuana use among MetroWest middle school students have remained steady at 4-5% since 2006.

- Current marijuana use (in the past 30 days) has also remained steady at 2-3%.
- Initiation of marijuana use is higher among males than females: 5% of males have tried marijuana in their lifetime, compared with 3% of females.
- There is a notable increase in reports of marijuana use in middle school: From 7<sup>th</sup> grade to 8<sup>th</sup> grade, lifetime marijuana use increases from 2% to 6%, and current use increases from 1% to 4%.
- Fewer MetroWest middle school youth are using marijuana than youth in Massachusetts: Among 8<sup>th</sup> grade youth, lifetime marijuana use was lower in the MetroWest region (6%) compared with the state (15%).
- The steady use of marijuana use among middle school youth in the region is consistent with recent statewide data, which also shows little variation in recent years.

#### **INHALANT USE**

Use of inhalants has steadily decreased: 4% of youth reported lifetime inhalant use in 2012, compared with 8% in 2006.

- The decline in inhalant use was notable among females (from 8% in 2006 to 4% in 2012) and males (from 9% to 5%). (Inhalant use is defined as sniffing glue, breathing the contents of spray cans, or inhaling any paints or sprays to get high.)
- Reports of inhalant use increase from 3% in 7<sup>th</sup> grade to 5% in 8<sup>th</sup> grade.
- The decrease in inhalant use in the MetroWest region is consistent with national data on 8<sup>th</sup> grade youth from the Monitoring the Future survey.<sup>2</sup>

## **Violence**

Fighting has declined steadily among middle school youth, from 45% in 2006 to 35% in 2012. Weapon carrying decreased from 18% in 2006 to 14% in 2010, but did not change notably in 2012.

#### **PHYSICAL FIGHTING**

- Physical fighting is lower among both genders: Lifetime reports decreased from 62% in 2006 to 50% in 2012 among males, and from 26% to 20% among females.
- Reports of fighting on school property decreased by half, from 19% in 2006 to 10% in 2012. The
  decrease was substantial among both males (from 30% in 2006 to 16% in 2012) and females
  (from 8% to 4%).
- Despite these decreases, reports of fighting remain much higher among males than females.
- The proportion of youth who report fighting on school property in their lifetime increases from 8% in 7<sup>th</sup> grade to 12% in 8<sup>th</sup> grade.

#### **WEAPON CARRYING**

- Weapon carrying declined from 18% in 2006 to 14% in 2010; in 2012, 15% of youth reported that they had carried a weapon in their lifetime.
- Weapon-carrying on school property has been low since 2006. Only 1% of youth reported that they had ever carried a weapon at school in 2012.
- Consistent with gender patterns for physical fighting, weapon-carrying is substantially higher among males (24%) compared with females (6%).
- Lifetime reports of carrying a weapon increase from 14% in 7<sup>th</sup> grade to 17% in 8<sup>th</sup> grade.

## **Bullying and Cyberbullying**

Fewer students are reporting school bullying, but not cyberbullying. After peaking in 2008 at 43%, reports of school bullying victimization steadily decreased to 27% in 2012. In contrast, reports of cyberbullying victimization remained steady at 16-17% since 2006.

#### **BULLYING**

- Reports of overall bullying victimization in the past 12 months also decreased, from a high of 49% in 2008 to 32% in 2012.
- School bullying is substantially lower among both genders. From 2008 to 2012, reports of school bullying decreased from 45% to 30% among females, and from 41% to 23% among males.
- More females than males continue to report bullying victimization overall (37% vs. 27%) and on school property (30% vs. 23%).
- 13% of youth report bullying someone else in the past year, with similar reports among females (12%) and males (13%).
- Reports of bullying in general and on school property are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.
- Many bullying victims do not seek help from adults: Among students who were bullied at school
  in the past year, just over one-third (37%) had talked to a school adult and half (54%) had talked
  to a parent or other adult outside of school about being bullied.
- More than one-third of youth (39%) have intervened as bystanders by trying to stop a student from bullying someone else at school, and 16% have told an adult at school that someone else was being bullied.
- Reports of overall bullying victimization are similar among 8<sup>th</sup> grade youth in MetroWest and across the state.

#### **CYBERBULLYING**

- Reports of cyberbullying victimization in the past 12 months have remained similar since 2006 at 16-17%.
- Cyberbullying continues to be a particular problem for females. Reports of cyberbullying victimization are now twice as high among females (22%) as males (11%).
- 6% of youth report cyberbullying someone else in the past year. Reports of cyberbullying perpetration are higher among females compared with males (7% vs. 5%).
- Cyberbullying victimization increases by grade, from 15% in 7<sup>th</sup> grade to 18% in 8<sup>th</sup> grade.

- The majority of cyberbullying victims do not seek help from adults: Among students who were
  cyberbullied, only 18% had talked to an adult at school and 35% had talked to a parent or other
  adult outside of school.
- 13% of youth have tried to stop a student from cyberbullying someone else. Twice as many females as males (17% vs. 9%) have tried to intervene in this way as active bystanders.
- Reports of cyberbullying victimization among 8<sup>th</sup> grade youth are slightly higher in MetroWest (17%) compared with the state (15%).

### **Mental Health**

Overall reports of mental health problems among MetroWest middle school youth have remained similar since 2006. In 2012, 13% of youth reported feeling depressive symptoms in the past year, and 11% had seriously considered suicide in their lifetime.

- 13% of youth reported feeling "very" stressed in the past 30 days, with no notable change in reports of stress since 2006.
- Reports of depressive symptoms were steady at 13% from 2010 to 2012 after declining from 16% in 2006. (Depressive symptoms are defined as feeling sad or hopeless almost every day for two or more weeks during the past 12 months).
- 8% of youth reported self-injury in the past 12 months, with little change since 2006. (Self-injury is defined as cutting, burning, or bruising oneself on purpose in the past 12 months).
- Suicidality has remained steady: Since 2006, reports of seriously considering suicide fell in the range of 9-11%, and reports of suicide attempts were steady at 3%.
- Mental health problems continue to be much higher among females than males. In 2012, more females reported depressive symptoms (17% compared with 9%), self-injury (11% compared with 4%), and seriously considering suicide (13% compared with 7%).
- Reports of stress, depressive symptoms, self-injury, and suicidality increase by grade. By 8<sup>th</sup> grade, 13% of youth report they have seriously considered suicide in their lifetime, and 4% have attempted suicide.
- 10% 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. Half as many youth (5%) have spoken to a teacher or other adult at school, and 3% have talked to a doctor, nurse, or health care provider.

## Physical Activity, Nutrition, and Body Weight

Overall physical activity levels and overweight/obesity have remained similar from 2006 to 2012. In 2012, four out of five students (80%) reported engaging in vigorous physical activity on 3 or more days per week, and one in five youth (19%) were overweight or obese.

#### **PHYSICAL ACTIVITY**

- Reports of vigorous physical activity on three or more days per week were lowest in 2010 at 77%, but then increased to 80% in 2012.
- Reports of playing on a sports team have also increased, from 73% in 2006 to 79% in 2012.
- More males (83%) than females (78%) reported being physically active on three or more days a
  week.
- Reports of physical activity are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.
- While the majority of students report vigorous physical activity on 3 or more days per week, 33% of youth (including 32% of females and 34% 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.

#### **N**UTRITION

- There has been a decline in reports of non-diet soda consumption in the day prior to the survey, from 51% in 2006 to 37% in 2012.
- During this time, fruit and vegetable consumption did not change notably, with 81% reporting at least one serving of fruit on the day before the survey, and a similar proportion (80%) reporting at least one serving of vegetables or green salad.

#### **BODY WEIGHT**

- The proportion of youth who were overweight or obese was similar at 19-20% since 2006. (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 85<sup>th</sup> percentile or above for body mass index by age and gender, based on reference data.)
- Males are more likely than females to be overweight/obese (23% compared with 15%).
- Similar proportions of youth in 7<sup>th</sup> and 8<sup>th</sup> grades are overweight/obese.

## **Conclusions**

The 2012 middle school survey has documented a number of important findings that can inform regional and local policies, practices, and programming.

There has been notable progress in several key areas:

- There were substantial declines in cigarette smoking and alcohol use that occurred from 2006 to 2010, and were maintained in 2012. The low levels of these substances being used in the region represent substantial progress that has occurred alongside local and regional efforts to address youth substance use.
- Fewer students are reporting physical fighting, with reports of fighting on school property cut in half since 2006.
- Reports of bullying on school property have also decreased substantially since 2008. This
  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 have been stable in recent years:

- Marijuana use in the region has not changed notably since 2006; while reports remain low, a small number of youth continue to initiate marijuana use in middle school.
- Although fighting has decreased substantially, reports of weapon carrying have not shown a similar decline. This is notable given elevated concerns regarding school safety.
- Despite lower reports of school bullying, cyberbullying remained steady since 2010, with twice as many females being victimized as males. Females are particularly vulnerable to the types of relational bullying that can occur easily online.
- Since 2006, reports of mental health problems have not changed substantially. Depressive symptoms, self-injury, and suicidality, continue to affect concerning proportions of middle school youth.
- Reports of physical activity and overweight/obesity have not changed notably in the region despite declines in unhealthy eating habits.

The MWAHS shows substantial progress in reducing several concerning behaviors, including cigarette smoking, drinking, and school bullying, yet many middle school youth continue to engage in harmful behaviors or have serious mental health problems. Continued prevention, education, and intervention efforts are important in further advancing the health of adolescents in the region.

#### **REFERENCES**

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

<sup>&</sup>lt;sup>1</sup> Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013). *Monitoring the Future national results on drug use: 2012 Overview, Key Findings on Adolescent Drug Use*. Ann Arbor: Institute for Social Research, The University of Michigan. See: <a href="http://monitoringthefuture.org//pubs/monographs/mtf-overview2012.pdf">http://monitoringthefuture.org//pubs/monographs/mtf-overview2012.pdf</a>.

# MetroWest Region Middle Schools (Grades 7-8) 2006-2012 Trends in Key Indicators\*

	Year of Survey (%)			
	2006	2008	2010	2012
	(6,875)	(10,650)	(11,597)	(12,224)
SUBSTANCE USE				
Lifetime cigarette smoking	9.6	8.4	5.7	6.2
Current cigarette smoking (past 30 days)	3.9	3.7	2.4	2.1
Lifetime alcohol use	21.9	20.2	13.2	12.4
Current alcohol use (past 30 days)	9.0	8.6	4.9	5.0
Binge drinking (past 30 days) <sup>†</sup>	2.5	2.5	1.5	1.4
Rode with driver who had been drinking (lifetime)	18.7	20.5	15.2	14.3
Lifetime marijuana use	4.8	5.2	4.1	4.1
Current marijuana use (past 30 days)	3.0	3.3	2.2	2.4
Lifetime inhalant use	8.3	7.1	5.2	4.2
VIOLENCE				
Physical fighting (lifetime)	44.5	45.3	39.3	35.0
Physical fighting on school property (lifetime)	18.9	16.8	12.4	9.8
Carried a weapon (lifetime)	17.6	16.3	13.7	15.1
Carried weapon on school property (lifetime)	3.3	2.5	1.4	1.4
BULLYING VICTIMIZATION				
Bullying victim (past 12 months)	43.9	48.9	37.7	32.4
Bullying victim on school property (past 12 months)	38.8	42.7	31.7	26.7
Cyberbullying victim (past 12 months)	15.6	15.9	17.2	16.6
MENTAL HEALTH				
Life "very" stressful (past 30 days)	13.3	13.6	12.1	12.5
Depressive symptoms (past 12 months)	15.6	15.2	12.8	12.8
Self-injury (past 12 months)	7.7	8.5	6.7	7.8
Considered suicide (lifetime)	9.9	10.9	9.4	10.5
Attempted suicide (lifetime)	3.0	3.0	2.6	3.0
PHYSICAL ACTIVITY AND BODY WEIGHT				
Exercised for ≥20 minutes on 3 or more days/week	78.7	79.0	76.9	80.3
Overweight or obese <sup>‡</sup>	20.4	19.8	19.5	19.0

<sup>\*</sup> Source: MetroWest Adolescent Health Survey

<sup>†</sup> Consumed 5 or more drinks in a row on one or more occasions

 $<sup>\</sup>ddagger$  Students who were  $\ge$ 85th percentile for body mass index by age and gender, based on reference data

# MetroWest Region Middle Schools (Grades 7-8) 2012 Gender Patterns for Key Indicators\*

	Gender (%)		Total (%)	
	Female	Male		
	(6,086)	(6,074)	(12,224)	
SUBSTANCE USE				
Lifetime cigarette smoking	5.2	7.3	6.2	
Current cigarette smoking (past 30 days)	1.6	2.6	2.1	
Lifetime alcohol use	10.6	14.1	12.4	
Current alcohol use (past 30 days)	4.4	5.6	5.0	
Binge drinking (past 30 days) <sup>†</sup>	1.1	1.7	1.4	
Rode with driver who had been drinking (lifetime)	14.6	14.0	14.3	
Lifetime marijuana use	2.9	5.2	4.1	
Current marijuana use (past 30 days)	1.7	3.1	2.4	
Lifetime inhalant use	3.8	4.5	4.2	
VIOLENCE				
Physical fighting (lifetime)	19.7	50.2	35.0	
Physical fighting on school property (lifetime)	4.0	15.6	9.8	
Carried a weapon (lifetime)	6.1	24.2	15.1	
Carried weapon on school property (lifetime)	0.6	2.2	1.4	
BULLYING VICTIMIZATION				
Bullying victim (past 12 months)	37.2	27.4	32.4	
Bullying victim on school property (past 12 months)	29.9	23.3	26.7	
Cyberbullying victim (past 12 months)	22.1	11.0	16.6	
MENTAL HEALTH				
Life "very" stressful (past 30 days)	16.8	8.2	12.5	
Depressive symptoms (past 12 months)	16.5	9.0	12.8	
Self-injury (past 12 months)	11.1	4.4	7.8	
Considered suicide (lifetime)	13.4	7.4	10.5	
Attempted suicide (lifetime)	3.9	2.0	3.0	
PHYSICAL ACTIVITY AND BODY WEIGHT				
Exercised for ≥20 minutes on 3 or more days/week	77.9	82.6	80.3	
Overweight or obese <sup>‡</sup>	15.0	23.0	19.0	

<sup>\*</sup> Source: MetroWest Adolescent Health Survey

<sup>†</sup> Consumed 5 or more drinks in a row on one or more occasions

 $<sup>\</sup>ddagger$  Students who were  $\ge$ 85th percentile for body mass index by age and gender, based on reference data

# MetroWest Region Middle Schools (Grades 7-8) 2012 Grade Patterns for Key Indicators\*

	Grade (%)		Total (%)
	7 <sup>th</sup>	8 <sup>th</sup>	
	(6,193)	(6,031)	(12,224)
SUBSTANCE USE			
Lifetime cigarette smoking	4.0	8.4	6.2
Current cigarette smoking (past 30 days)	1.0	3.3	2.1
Lifetime alcohol use	8.2	16.6	12.4
Current alcohol use (past 30 days)	2.7	7.3	5.0
Binge drinking (past 30 days) <sup>†</sup>	0.5	2.4	1.4
Rode with driver who had been drinking (lifetime)	11.3	17.4	14.3
Lifetime marijuana use	1.8	6.4	4.1
Current marijuana use (past 30 days)	1.0	3.7	2.4
Lifetime inhalant use	3.4	5.0	4.2
VIOLENCE			
Physical fighting (lifetime)	33.8	36.2	35.0
Physical fighting on school property (lifetime)	8.1	11.6	9.8
Carried a weapon (lifetime)	13.7	16.5	15.1
Carried weapon on school property (lifetime)	0.7	2.1	1.4
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	32.1	32.7	32.4
Bullying victim on school property (past 12 months)	26.5	26.8	26.7
Cyberbullying victim (past 12 months)	15.2	18.1	16.6
MENTAL HEALTH			
Life "very" stressful (past 30 days)	9.8	15.3	12.5
Depressive symptoms (past 12 months)	11.3	14.4	12.8
Self-injury (past 12 months)	5.9	9.7	7.8
Considered suicide (lifetime)	8.3	12.7	10.5
Attempted suicide (lifetime)	2.1	3.8	3.0
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	81.0	79.5	80.3
Overweight or obese <sup>‡</sup>	18.1	20.0	19.0

<sup>\*</sup> Source: MetroWest Adolescent Health Survey

<sup>†</sup> Consumed 5 or more drinks in a row on one or more occasions

 $<sup>\</sup>ddagger$  Students who were  $\ge$ 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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