### 2010

### **HIGHLIGHTS FROM THE** METROWEST ADOLESCENT HEALTH SURVEY

### **METROWEST REGION** MIDDLE SCHOOL REPORT

**Funded by MetroWest Community Health Care Foundation** 



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



# Highlights from the 2010 MetroWest Adolescent Health Survey MetroWest Region Middle School Report

#### **BACKGROUND AND METHODOLOGY**

The MetroWest Adolescent Health Survey (MWAHS) is an initiative of the MetroWest Community Health Care Foundation to support community efforts to improve the health of youth in the region. Since 2006, middle schools and high schools have participated in the MWAHS every other year to monitor health and risk behaviors and identify trends and emergent issues. Findings are used by schools and communities to improve health education, inform prevention efforts, and set priorities for achieving a healthier youth population.

The 2010 middle school MWAHS was administered to a census of students in grades 7 and 8 in 21 middle school districts. Thirteen schools 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, 11,597 students in grades 7 and 8 completed the 2010 survey, representing 93% of youth in the 21 participating districts. These data allow, for the first time, an examination of behavioral trends across three timepoints from 2006 to 2010. This report summarizes current youth behaviors on key health indicators in the areas of substance use, violence, bullying, mental health, and physical activity. Current information is provided by gender and grade, and trends over the three waves of the MWAHS are highlighted.

#### **SUBSTANCE USE**

#### **CIGARETTE SMOKING**

Smoking initiation among MetroWest middle school students is declining: In 2010, 6% of youth reported smoking in their lifetime, compared with 10% in 2006.

- Smoking decreased among both males and females: Reports of lifetime smoking decreased from 11% in 2006 to 7% in 2010 among males and from 8% to 5% among females.
- Current cigarette smoking (in the past 30 days) is also slightly lower in 2010 (2%) compared with 2006 (4%).
- Smoking initiation doubles from 7<sup>th</sup> to 8<sup>th</sup> grade: 4% of 7<sup>th</sup> grade students have smoked in their lifetime compared with 8% of 8<sup>th</sup> grade students.
- Fewer MetroWest youth smoke compared with Massachusetts youth: For example, 4% of 8<sup>th</sup> grade students in the region report current smoking compared with 7% of 8<sup>th</sup> grade students in the state. The regional decline in smoking is consistent with state trends.

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

Fewer middle school students are starting to drink alcohol: In 2010, 13% of youth reported drinking alcohol in their lifetime, down from 22% in 2006. Current alcohol use also declined from 9% in 2006 to 5% in 2010.

- Alcohol use is lower among both genders: Lifetime use decreased from 18% in 2006 to 11% in 2010 among females, and from 26% to 15% among males.
- Lifetime reports of riding in a car with a driver who had been drinking decreased from 19% in 2006 to 15% in 2010.
- The proportion of students that reported binge drinking was 3% in 2006 and 2% in 2010. (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 (15% compared with 11%), but current drinking is similar among both genders (5%).
- Alcohol use increases substantially by grade: Lifetime use increases from 9% in 7<sup>th</sup> grade to 17% in 8<sup>th</sup> grade. Current drinking increases from 3% to 7%.
- Riding in a car with a driver who had been drinking also increases by grade from 12% in 7<sup>th</sup> grade to 19% in 8<sup>th</sup> grade.
- The decline in alcohol use in MetroWest is consistent with national trends reported for 8<sup>th</sup> grade students in the *Monitoring the Future*<sup>1</sup> study.

<sup>&</sup>lt;sup>1</sup> Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2011). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2010*. Ann Arbor: Institute for Social Research, The University of Michigan.

#### **M**ARIJUANA **U**SE

From 2006 to 2010, the proportion of youth who have tried marijuana in their lifetime remained steady at 4-5%.

- Current marijuana use (in the past 30 days) remained steady in the 2-3% range.
- Consistent with prior surveys, males are more likely than females to initiate marijuana use: 6% of males and 3% of females have tried marijuana.
- Marijuana use increases by grade: For example, reports of lifetime use increase from 2% in 7<sup>th</sup> grade to 6% in 8<sup>th</sup> grade.

#### INHALANT USE

Inhalant use is decreasing: In 2010, 5% of youth reported having used inhalants in their lifetime, compared with 8% in 2006.

- Decreases in inhalant use were reported by both genders: Lifetime use decreased from 8% in 2006 to 5% in 2010 among females, and from 9% to 6% among males. (Inhalant use is defined as sniffing glue, breathing the contents of spray cans, or inhaling any paints or sprays to get high.)
- Lifetime inhalant use is similar among males and females.
- Unlike alcohol and cigarette use, initiation of inhalant use does not increase notably from 7<sup>th</sup> grade (5%) to 8<sup>th</sup> grade (6%).

#### **VIOLENCE**

Fewer students are engaging in fighting and weapon carrying. Lifetime reports of physical fighting decreased from 45% in 2006 to 39% in 2010, and lifetime reports of weapon carrying decreased from 18% to 14%.

#### **PHYSICAL FIGHTING**

- There were declines in fighting among both genders: Lifetime physical fighting decreased from 63% in 2006 to 56% in 2010 among males, and from 26% to 22% among females.
- Lifetime reports of fighting on school property also decreased from 19% in 2006 to 12% in 2010. There were declines among both genders, but the decrease is especially notable among males (from 30% to 20%).
- Gender differences still persist: Over twice as many males as females report physical fighting in their lifetime, and over four times as many males as females report fighting on school property.
- The proportion of youth who have engaged in physical fighting in their lifetime increases from 37% in 7<sup>th</sup> grade to 42% in 8<sup>th</sup> grade. Fighting on school property is similar in 7<sup>th</sup> and 8<sup>th</sup> grades at 12-13%.

#### WEAPON CARRYING

- Reports of lifetime weapon carrying decreased from 18% in 2006 to 14% in 2010. Weapon carrying on school property also decreased from 3% to 1%.
- Declines in weapon carrying were found for males and females: For example, lifetime weapon carrying decreased from 28% in 2006 to 22% in 2010 among males, and from 7% to 5% among females.
- Consistent with gender patterns for physical fighting, many more males (22%) than females (5%) have carried a weapon in their lifetime.
- The proportion of youth who have carried a weapon in their lifetime increases from 12% in 7<sup>th</sup> grade to 16% in 8<sup>th</sup> grade. Lifetime reports of weapon carrying on school property are low in both 7<sup>th</sup> and 8<sup>th</sup> grades at 1-2%.

#### **BULLYING**

Reports of bullying have decreased, yet overall levels of victimization remain high: 44% of youth in 2006 and 38% in 2010 reported being bullied in the past 12 months. Reports of cyberbullying remain steady at 16-17%.

#### BULLYING

- Reports of bullying victimization in the past 12 months peaked in 2008 at 49% and decreased to 38% in 2010.
- Bullying victimization on school property similarly rose from 39% in 2006 to 43% in 2008, and then fell to 32% in 2010.
- The declines in bullying are similar for both genders: For example, victimization decreased from 45% in 2006 to 40% in 2010 among females, and from 43% to 35% among males.
- More females than males continue to report bullying victimization.
- Reports of bullying are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.
- While 38% of students reported being bullied in the past 12 months, only 22% reported talking to an adult about being victimized.

#### **CYBERBULLYING**

- Overall reports of cyberbullying victimization in the past 12 months have remained similar from 2006 to 2010 at 16-17%. However, there is an increase in cyberbullying reports among females from 18% in 2006 to 22% in 2010.
- While cyberbullying victimization has always been higher among females than males, the gender gap is greater in 2010 than in prior years.
- Reports of cyberbullying increase by grade from 15% in 7<sup>th</sup> grade to 20% in 8<sup>th</sup> grade.
- While 17% of students reported that they were cyberbullied, only 7% reported talking to an adult about it.

#### MENTAL HEALTH

There is a slight decrease in student reports of depressive symptoms from 2006 to 2010. For the most part, however, reports of mental health problems, including stress, self-injury, and suicidality, remain steady.

- Reports of depressive symptoms in the past 12 months decreased from 16% in 2006 to 13% in 2010, with similar declines among males and females. (Depressive symptoms are defined as feeling sad or hopeless almost every day for two or more weeks during the past 12 months.)
- Reports of feeling "very" stressed in the past 30 days are similar from 2006 to 2010 at 12-13%.
- While overall reports of self-injury remain steady at 7-8%, there is a slight decrease among males from 7% to 5%. (Self-injury is defined as cutting, burning, or bruising oneself on purpose in the past 12 months.)
- Indicators of suicidality have remained steady: From 2006 to 2010, 9-10% of students reported they had seriously consider suicide, and 3% reported they had attempted suicide.
- Reports of mental health problems continue to be higher among females than males. In 2010, 15% of females reported depressive symptoms compared with 10% of males; 9% of females engaged in self-injury compared with 5% of males.
- Reports of stress, depressive symptoms, and self-injury increase from 7<sup>th</sup> to 8<sup>th</sup> grade. For example, 10% of 7<sup>th</sup> grade students and 15% of 8th grade students report feeling "very" stressed.
- Suicidality also increases from 7<sup>th</sup> to 8<sup>th</sup> grade. The proportion of youth who have considered suicide in their lifetime increases from 8% in 7<sup>th</sup> grade to 11% in 8<sup>th</sup> grade. By 8<sup>th</sup> grade, 3% of youth report they have attempted suicide.

#### PHYSICAL ACTIVITY AND BODY WEIGHT

Physical activity levels and overweight/obesity remain relatively constant. In 2010, 77% of youth reported engaging in vigorous physical activity at least 3 times per week, and one in five (20%) were overweight or obese; these are similar to figures from 2006 and 2008.

#### **PHYSICAL ACTIVITY**

- From 2006 to 2010, 75-76% of females reported engaging in vigorous physical activity for at least 20 minutes at least 3 times per week; however, this figure decreased slightly among males from 82% in 2006 to 79% in 2010.
- As in prior years, slightly more males (79%) than females (75%) report being physically active.
- Reports of physical activity are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.

#### **BODY WEIGHT**

- The proportion of youth who are overweight or obese remained steady at 20% from 2006 to 2010. (Reports of overweight/obesity are based on self-reported height and weight, which is used to calculate body mass index.)
- As in previous survey waves, overweight/obesity is higher among males (24%) than females (15%).
- Similar proportions of 7<sup>th</sup> and 8<sup>th</sup> grade students are overweight/obese.

#### **CONCLUSIONS**

The MWAHS provides an opportunity to examine current health behaviors among youth as well as identify emergent issues and patterns over time, now that three survey waves have been completed. While additional timepoints are important for establishing trends, the 2010 survey has documented a number of interesting findings that can inform regional and local policies and practices:

- In 2010, fewer youth report cigarette smoking, alcohol use, and inhalant use than in previous surveys. These declines are encouraging, consistent with some state and national trends, and local efforts to address these issues. However, marijuana use remains similar.
- Physical fighting, weapon carrying, and overall reports of bullying are decreasing. However, cyberbullying is increasing among females. Many students continue to report being victims of violence and bullying.
- Student reports of mental health problems have not changed substantially since 2006, and continue to affect substantial proportions of middle school youth.
- Student reports of physical activity and overweight/obesity show little change from 2006 to 2010.

There has been progress in reducing several risk behaviors, yet many middle school youth continue to initiate substance use and engage in other dangerous behaviors that require continued education and prevention efforts. The 2012 MWAHS will further inform school and community initiatives to keep middle school youth healthy and safe.

# MetroWest Region Middle School Students (Grades 7-8) 2006-2010 Trends in Key Indicators\*

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

<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 School Students (Grades 7-8) 2010 Gender Patterns for Key Indicators\*

	Gender (%)		Total (%)
	Female	Male	
	(5,704)	(5,832)	(11,597)
SUBSTANCE USE			
Lifetime cigarette smoking	4.6	6.9	5.7
Current cigarette smoking (past 30 days)	1.9	2.9	2.4
Lifetime alcohol use	11.3	15.1	13.2
Current alcohol use (past 30 days)	4.5	5.3	4.9
Binge drinking (past 30 days) <sup>†</sup>	1.2	1.8	1.5
Rode with driver who had been drinking (lifetime)	14.9	15.5	15.2
Lifetime marijuana use	2.7	5.5	4.1
Current marijuana use (past 30 days)	1.4	3.0	2.2
Lifetime inhalant use	4.7	5.6	5.2
VIOLENCE			
Physical fighting (lifetime)	22.1	56.0	39.3
Physical fighting on school property (lifetime)	4.7	19.8	12.4
Carried a weapon (lifetime)	5.2	22.2	13.7
Carried weapon on school property (lifetime)	0.7	2.1	1.4
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	40.4	35.0	37.7
Bullying victim on school property (past 12 months)	33.1	30.2	31.7
Cyberbullying victim (past 12 months)	22.2	12.2	17.2
MENTAL HEALTH			
Life "very" stressful (past 30 days)	15.6	8.7	12.1
Depressive symptoms (past 12 months)	15.2	10.4	12.8
Self-injury (past 12 months)	8.9	4.6	6.7
Considered suicide (lifetime)	11.2	7.6	9.4
Attempted suicide (lifetime)	3.2	1.9	2.6
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	74.5	79.3	76.9
Overweight or obese <sup>‡</sup>	15.3	23.5	19.5

<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 School Students (Grades 7-8) 2010 Grade Patterns for Key Indicators\*

	Grade (%)		Total (%)	
	7 <sup>th</sup>	8 <sup>th</sup>		
	(5,935)	(5,662)	(11,597)	
SUBSTANCE USE				
Lifetime cigarette smoking	3.5	8.0	5.7	
Current cigarette smoking (past 30 days)	1.3	3.5	2.4	
Lifetime alcohol use	9.3	17.2	13.2	
Current alcohol use (past 30 days)	3.3	6.5	4.9	
Binge drinking (past 30 days) <sup>†</sup>	0.8	2.3	1.5	
Rode with driver who had been drinking (lifetime)	12.0	18.6	15.2	
Lifetime marijuana use	2.3	6.0	4.1	
Current marijuana use (past 30 days)	1.4	3.1	2.2	
Lifetime inhalant use	4.7	5.7	5.2	
VIOLENCE				
Physical fighting (lifetime)	37.0	41.7	39.3	
Physical fighting on school property (lifetime)	12.1	12.7	12.4	
Carried a weapon (lifetime)	11.9	15.6	13.7	
Carried weapon on school property (lifetime)	1.1	1.8	1.4	
BULLYING VICTIMIZATION				
Bullying victim (past 12 months)	37.5	38.0	37.7	
Bullying victim on school property (past 12 months)	30.7	32.7	31.7	
Cyberbullying victim (past 12 months)	14.9	19.5	17.2	
MENTAL HEALTH				
Life "very" stressful (past 30 days)	9.6	14.7	12.1	
Depressive symptoms (past 12 months)	11.3	14.4	12.8	
Self-injury (past 12 months)	4.9	8.6	6.7	
Considered suicide (lifetime)	7.6	11.2	9.4	
Attempted suicide (lifetime)	1.9	3.3	2.6	
PHYSICAL ACTIVITY AND BODY WEIGHT				
Exercised for ≥20 minutes on 3 or more days/week	77.1	76.7	76.9	
Overweight or obese <sup>‡</sup>	18.7	20.3	19.5	

<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