



Results of the
MetroWest
Adolescent Health Survey

MetroWest Regional
Middle School Report
Grades 7 and 8
EXECUTIVE SUMMARY



2008

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METROWEST
COMMUNITY
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Education Development Center, Inc.



EDC

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MetroWest Region Middle School EXECUTIVE SUMMARY

Results from the 2008 MetroWest Adolescent Health Survey

INTRODUCTION

In 2006, the MetroWest Community Health Care Foundation embarked on a ten-year initiative to provide communities with timely, local data on the health and risk behaviors of youth. To accomplish this goal, the **MetroWest Adolescent Health Survey (MWAHS)** is being administered every other year to middle and high school students in the MetroWest region. The current report provides data from the second administration of the MWAHS in the Fall of 2008.

The 2006 survey was initially targeted only to district high schools. However, at a meeting with district representatives, many expressed interest in better understanding the early initiation of risk behaviors and the health needs of middle school students. In response, middle school surveys were offered as an optional addition. In 2006, 13 of 25 districts in the region decided to conduct middle school surveys. In 2008, the number of participating middle school districts increased to 19 (76%). This increase shows a strong commitment to using data to drive community-level decision-making, programming, and policy change. It also allows for the creation of a highly representative regional MetroWest dataset to which individual school districts can compare their results.

For the first time, the report provides information on trends from the 2006 and 2008 survey waves. As subsequent waves of surveys are conducted, communities across the region will be able to monitor emergent issues and trends, identify priorities, and measure progress towards achieving a healthier adolescent population.

The MWAHS development, coordination of survey administration, analysis, and reporting were carried out by the Health and Human Development Division at Education Development Center, Inc.

METHODS

Middle school students in 19 MetroWest districts participated in the 2008 survey. All schools surveyed grades 7 and 8; at four school districts, administrators chose to survey students in 6th grade as well.* Rather than surveying a sample of students, a census was conducted of all students in the participating grades who were present on the days of the survey. Therefore, the results in this report reflect the range of students in the region.

The MWAHS is an anonymous and voluntary survey. Parents/guardians are informed of the survey in advance and given the opportunity to opt out their child(ren). Students are also informed of the voluntary nature of the survey and can decide whether or not to participate. Very few students (1.9%) did not participate for either of these reasons. In addition, the survey administration protocol takes numerous steps to protect students' anonymity and provide privacy. Such steps have been shown to result in valid and reliable youth reporting.^{1,2,3}

This report includes data from 10,650 students in grades 7 and 8. This represents 93% of eligible students in the 19 participating school districts. (Because of the relatively small number of schools including 6th grade students, these findings are reported elsewhere.) To make use of all data and provide a foundation for future analyses, we have included all 19 participating districts when examining trends from 2006 to 2008.†

* Districts that included 6th grade will receive their data in a separate supplement.

† We explored whether it was necessary to restrict the trend analysis to the 13 districts that participated in both surveys. Analyses showed that the differences between the original cohort of 13 districts and the current group of 19 districts were minimal and did not impact the overall findings.

The MWAHS is largely based on the Youth Risk Behavior Surveillance System (YRBSS), a program of the Centers for Disease Control and Prevention (CDC).⁴ The YRBSS monitors national and state trends in the prevalence of risk behaviors contributing to the leading causes of morbidity and mortality among youth, including:

- ◆ Tobacco, alcohol and drug use
- ◆ Unhealthy dietary behaviors
- ◆ Inadequate physical activity
- ◆ Suicide
- ◆ Violence.

In addition, the MWAHS incorporates topics of particular interest to the MetroWest (MW) communities. Based on feedback from school district personnel, the MWAHS also assesses:

- ◆ Prescription drug misuse
- ◆ Stress and mental health
- ◆ School attachment and adult support
- ◆ Bullying.

The middle school MWAHS is designed specifically for middle school youth in terms of length, reading level, and developmental appropriateness. Questions generally focus on the initiation of risk behaviors that are known to increase over the middle school years.

Massachusetts administered a middle school risk behavior survey for the first time in 2007. When possible, this report will compare data from the MW region and the state. No national comparison data is available, although efforts are underway to expand the CDC middle school survey to a nationally representative sample of youth.

SUBSTANCE USE

OVERALL PATTERNS

One in four middle school youth in the MetroWest region (24%) have experimented with alcohol or other substances in their lifetime. Alcohol is the most commonly used substance: 20% of students have had at least one drink of alcohol in their lifetime and 9% report drinking in the past 30 days. 7% of youth report having a drink before they were 11 years of age, and current drinking more than doubles from 5% in 7th grade to 12% in 8th grade. Middle school students who use alcohol are far more likely to also smoke cigarettes or use marijuana or inhalants.

Fewer students smoke cigarettes than use alcohol: 8% of youth have smoked cigarettes in their lifetime, and 4% have smoked in the past 30 days. Marijuana use is still relatively rare, with 5% reporting lifetime use and 3% reporting current use. Many students initiate use in middle school: from 7th to 8th grade, cigarette smoking increases from 5% to 12% and marijuana use increases from 2% to 8%. While cigarette smoking is more prevalent than marijuana use in middle school, this pattern reverses in high school, where students are more likely to use marijuana than smoke cigarettes.

The proportion of youth who report lifetime cigarette smoking (8%) is similar to the proportion who have ever used inhalants (7%). While other substance use typically increases as students get older, inhalant use decreases in the high school years.

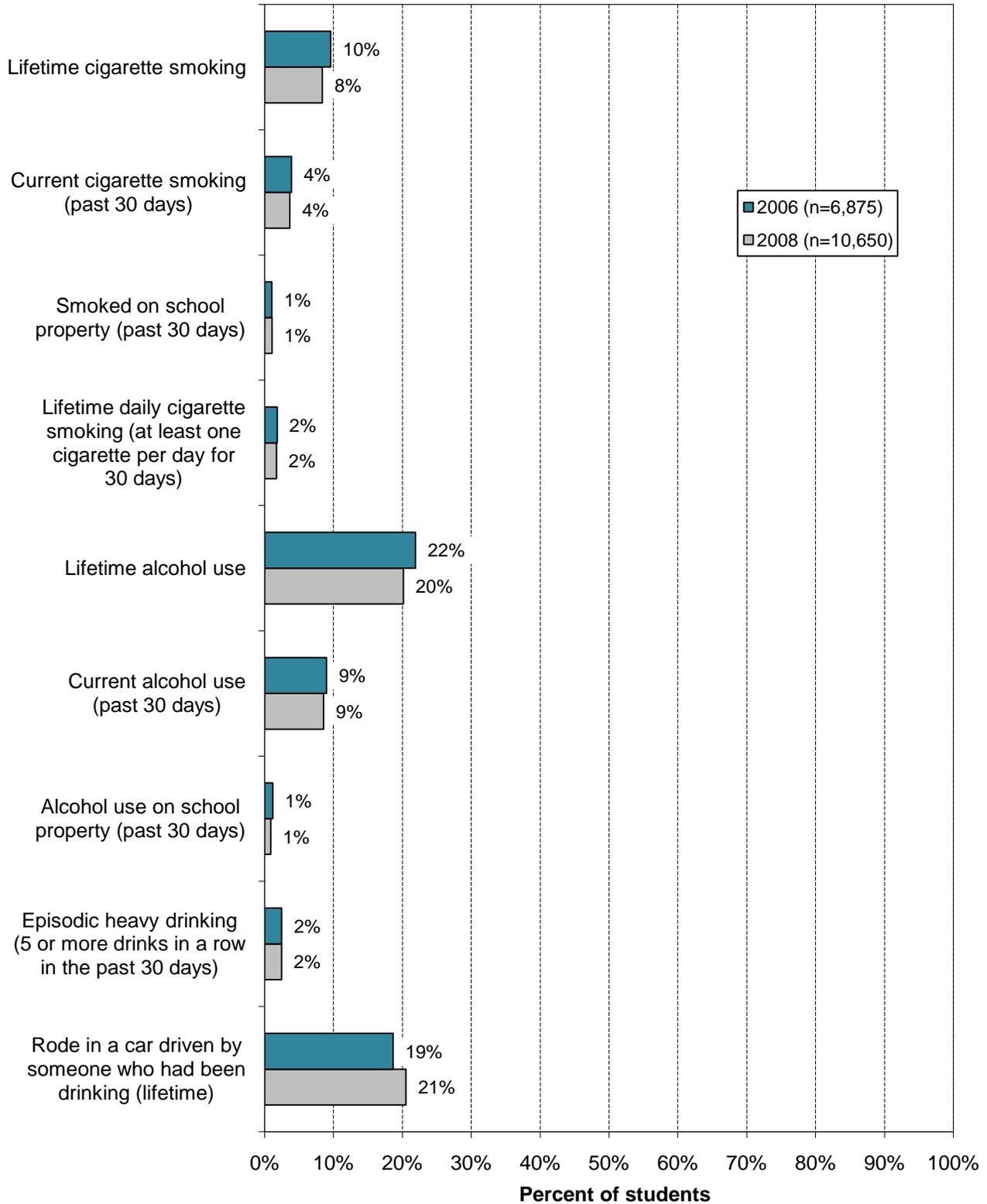
With the exception of inhalants, males are more likely to report substance use than females in middle school. For example, more males than females report lifetime cigarette smoking (10% vs. 7%), alcohol use (24% vs. 16%), and marijuana use (7% vs. 3%). Inhalant use is similar for males and females at 7%.

Substance use in middle school – including use of alcohol, cigarettes, and marijuana – is substantially lower in the MetroWest region relative to the state. Among 8th grade students, fewer youth in the region report lifetime alcohol use (26% vs. 34%), current use (12% vs. 17%), and “binge” drinking (2% vs. 8%) relative to youth statewide. Lifetime smoking among MetroWest youth (12%) is half that of Massachusetts youth (23%), and current smoking is also much lower in the region (5% vs. 8%). Lifetime use (8% vs. 14%) and current marijuana use (5% vs. 8%) are notably less prevalent in the region as well.

OVERALL TRENDS FROM 2006 TO 2008

Use of all substances—alcohol, cigarettes, marijuana, inhalants, steroids, and prescription drugs—has remained steady in the region since 2006.

Tobacco Use, Alcohol Use, and Riding With Impaired Drivers in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



TOBACCO USE

CURRENT PATTERNS

- ◆ **After alcohol, cigarettes are the most frequently used substance.** 8% of students smoked cigarettes in their lifetime, and 4% have smoked in the past 30 days.
- ◆ **Experimentation with cigarettes increases over the middle school years.** Only 2% of students smoked a whole cigarette before the age of 11. From 7th to 8th grade, lifetime smoking increases from 5% to 12%, and current smoking increases from 2% to 5%.
- ◆ **A very small number of middle school youth smoke regularly.** Only 1% of 7th grade and 2% of 8th grade students smoked at least one cigarette every day for 30 days at some point in their lifetime.
- ◆ **Smoking on school property is rare.** Only 1% of youth smoked at school in the past 30 days.
- ◆ **Of youth who smoke, few (7%) buy their cigarettes in a store.** The most common sources of cigarettes are: 21% bum/borrow them from someone else; 17% give someone else money to buy them; 13% take them from a store or family member; and 9% are given cigarettes from someone 18 years of age or older. 33% got them some other way.
- ◆ **Males are a little more likely than females to smoke cigarettes.** More males than females report lifetime smoking (10% vs. 7%) and current smoking (4% vs. 3%).

TRENDS FROM 2006 TO 2008

- ◆ **Reports of cigarette smoking are similar in 2006 and 2008.** About 4% of students are current smokers at each time point, and 8-10% have tried smoking at least once.

ALCOHOL USE

CURRENT PATTERNS

- ◆ **Alcohol is the most frequently used substance among middle school youth.** One in five youth (20%) report lifetime use, and nearly one in ten (9%) consumed alcohol in the past 30 days.
- ◆ **A substantial number of youth experiment with alcohol early.** 7% of all youth had their first drink prior to age 11. Lifetime use increases from 14% in 7th grade to 26% in 8th grade, current use increases from 5% to 12%, and “binge” drinking increases from 1% to 4%.
- ◆ **A small number of middle school students report episodic heavy (“binge”) drinking.** 2% of students report “binge” drinking in the past 30 days, and 3% report being “drunk” in the past 30 days. *“Binge” drinking is defined as having five or more drinks in a row on one occasion.*
- ◆ **Alcohol use on school property is rare.** Only 1% of students used alcohol on school property in the past 30 days.
- ◆ **Most students who drink get alcohol from their own homes.** 31% of youth drinkers say they get alcohol from home, *with* their parent’s knowledge. Another 19% get it from home, *without* their parent’s knowledge. 20% of youth get alcohol at parties.
- ◆ **One in five youth (21%) report they have been a passenger in a car with a driver who had been drinking.** *Note: this could have happened only once, and the driver could have been a parent, other adult, sibling or older peer.*
- ◆ **Males are more likely to report drinking than females.** 24% of males and 16% of females have had a drink of alcohol in their lifetime. 10% of males and 8% of females drank in the past 30 days. Males also initiate alcohol use earlier: nearly twice as many males as females (9% vs. 5%) consumed alcohol prior to age 11. It is notable that in high school, drinking among males and females is similar.

TRENDS FROM 2006 TO 2008

- ◆ **Alcohol use is steady over the past two years.** 9% of middle school students report recent drinking at both time points, and 2-3% report “binge” drinking.

MARIJUANA USE

CURRENT PATTERNS

- ◆ **One in twenty middle school students (5%) used marijuana in their lifetime**, and 3% used marijuana in the past 30 days.
- ◆ **Experimentation with marijuana begins in middle school.** Only 1% of youth used marijuana prior to age 11. From 7th to 8th grade, lifetime use quadruples from 2% to 8%. Similarly, current use rises from 2% to 5%.
- ◆ **Males are more likely to use marijuana than females.** Lifetime use is nearly twice as high among males (7%) as females (4%). Current use is also higher among males (4% vs. 2%).

TRENDS FROM 2006 TO 2008

- ◆ **Marijuana use in middle school remains steady.** At both time points, about 5% of youth report they have used marijuana at least once, and 3% report current use.

INHALANT USE

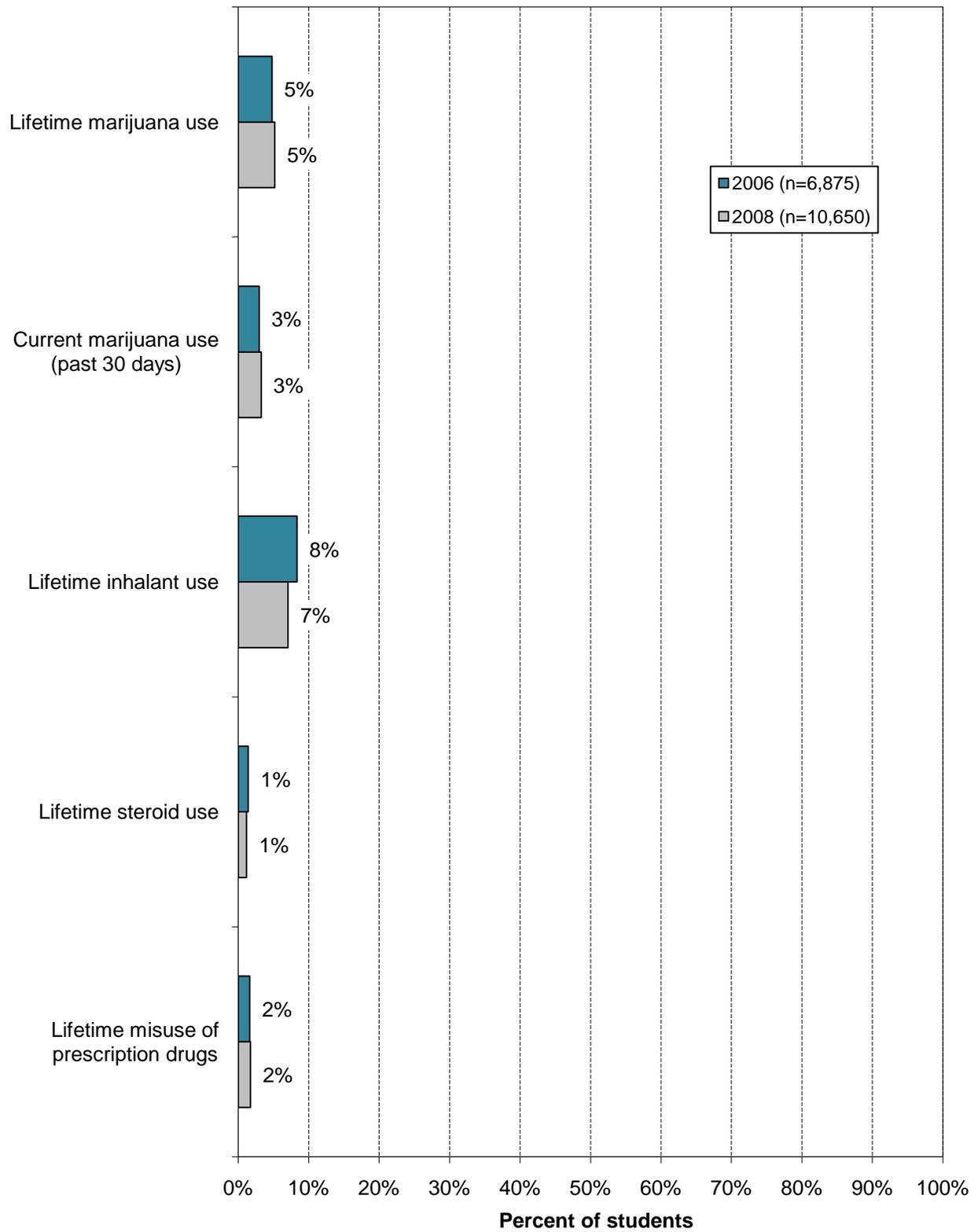
CURRENT PATTERNS

- ◆ **After alcohol and cigarettes, inhalants are the substance most often used in middle school.** 7% of students have used inhalants in their lifetime. *This includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high.*
- ◆ **Lifetime inhalant use increases slightly from 6% in 7th grade to 8% in 8th grade.**
- ◆ **Unlike patterns for alcohol and other substances, inhalant use is similar among males and females.**

TRENDS FROM 2006 TO 2008

- ◆ **There are no changes in lifetime inhalant use.** At both time points, about 7-8% of middle school students say they have experimented with inhalants at least once.

Marijuana and Other Substance Use in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



PRESCRIPTION DRUG AND STEROID MISUSE

CURRENT PATTERNS

- ◆ **Misuse of prescription drugs and steroids occurs infrequently in middle school.** 2% of students misused prescription drugs in their lifetime, and 1% misused steroids. *This means using them without a doctor's prescription.*
- ◆ **While the prevalence of steroid use increases only slightly after middle school, prescription drug misuse increases substantially in the high school years.**

TRENDS FROM 2006 TO 2008

- ◆ **Reports of lifetime misuse of prescription drugs and steroids are steady over the past two years.**

AVAILABILITY OF SUBSTANCE ON SCHOOL PROPERTY

CURRENT PATTERNS

- ◆ **A small number of youth have access to substances on school property.** 4% were offered, sold, or given tobacco or alcohol on school property in the past 12 months, and the same proportion were offered, sold, or given marijuana, pills, or other drugs during this time.
- ◆ **Males are more likely than females to have access to illegal substances at school.** For example, 5% of males and 3% of females were offered, sold, or given tobacco or alcohol in the past year. This pattern is the same for marijuana, pills, and other drugs.
- ◆ **The availability of substances on school property increases notably from 7th to 8th grade.** Availability of tobacco and alcohol doubles from 3% in 7th grade to 6% in 8th grade. For marijuana, pills, and other drugs, availability triples from 2% in 7th grade to 6% in 8th grade.

TRENDS FROM 2006 TO 2008

- ◆ **The availability of substances on school property is similar over time,** with 8th grade students consistently reporting greater access to tobacco, marijuana, alcohol, and other drugs at both time points.

VIOLENCE AND RELATED BEHAVIORS

OVERALL PATTERNS

Violence, including physical fighting, bullying, weapon carrying, and other threats to personal and school safety, often increases during the middle school years. Bullying – defined as being repeatedly teased, threatened, hit, kicked, or excluded by another student or group of students – is the most common form of violence experienced by MetroWest middle school youth. Half of all middle school students (49%) were bullied in the past 12 months, 43% were bullied on school property, and 16% were bullied electronically, defined as using the Internet, phone, or other electronic communications to bully, tease or threaten.

Along with bullying, physical fighting and weapons also pose a serious concern in middle school: over a quarter of youth (26%) have been in a fight in the past 12 months, and 8% of youth say they have carried a weapon, such as a gun, knife, or club, in the past 30 days. Similar proportions of 7th and 8th grade students engage in these behaviors. Physical fighting is highest in middle school and early high school; in the MetroWest regional high school survey, reports of physical fighting decrease steadily after 9th grade.

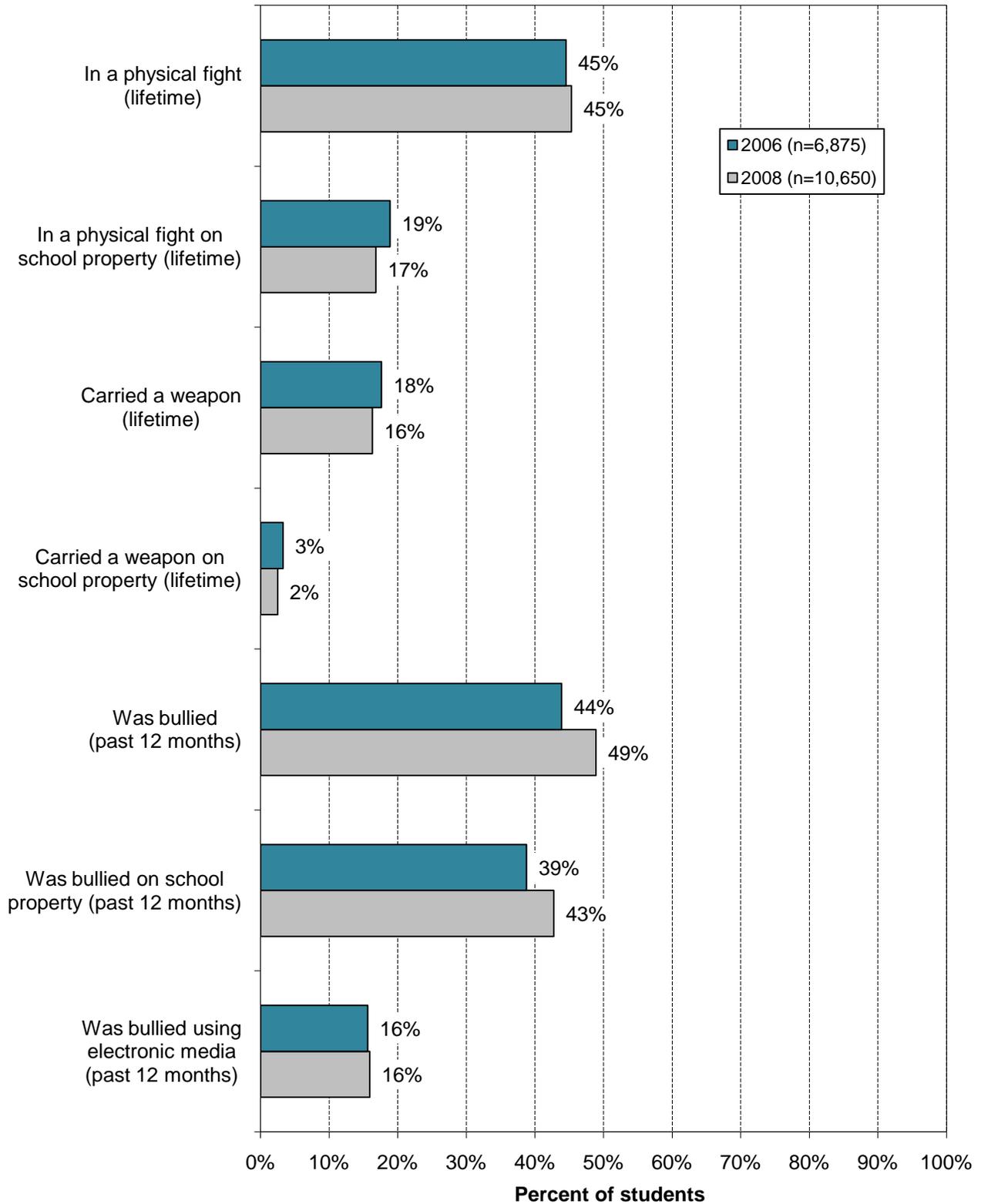
Males are far more likely to engage in violence-related behaviors. Nearly three times as many males as females report being in a physical fight in the past year, and males are four times as likely to report carrying a weapon in the past 30 days. Males are also more likely to self-report that they are bullying perpetrators (39% compared to 30%). However, females are more likely to report being victimized by bullying (51% vs. 46%), and especially electronic bullying (20% vs. 12%).

OVERALL TRENDS FROM 2006 TO 2008

There are some indicators that bullying is on the rise, particularly among females. Bullying victimization increased from 44% in 2006 to 49% in 2008, and bullying on school property increased from 39% to 43%. Bullying victimization increased more for females (from 45% to 51%) than males (from 43% to 46%), and victimization on school property follows a similar pattern. Electronic bullying does not show an overall increase.

Despite the apparent increase in bullying, there are no changes in physical fighting or weapon carrying in the past two years.

Physical Fighting, Weapon Carrying, and Bullying in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



PERSONAL SAFETY AT SCHOOL

CURRENT PATTERNS

- ◆ **Theft and damage of personal property at school are common occurrences.** Nearly one in four students (23%) had their property (such as clothing or books) stolen or deliberately damaged at school in the past 12 months. More males report this (28%) than females (19%). 8th grade students (25%) are more likely to report this than 7th grade students (21%).
- ◆ **Fears about safety at school impact attendance for a small group of youth.** 3% of students didn't attend school on at least one occasion in the past 30 days because they felt they would be unsafe at school or on the way to or from school.

TRENDS FROM 2006 TO 2008

- ◆ **Property damage and theft at school has increased somewhat,** from 19% in 2006 to 23% in 2008. This increase was similar for males and females.
- ◆ **Absence from school due to safety concerns has not changed.**

PHYSICAL FIGHTING

CURRENT PATTERNS

- ◆ **Physical fighting is common among middle school students.** Nearly half of all students (45%) were in a physical fight in their lifetime, and 26% were in a fight in the past 12 months.
- ◆ **A substantial amount of fighting occurs on school property.** 17% of youth were in a physical fight on school property in their lifetime, and 7% were in a fight at school in the past 12 months.
- ◆ **Fights can sometimes result in serious consequences.** 6% of youth have received medical treatment as a result of an injury suffered in a fight.
- ◆ **Males are far more likely than females to engage in physical fighting.** Over twice as many males (38% vs. 14%) were in a physical fight in the past 12 months, and five times as many males were in a fight on school property (11% vs. 2%).
- ◆ **Fighting is slightly higher among older students.** Lifetime physical fighting increases from 43% in 7th grade to 48% in 8th grade. 25% of 7th grade students and 27% of 8th grade students were in a fight in the past 12 months.

TRENDS FROM 2006 TO 2008

- ◆ **Reports of physical fighting are similar.** At both time points, 45% of students were in a physical fight at least once in their lifetime, and about 17-19% were in a fight on school property at least once.

WEAPONS

CURRENT PATTERNS

- ◆ **A minority, but still concerning proportion of youth, report they have carried a weapon.** 16% carried a weapon, such as a gun, knife, or club, in their lifetime, and 8% carried a weapon in the past 30 days.
- ◆ **A small number of youth (2%) have carried a weapon on school property in their lifetime.**
- ◆ **Males are four times as likely to carry weapons as females.** 26% of males and 6% of females carried a weapon in their lifetime. 13% of males and 3% of females carried a weapon in the past 30 days.
- ◆ **Weapon-carrying remains steady across grades.**

TRENDS FROM 2006 TO 2008

- ◆ **Reports of weapon-carrying are similar.** At the two time points, about 16-18% of youth have carried a weapon in their lifetime, and 2-3% have carried a weapon on school property at least once.

BULLYING

CURRENT PATTERNS

- ◆ **Nearly half of all middle school youth have been victims of bullying.** 49% were bullied in the past 12 months, and 43% were bullied on school property. One in three youth (35%) report they have bullied others.
- ◆ **A smaller, but still considerable, proportion of youth are victims of electronic bullying.** 16% of youth were bullied electronically in the past 12 months. 9% were perpetrators of electronic bullying.
- ◆ **Females are somewhat more likely to report being a victim of bullying.** Overall, bullying victimization is higher among females (51%) than males (46%). There is a greater gender difference in electronic bullying victimization, which is reported by 20% of females and 12% of males.
- ◆ **Males are more likely to self-report they have been bullying perpetrators.** 39% of males and 30% of females said they bullied someone else in the past 12 months. However, females and males report similar levels of electronic bullying perpetration (9% and 10% respectively).
- ◆ **Reports of bullying are similar in 7th and 8th grades.**

TRENDS FROM 2006 TO 2008

- ◆ **The overall prevalence of bullying may be on the rise, particularly among females.** Bullying victimization in the past 12 months increased from 44% in 2006 to 49% in 2008. Bullying increased among both genders, but the change was greater for females (from 45% to 51%) than males (from 43% to 46%). Similarly, bullying on school property increased from 39% to 43%, with a greater increase for females (37% to 43%) than males (40% to 43%).
- ◆ **Reports of electronic bullying are similar at both time points,** with 16% of youth reporting electronic bullying victimization.

BEHAVIORS RELATED TO UNINTENTIONAL INJURY

OVERALL PATTERNS

Although the vast majority of youth wear seatbelts regularly (89% wear seatbelts all or most of the time), many middle school youth fail to wear helmets when rollerblading, skateboarding, or bicycling, increasing their risk of unintentional injury. Over half of those who rollerblade or skateboard (51%) never or rarely wear a helmet, and more than one third of students who ride a bicycle (37%) never or rarely wear a helmet. Males are more likely than females to ride without helmets, and helmet use decreases from 7th to 8th grade. This is a concern, since rates continue to fall during high school.

Risk of unintentional injury also may increase when youth ride in cars driven by individuals who have been drinking alcohol. At least once in their lifetime, 21% of students were passengers in a car with a driver who had been drinking. Reports of riding with a driver who had been drinking increase from 16% in 7th grade to 25% in 8th grade. *Note: the driver could have been a parent, other adult, or an individual under the age of 21.*

OVERALL TRENDS FROM 2006 TO 2008

Student reports of safety-related behaviors – helmet use, seatbelt use, and riding with a driver who had been drinking – are similar at the two time points.

SEATBELT AND HELMET USE

CURRENT PATTERNS

- ◆ **Most students (89%) wear seatbelts most or all of the time.** Only 4% never or rarely wear a seatbelt when riding in a car driven by someone else.
- ◆ **Many students put themselves at risk of injury by not wearing helmets.** 37% of bicycle riders never or rarely wear a helmet. 51% of students who rollerblade or skateboard never or rarely wear a helmet.
- ◆ **Males are more likely than females to be at risk of unintentional injury.** More males than females never or rarely wear helmets when riding bicycles (42% vs. 32%) and when rollerblading or skateboarding (59% vs. 44%). Males are also slightly more likely to never or rarely wear seatbelts (5% vs. 3%).
- ◆ **Helmet and seatbelt use decline as students get older.** 31% of 7th grade students and 44% of 8th grade students never or rarely wear helmets when bicycling. Lack of helmet use when rollerblading or skateboarding also increases from 7th grade (45%) to 8th grade (58%).

TRENDS FROM 2006 TO 2008

- ◆ **Use of helmets (when bicycling or when rollerblading/skateboarding) is similar at the two time points.**
- ◆ **Seatbelt use also remains steady.**

DRIVING AFTER DRINKING

CURRENT PATTERNS

- ◆ **At least once in their lifetime, 21% rode in a car with a driver who had been drinking.** This is similar for males and females, and the driver could be a parent, other adult, or someone else.
- ◆ **As students get older, they are more likely to report they rode in a car with a driver who had used alcohol.** 16% of 7th grade students and 25% of 8th grade students have ridden with a driver who had been drinking.

TRENDS FROM 2006 TO 2008

- ◆ **Riding with a driver who had been drinking is similar at the two time points,** with about 19-21% reporting this at least once in their lifetime.

STRESS, MENTAL HEALTH, AND SUICIDE

OVERALL PATTERNS

Mental health is a concern for a substantial proportion of middle school youth. Stress is common, with one in seven youth (14%) reporting their life was “very” stressful in the past 30 days. A similar proportion of youth (15%) experienced symptoms of depression in the past 12 months, defined as feeling sad or hopeless for two or more weeks in a row. 11% of students report that they have seriously considered suicide in their lifetime, and 3% say they have made a suicide attempt.

Consistent with gender differences in national data, females are more likely than males to experience stress, depressive symptoms, and suicidality. 8th grade students are also more likely than their younger peers to report that they have experienced these mental health issues in their lifetime, with prevalences increasing during the high school years.

While reports of depressive symptoms are similar for youth in the state and the MetroWest region, self-injury is substantially lower in MetroWest (9% vs. 16% among 8th grade students). Comparison data is not available for suicidality and suicide attempts.

OVERALL TRENDS FROM 2006 TO 2008

Similar proportions of students report high levels of stress, depressive symptoms, self-injury, and suicidality at both time points.

STRESS

CURRENT PATTERNS

- ◆ **Stress is common among middle school youth**, with 25% reporting that their life was “somewhat” stressful, and 14% reporting their life was “very” stressful in the past 30 days.
- ◆ **More females experience stress than males.** 17% of females and 11% of males said their life was “very” stressful.
- ◆ **Older students are more likely to experience stress.** Reports of recent stress increase from 7th grade (11%) to 8th grade (16%).

TRENDS FROM 2006 TO 2008

- ◆ **Reports of life being “very” stressful are steady at 13-14% at both time points.**

MENTAL HEALTH AND SUICIDE

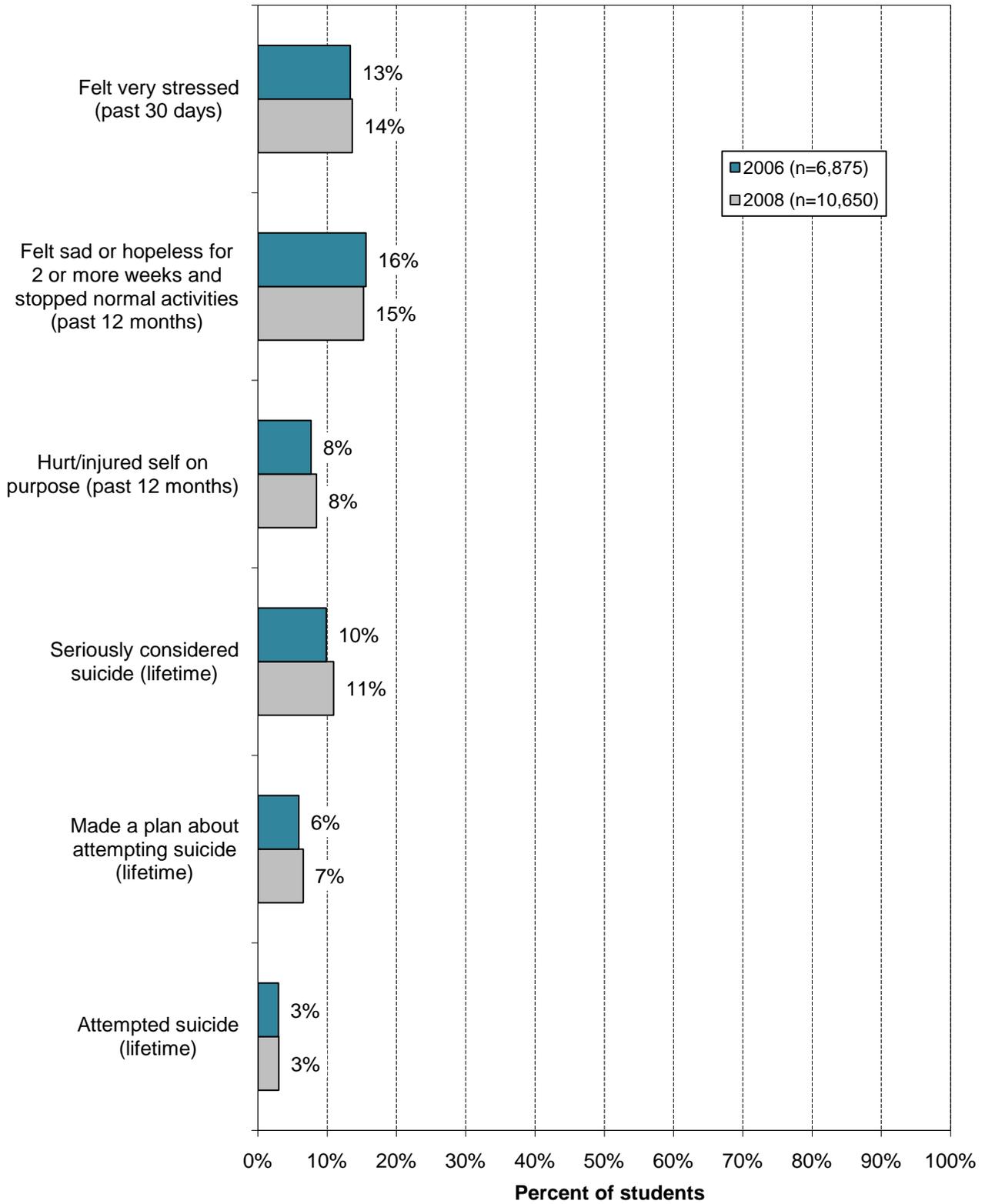
CURRENT PATTERNS

- ◆ **A substantial number of youth report depressive symptoms.** 15% of youth felt sad or hopeless almost every day for two or more weeks in the past 12 months.
- ◆ **Suicidal ideation is also prevalent.** 11% of students seriously considered suicide, and 7% made a plan about attempting suicide in their lifetime.
- ◆ **Many youth engage in self-injury.** 9% have deliberately injured themselves in the past 12 months. *This includes hurting or injuring themselves on purpose by cutting, burning, or bruising themselves.*
- ◆ **A concerning number of middle school youth (3%) have attempted suicide in their lifetime.**
- ◆ **Females are more likely to report depressive symptoms, self-injury, suicidal ideation, and suicide attempts.** For example, more females than males report symptoms of depression (18% vs. 13%) and self-injury (11% vs. 6%) in the past 12 months. In their lifetime, more females seriously considered suicide (13% vs. 9%) and attempted suicide (4% vs. 2%).
- ◆ **Depressive symptoms and self-injury increase as students get older.** More 8th grade students (17%) than 7th grade students (13%) report depressive symptoms in the past 12 months. Similarly, self-injury is more common among 8th grade students (10%) than 7th grade students (7%). Lifetime reports of suicidality and suicide attempts also increase from 7th to 8th grade.

TRENDS FROM 2006 TO 2008

- ◆ **Reports of depressive symptoms, self-injury, and suicidality are similar in 2006 and 2008.** At the two time points, about one in seven youth report having experienced depressive symptoms, one in ten have seriously considered suicide in their lifetime, and 3% have attempted suicide.

Stress, Mental Health, and Suicide in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



WEIGHT, NUTRITION, AND PHYSICAL ACTIVITY

OVERALL PATTERNS

MetroWest youth are less likely to be overweight or obese than youth in Massachusetts. 13% are overweight, *defined as being in the 85th to 95th percentile for body mass index (BMI) by age and gender*, and 7% are obese, *defined as being in the 95th or above percentile*. BMIs are calculated from self-reported height and weight. The overall proportion of middle school youth who are overweight or obese in MetroWest (20%) is substantially lower than in the state (28%).

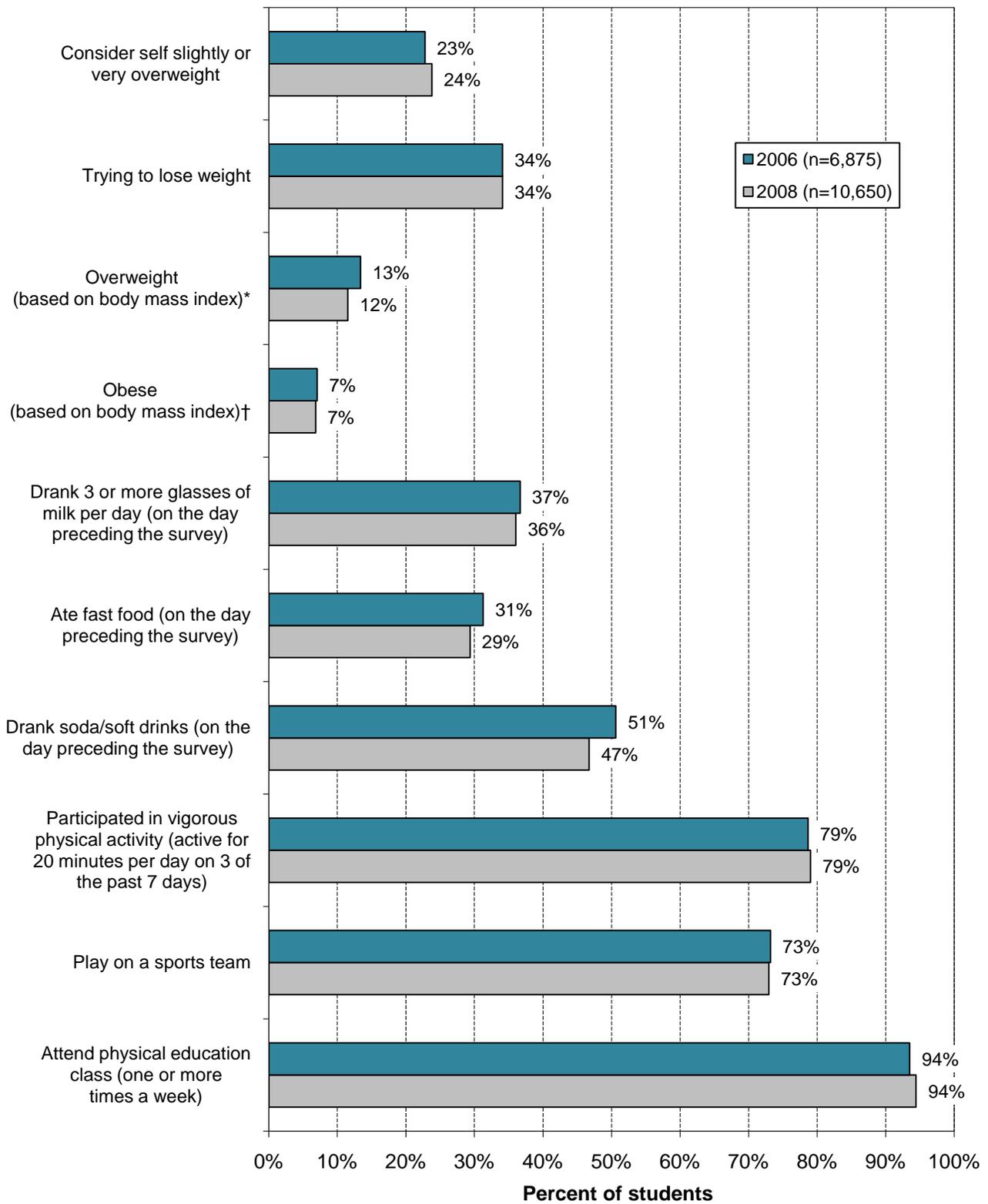
Consistent with national and state data, males are more likely than females to be overweight (14% vs. 12%) or obese (8% vs. 5%). Males are also more likely to report unhealthy eating behaviors, such as consuming fast food and non-diet soda. While females are less likely to be overweight or obese, they are more likely to be trying to lose weight (42% vs. 26%). Substantially more females than males have dieted or fasted in their lifetime to lose weight or keep from gaining weight.

Males are more likely to report unhealthy eating, yet they are somewhat more likely to engage in physical activity: 83% of males, compared with 75% of females, exercised vigorously on 3 or more of the past 7 days.

OVERALL TRENDS FROM 2006 TO 2008

There have not been any notable changes in overweight/obesity, weight control behaviors, nutrition, or physical activity.

Weight Perception, Body Weight, Nutrition, and Physical Activity in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



*Students who were ≥85th percentile but <95th percentile for body mass index by age and sex, based on reference data
 †Students who were ≥95th percentile for body mass index by age and sex, based on reference data

OVERWEIGHT, WEIGHT PERCEPTION, AND WEIGHT CONTROL

CURRENT PATTERNS

- ◆ **One in five students (20%) are overweight or obese.** 13% are overweight (*85th to 95th percentile BMI for age and sex*), and 7% are obese (*95th or higher percentile BMI*). This information is based on self-reported height and weight data.
- ◆ **More males than females are overweight or obese.** 12% of females and 14% of males are overweight; 5% of females and 8% of males are obese.
- ◆ **Females more frequently perceive themselves as overweight.** While 17% of females are classified as overweight or obese, 25% describe themselves as “slightly” or “very” overweight, and 42% are trying to lose weight. Among males, overweight/obesity (23%) is the same as the proportion who perceive they are overweight (23%) and similar to the proportion who are trying to lose weight (26%).
- ◆ **Many youth exercise or diet to control their weight.** Over half (61%) have exercised in their lifetime to lose weight or keep from gaining weight, and over a third (36%) have dieted in their lifetime.
- ◆ **Females are also more likely to engage in weight control behaviors.** In their lifetime, females are more likely to diet (46% vs. 27%), fast (11% vs. 5%), and take laxatives or vomit (4% vs. 2%).

TRENDS FROM 2006 TO 2008

- ◆ **There have been no changes in overweight/obesity, weight perception, or weight control behaviors.** At both time points, one in five students are overweight or obese, and about a third of youth are trying to lose weight.

NUTRITION

CURRENT PATTERNS

- ◆ **Most students consume some fruits and vegetables.** 82% ate fruit or drank 100-percent fruit juice and 80% ate vegetables the day prior to the survey.
- ◆ **Only a third of students (36%) consume the recommended three glasses of milk per day,** though 84% consume dairy products one or more times.
- ◆ **A substantial number of youth report drinking non-diet soda and eating fast food.** 47% drank non-diet soda and 29% consumed fast food on the day prior to the survey.
- ◆ **Consistent with gender patterns in overweight and obesity, males are more likely to report unhealthy eating.** More males than females ate fast food (32% vs. 26%) and drank non-diet soda (55% vs. 39%) on the day prior to the survey.
- ◆ **Consumption patterns are similar in 7th and 8th grades.**

TRENDS FROM 2006 TO 2008

- ◆ **There are no changes in consumption patterns at the two time points.**

CURRENT PATTERNS

- ◆ **Most youth exercise vigorously at least three days per week.** 79% participated in vigorous activity for at least 20 minutes that made them sweat or breathe hard (such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activity) on three or more days in the past week.
- ◆ **A majority of students (73%) play on a sports team, and nearly all (94%) take physical education (PE) class.**
- ◆ **Males are more likely to be physically active.** More males than females (83% vs. 75%) participated in vigorous physical activity on three days in the past week, and males are also more likely to play a team sport (76% vs. 70%). Participation in PE class is similar for males and females.
- ◆ **There are small decreases in physical activity as students get older.** From 7th to 8th grade, participation in vigorous activity decreases slightly from 80% to 78%, and playing on a sports team decreases from 74% to 72%. PE participation does not change.

TRENDS FROM 2006 TO 2008

- ◆ **Participation in physical activity, sports teams, and PE class is similar at the two time points.** For example, the proportion of students who participate in vigorous activity at least three days a week is steady at 79%.

SCHOOL ATTACHMENT AND ADULT SUPPORT

OVERALL PATTERNS

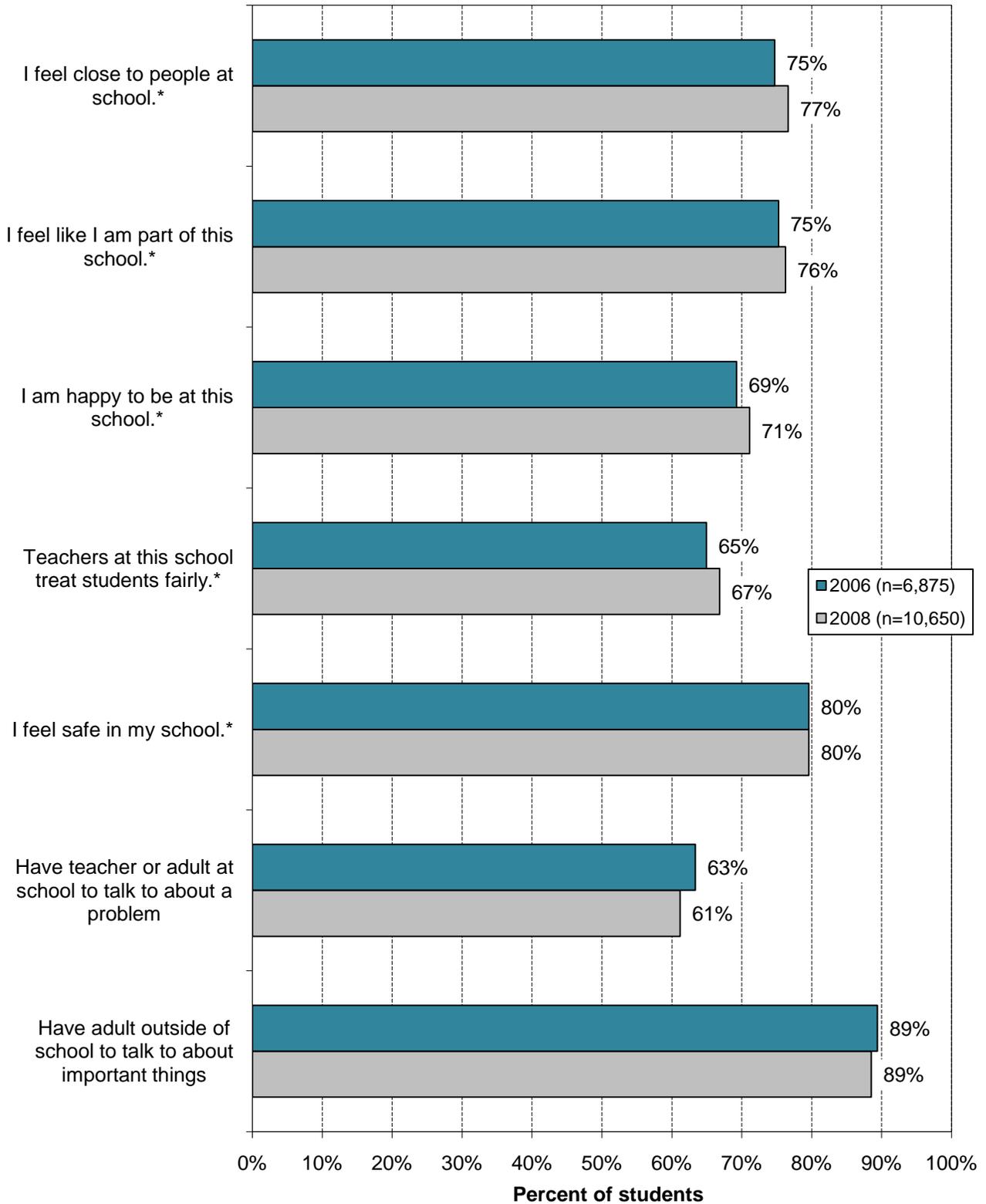
Protective factors, like school attachment and adult support, promote resiliency and healthy behaviors. School attachment is associated with lower levels of deviant behavior, including less substance use, violence, and delinquency.^{5,6,7} Regional data shows that a majority of youth have positive school attachments, shown by their agreement with statements such as: “I feel like I am a part of this school” (76% agreement) and “I feel safe in this school” (80% agreement).

Having a supportive adult is associated with less risky behavior fewer risks including lower prevalences of suicidality, risky sexual activity and substance use.^{8,9,10} Three out of five students (61%) report they have at least one teacher or other adult at school to talk to if they have a problem. Outside of school, even more youth (89%) have an adult they can talk to about things that are important. Yet despite these high numbers, there is a small minority of students (9%) who do not have a supportive adult either at school or home. Analyses show that these individuals are far more likely to engage in multiple forms of risk behaviors, including substance use, violence, and suicide-related thoughts and behavior.

OVERALL TRENDS FROM 2006 TO 2008

Overall school attachment and adult support (both in and outside of school) are similar at both time points.

School Attachment and Adult Support in 2006 and 2008
MetroWest Region Middle School Students - Grades 7 and 8
MetroWest Adolescent Health Survey, 2008



*Percent of students that agree or strongly agree with the statement

SCHOOL ATTACHMENT

CURRENT PATTERNS

- ◆ **The majority of middle school students feel positively connected with their schools, as measured by agreement with the following statements regarding school attachment:**
 - ◆ 80% feel safe in their school.
 - ◆ 77% feel close to people at school.
 - ◆ 76% feel like they are part of their school.
 - ◆ 71% are happy to be at their school.
 - ◆ 67% feel that teachers at their school treat students fairly.
- ◆ **There are no notable gender differences in overall school attachment.** This is based on a five-item school attachment scale combining responses to the statements above.
- ◆ **Overall school attachment decreases as students get older.** For example, from 7th to 8th grade, there are decreases in the proportion of youth who agree with the following statements: “I am happy to be at this school” (from 75% to 68%), “The teachers treat students fairly” (from 70% to 64%), and “I feel safe in my school” (from 83% to 77%).

TRENDS FROM 2006 TO 2008

- ◆ **Overall school attachment, as measured by the five-item scale, is similar at both time points.**

ADULT SUPPORT

CURRENT PATTERNS

- ◆ **A majority of students have supportive adults in their lives.** 61% have at least one teacher or other adult at school to talk to if they have a problem, and even more (89%) have at least one adult outside of school they can talk to about things that are important to them.
- ◆ **Most students have a parent or other family member they can talk to.** 56% of youth have a parent or family member they can talk to, and 30% have adults both in and outside of their family that they can talk to.
- ◆ **Reports of adult support are relatively similar among males and females.** 63% of females and 59% of males have a supportive adult at school, and 90% of females and 87% of males have a supportive adult at home.
- ◆ **Adult support is high in both 7th and 8th grade.** The proportion of youth with a supportive adult outside of school is 90% in 7th grade and 87% in 8th grade. Having a supportive adult at school is also similar for both grades.
- ◆ **A small minority of students have no supportive adults in their lives.** 9% of youth have neither an adult at school nor outside of school that they can talk to. These individuals are at far greater risk of engaging in many forms of risk behaviors.

TRENDS FROM 2006 TO 2008

- ◆ **Adult support both in and outside of school is similar at the two time points.** At both time points, about six out of ten youth have a supportive adult at school, and about nine out of ten have a supportive adult outside of school.

CONCLUSIONS

The MWAHS initiative provides a valuable look into the risk and health behaviors of youth across MetroWest, and the 2008 data has provided a first glimpse at trends in risk behaviors in the region. While most behaviors have remained steady since 2006, bullying appears to have increased. Other topic areas—substance use, fighting and weapon-carrying, unintentional injury, and weight and physical activity—showed minimal or no change over time.

Initiation of substance use occurs in middle school for a notable proportion of youth, with alcohol being the most commonly used substance. While some youth may be experimenting infrequently, a small number of youth are beginning to drink more often. Use of tobacco and inhalants are also reported by a small proportion of students in middle school, and lifetime use of these two substances is similar. While marijuana use is less common in middle school, it becomes the second most commonly used substance in high school, after alcohol.

Behaviors related to violence, such as bullying, physical fighting, and weapon-carrying are common throughout middle school. The increase in bullying from 2006 to 2008, which is especially notable among females, is concerning. However, the prevalence of electronic bullying has not increased, despite the substantial attention it has garnered in the media. Physical fighting, weapon-carrying, and related threats have also remained steady in the past two years.

Data from future administrations of the MWAHS will allow us to further explore these areas, and additional patterns will likely emerge as we are able to examine the data over a longer period of time.

REFERENCES

- ¹ Brener, N.D., Kann, L., McManus, T.L., Kinchen, S., Sundberg, E.C., & Ross, J.G. (2002). Reliability of the 1999 Youth Risk Behavior Survey Questionnaire. *Journal of Adolescent Health, 31*, 336-342.
- ² Brener, N.D., McManus, T., Galuska, D.A., Lowry, R., & Wechsler, H. (2002). Reliability and validity of self-reported height and weight among high school students. *Journal of Adolescent Health, 32*, 281-287.
- ³ Brener, N.D., Billy, J.O.G., & Grady, W.R. (2003). Assessment of factors affecting the validity of self-reported health risk behavior among adolescents: Evidence from the scientific literature. *Journal of Adolescent Health, 33*, 436-457.
- ⁴ Centers for Disease Control. (2008). *Youth Risk Behavior Surveillance – United States, 2007*. Morbidity and Mortality Weekly Report, 57 (SS-4). Atlanta, GA: U.S. Government Printing Office.
- ⁵ Lee, V., & Burkam, D.T. (2003). Dropping out of High School: The Role of School Organization and Structure. *American Education Research Journal, 40*, 353-393.
- ⁶ Battistich, V., & Horn, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health, 87*, 1997-2001.
- ⁷ Bazron, B., Osher D., & Fleischman S. (2005). Creating Culturally Responsive Schools, *Educational Leadership, 63*(1), 83-84.
- ⁸ O'Donnell, L., Stueve, A., Wardlaw, D., & O'Donnell, C. (2003). Adolescent Suicidality and Adult Support: The Reach for Health Study of Urban Youth. *American Journal of Health Behavior, 27*, 633-644.
- ⁹ Evans, A.E., Griffin, S.F., Vincent, M.L., & Valois, R.F. (2004). An exploration of the relationship between youth assets and engagement in risky sexual behaviors. *Journal of Adolescent Health, 35*, 424.e21-30.
- ¹⁰ Wills, T.A. & Vaughan, R. (1989). Social Support and substance use in early adolescence. *Journal of Behavioral Medicine, 12*, 321-339.