



*Results of the*  
**MetroWest  
Adolescent Health Survey**

**Franklin Middle Schools**  
*Grades 7 and 8*  
**EXECUTIVE SUMMARY**



**2008**

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*Submitted by*

Health and Human Development Division  
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**EDC**

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# Franklin Middle Schools 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 6<sup>th</sup> 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 (1.5%) 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.<sup>1,2,3</sup>

This report includes regional data from 10,650 students in grades 7 and 8 (93% of the eligible students in the 19 participating school districts). In Franklin, 917 students in grades 7 and 8 participated, representing 87.8% of students. 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.†

\* Due to the relatively small number of schools surveying 6<sup>th</sup> grade, findings are reported 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).<sup>4</sup> 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 five middle school youth in Framingham (20%) have experimented with alcohol or other substances in their lifetime. Alcohol is the most commonly used substance: 15% of students have had at least one drink of alcohol in their lifetime and 5% report drinking in the past 30 days. 5% of youth report having a drink before they were 11 years of age, and current drinking more than doubles from 3% in 7<sup>th</sup> grade to 7% in 8<sup>th</sup> 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: 6% of youth have smoked cigarettes in their lifetime, and 3% have smoked in the past 30 days. Marijuana use is still relatively rare, with 3% reporting lifetime use and 1% reporting current use. Many students initiate use in middle school: from 7<sup>th</sup> to 8<sup>th</sup> grade, cigarette smoking increases from 4% to 8% and marijuana use increases from 1% to 5%. 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 (6%) is similar to the proportion who have ever used inhalants (5%). While other substance use typically increases as students get older, inhalant use does decrease in high school.

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 (7% vs. 5%), alcohol use (19% vs. 11%), and marijuana use (4% vs. 2%). Inhalant use is similar for males and females at 5-6%.

### OVERALL TRENDS FROM 2006 TO 2008

Use of all substances—alcohol, cigarettes, marijuana, inhalants, steroids, and prescription drugs—has remained similar since 2006.

*Alcohol is the substance most frequently used by middle school students in MetroWest: 20% of students have had a drink of alcohol in their lifetime, and 9% consumed alcohol in the past 30 days. This does not include drinking a few sips of wine for religious purposes.*

*8% of MW youth have smoked cigarettes in their lifetime, and 5% have smoked marijuana.*

*Lifetime inhalant use is reported by 7% of youth, defined as sniffing glue, breathing the contents of spray cans, or inhaling paints or sprays to get high.*

*There were no substantial changes in use of tobacco, alcohol, marijuana, or other substances among middle school students in the MW region.*

### CURRENT PATTERNS

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- ◆ **After alcohol, cigarettes are the most frequently used substance.** 6% of students smoked cigarettes in their lifetime, and 3% have smoked in the past 30 days.
- ◆ **Experimentation with cigarettes increases over the middle school years.** Only 1% of students smoked a whole cigarette before the age of 11. From 7<sup>th</sup> to 8<sup>th</sup> grade, lifetime smoking increases from 4% to 8%, and current smoking increases from 2% to 4%.
- ◆ **A very small number of middle school youth smoke regularly.** Only 1% of 8<sup>th</sup> grade students smoked at least one cigarette every day for 30 days at some point in their lifetime.
- ◆ **Smoking on school property is very rare.** Less than 1% of youth smoked at school in the past 30 days.
- ◆ **Males are a little more likely than females to smoke cigarettes.** More males than females report lifetime smoking (7% vs. 5%) and current smoking (3% vs. 2%).

### TRENDS FROM 2006 TO 2008

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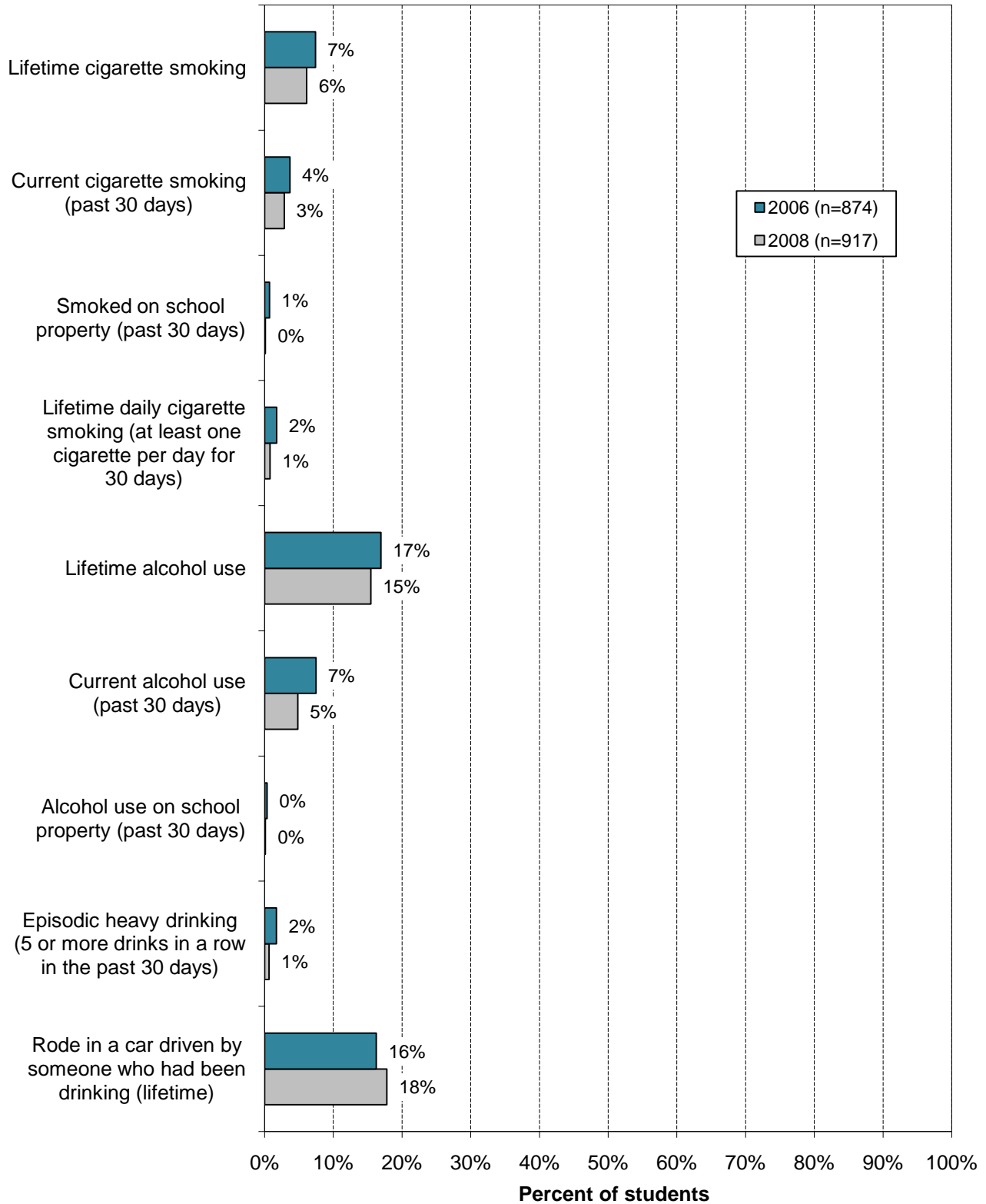
- ◆ **Reports of cigarette smoking are similar in 2006 and 2008.** About 3-4% of students are current smokers at each time point, and 6-7% have tried smoking at least once in their lifetime.

*Cigarettes are the second most commonly used substance in middle school after alcohol. In MW, 8% of youth smoked in their lifetime, and 4% smoked in the past 30 days. 2% have smoked regularly for at least 30 days in their lifetime.*

*Youth smoking in MW is substantially lower than in MA. For example, in 8<sup>th</sup> grade, lifetime smoking among MW youth (12%) is half that of MA youth (23%). Current smoking is also lower in 8<sup>th</sup> grade in MW compared with the state (5% vs. 8%).*

*In the MetroWest region, cigarette smoking in middle school has not changed substantially in the past two years.*

**Tobacco Use, Alcohol Use, and Riding With Impaired Drivers in 2006 and 2008**  
**Franklin Middle Schools - Grades 7 and 8**  
*MetroWest Adolescent Health Survey, 2008*



### CURRENT PATTERNS

- ◆ **Alcohol is the most frequently used substance among middle school youth.** 15% report lifetime use, and 5% consumed alcohol in the past 30 days.
- ◆ **A substantial number of youth experiment with alcohol early.** 5% of all youth had their first drink prior to age 11. Lifetime use increases from 10% in 7<sup>th</sup> grade to 21% in 8<sup>th</sup> grade, and current use increases from 3% to 7%.
- ◆ **A small number of middle school students report episodic heavy (“binge”) drinking.** 1% of students report “binge” drinking in the past 30 days, and 2% 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 very rare.** Less than 1% of students used alcohol on school property in the past 30 days.
- ◆ **Nearly one in five youth (18%) 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.** 19% of males and 11% of females have had a drink of alcohol in their lifetime. 5% of males and 4% of females drank in the past 30 days. Males also initiate alcohol use earlier: nearly twice as many males as females (6% vs. 3%) consumed alcohol prior to age 11. However, in high school, drinking among males and females is similar.

### TRENDS FROM 2006 TO 2008

- ◆ **Alcohol use is similar over the past two years.** 5-7% of middle school students report recent drinking at the two time points, and 1-2% report “binge” drinking in the past 30 days.

*Alcohol use is substantially lower among MW youth compared with MA youth. For example, in 8<sup>th</sup> grade, fewer MW youth report lifetime use (26% vs. 34%), current use (12% vs. 17%), and “binge” drinking (2% vs. 8%).*

*In the MW region, 21% of middle school youth have been passengers in a car with a driver who had been drinking. Data for MA is not available.*

*MW males are more likely than females to drink alcohol in middle school. For example, more males than females report lifetime use (24% vs. 16%) and early initiation (9% vs. 5%). By early high school, similar proportions of males and females are drinking.*

*Recent drinking in MW more than doubles from 7<sup>th</sup> grade (5%) to 8<sup>th</sup> grade (12%).*

*Alcohol use has not changed in MetroWest. Current use is steady at 9%, and “binge” drinking remains at 3% in the region.*



## MARIJUANA USE

### CURRENT PATTERNS

- ◆ **A small number of middle school students (3%) used marijuana in their lifetime**, and 1% used marijuana in the past 30 days.
- ◆ **Experimentation with marijuana begins in middle school.** Less than 1% of youth used marijuana prior to age 11. From 7<sup>th</sup> to 8<sup>th</sup> grade, lifetime use increases from 1% to 5%. Current use is about 1% in both 7<sup>th</sup> and 8<sup>th</sup> grade.
- ◆ **Males are more likely to use marijuana than females.** Lifetime use is twice as high among males (4%) as females (2%). Current use is the same among males and females (1%).

*5% of MW youth have used marijuana in their lifetime, and 3% report current use. Males are about twice as likely as females to have used marijuana at least once (7% vs. 3%).*

*Marijuana use is lower in MW than in MA. For example, in 8<sup>th</sup> grade, fewer MW youth report lifetime (8% vs. 14%) and current use (5% vs. 8%) compared with MA youth.*

### TRENDS FROM 2006 TO 2008

- ◆ **Marijuana use in middle school remains steady.** At both time points, about 3% of youth report they have used marijuana at least once, and 1-2% report current use.

*Marijuana use in MW has not changed in recent years. Lifetime use has been steady at 5%, and current use has stayed at 3%.*



## INHALANT USE

### CURRENT PATTERNS

- ◆ **After alcohol and cigarettes, inhalants are the substance most often used in middle school.** 5% 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 is similar in 7<sup>th</sup> grade (5%) and 8<sup>th</sup> grade (6%).**
- ◆ **Unlike patterns for alcohol and other substances, inhalant use is similar among males (6%) and females (5%).**

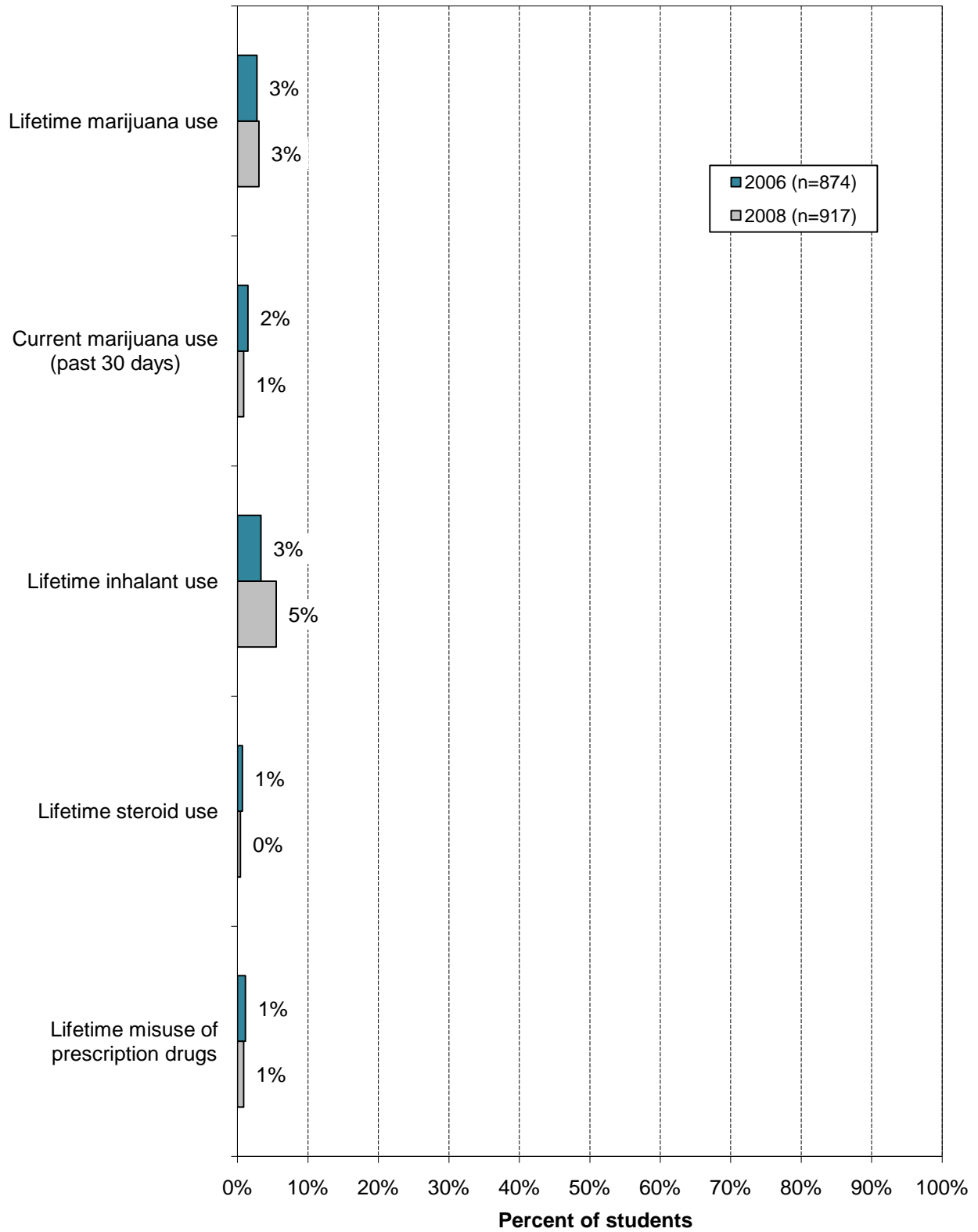
*In the MW region, lifetime inhalant use (7%) is reported by about the same proportion of youth who report lifetime cigarette smoking (8%).*

### TRENDS FROM 2006 TO 2008

- ◆ **There are no changes in lifetime inhalant use.** At both time points, about 3-5% of middle school students say they have experimented with inhalants at least once.

*In MW, lifetime inhalant use has remained similar.*

**Marijuana and Other Substance Use in 2006 and 2008**  
**Franklin Middle Schools - 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.** 1% of students misused prescription drugs in their lifetime, and less than 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.**

*Very few MW youth have misused prescription drugs (2%) or steroids (1%) in their lifetime.*

### TRENDS FROM 2006 TO 2008

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

*Prescription drug and steroid misuse have remained steady in MW in the past two years.*

## AVAILABILITY OF SUBSTANCE ON SCHOOL PROPERTY

### CURRENT PATTERNS

- ◆ **A small number of youth have access to substances on school property.** 3% 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.
- ◆ **Access to illegal substances at school is similar among males and females.** For example, 4% of males and 3% of females were offered, sold, or given tobacco or alcohol in the past year.
- ◆ **The availability of substances on school property increases from 7<sup>th</sup> to 8<sup>th</sup> grade.** Availability of tobacco and alcohol increases from 2% in 7<sup>th</sup> grade to 5% in 8<sup>th</sup> grade. For marijuana, pills, and other drugs, availability increases from 1% in 7<sup>th</sup> grade to 4% in 8<sup>th</sup> grade.

*In MW middle schools, availability of tobacco and alcohol on school property is the same as that of marijuana, pills, or other drugs on school property (both 4%).*

### TRENDS FROM 2006 TO 2008

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

*The availability of substances on middle school property has not changed substantially in the region in the past two years.*

## 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 Franklin middle school youth. 55% of all students were bullied in the past 12 months, 44% were bullied on school property, and 18% 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: 25% of youth have been in a fight in the past 12 months, and 7% of youth say they have carried a weapon, such as a gun, knife, or club, in the past 30 days. Similar proportions of 7<sup>th</sup> and 8<sup>th</sup> 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 9<sup>th</sup> grade.

Males are far more likely to engage in violence-related behaviors. Over twice as many males as females report being in a physical fight in the past year, and males are five 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 (38% compared to 33%). However, females are more likely to report being victimized by bullying in general (62% vs. 49%) and electronic bullying (23% vs. 13%).

### OVERALL TRENDS FROM 2006 TO 2008

There are some indications that bullying is on the rise, particularly among females. Bullying victimization increased from 45% in 2006 to 55% in 2008, and bullying on school property increased from 38% to 44%. Bullying victimization increased among both genders, but the difference was larger for females (from 49% to 62%) than males (from 42% to 49%). Victimization on school property follows a similar pattern. Electronic bullying may also be on the rise, but future data will determine whether or not this is indeed a trend.

Weapon-carrying did not change in the past two years. There may be an increase in physical fighting, though it is not consistent across all measures.

*Bullying is prevalent among middle school youth in MW: 49% were bullying victims and 43% were bullied on school property in the past 12 months. 16% of MW youth were victims of electronic bullying during this time.*

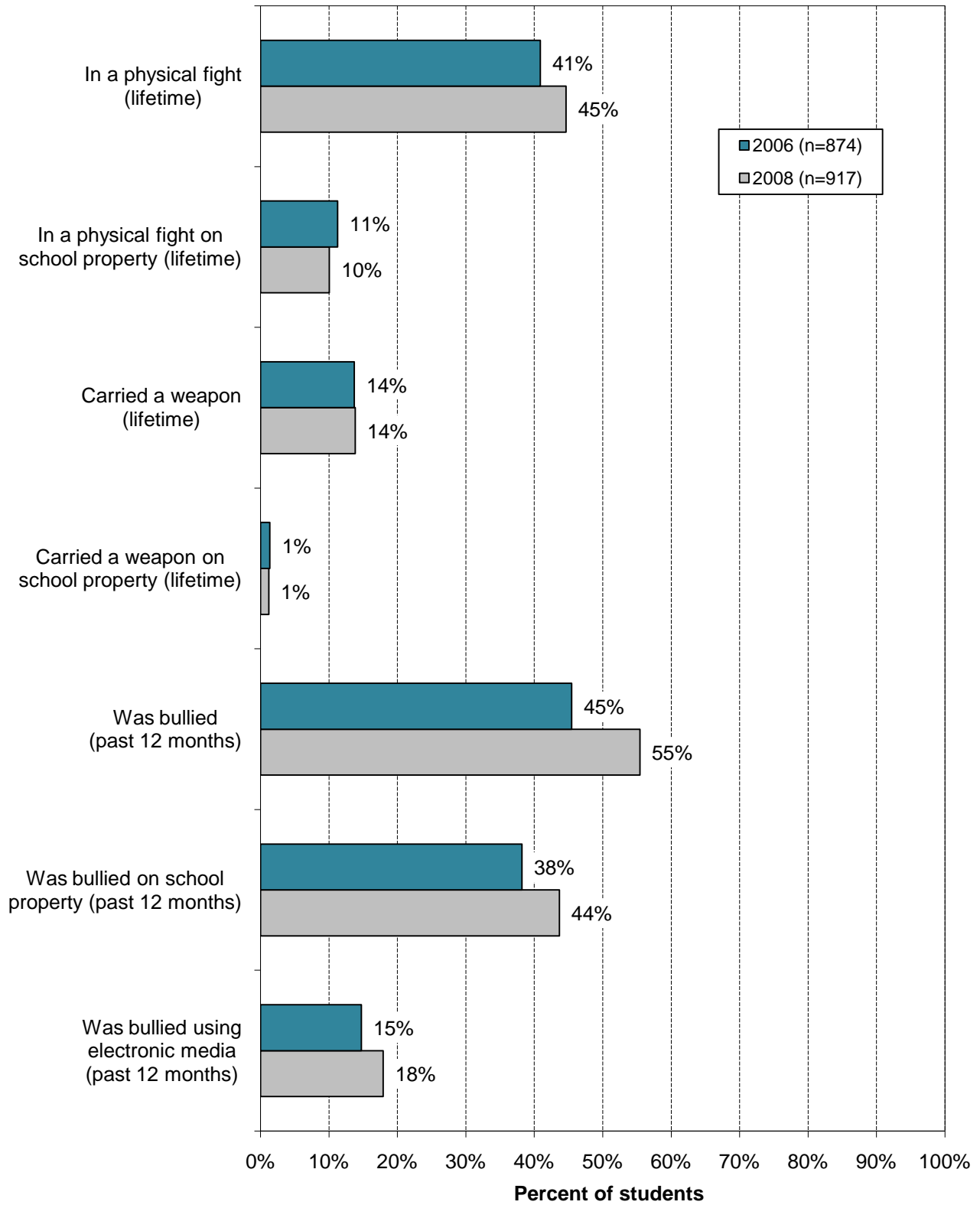
*Physical fighting is also common in middle school. One in four MW youth (26%) were in a physical fight in their lifetime, and 8% carried a weapon in the past 30 days.*

*Males are more likely than females to be in fights, to carry weapons, and to be perpetrators of bullying.*

*There are increases in reports of bullying in the region over the past two years, both in general and on school property. Electronic bullying has not changed in the region.*

*Physical fighting and weapon-carrying have remained steady in MetroWest.*

**Physical Fighting, Weapon Carrying, and Bullying in 2006 and 2008**  
**Franklin Middle Schools - 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.** 15% of students had their property (such as clothing or books) stolen or deliberately damaged at school in the past 12 months. More males report this (17%) than females (13%). 8<sup>th</sup> grade students (17%) are more likely to report this than 7<sup>th</sup> grade students (13%).
- ◆ **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. More females report this than males (4% vs. 1%).

*Most MW youth feel safe at school: Only 3% said they didn't attend school once or more in the past month due to safety concerns.*

*However, nearly a quarter (23%) had their property stolen or damaged at school in the past 12 months.*

### TRENDS FROM 2006 TO 2008

- ◆ **Property damage and theft at school has increased slightly,** from 12% in 2006 to 15% in 2008.
- ◆ **Absence from school due to safety concerns is steady at 3%.**

*In the MW region, there was an increase in property damage/theft at school, from 19% to 23%. Absence from school due to safety concerns remained steady at 3%.*

## PHYSICAL FIGHTING

### CURRENT PATTERNS

- ◆ **Physical fighting is common among middle school students.** 45% of students were in a physical fight in their lifetime, and 25% were in a fight in the past 12 months.
- ◆ **A substantial amount of fighting occurs on school property.** 10% of youth were in a physical fight on school property in their lifetime, and 3% were in a fight at school in the past 12 months.
- ◆ **Fights can sometimes result in serious consequences.** 5% 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.** Substantially more males (36% vs. 14%) were in a physical fight in the past 12 months, and more males were in a fight on school property (5% vs. 1%).
- ◆ **Fighting is similar among 7<sup>th</sup> and 8<sup>th</sup> grade students.** Lifetime physical fighting is 44% in 7<sup>th</sup> grade and 46% in 8<sup>th</sup> grade. 24% of 7<sup>th</sup> grade students and 26% of 8<sup>th</sup> grade students were in a fight in the past 12 months.

*Physical fighting among middle school youth is common, particularly among males. Nearly half of MW youth were in a physical fight in their lifetime (45%), and 26% were in a fight in the past 12 months (38% of males and 14% of females). 27% of males and 6% of females were in a fight on school property in the past 12 months.*

### TRENDS FROM 2006 TO 2008

- ◆ **Physical fighting may be increasing slightly.** There was an increase in lifetime physical fighting from 41% to 45%, but no changes in other physical fighting measures. Future data will determine whether the small difference in lifetime reports of fighting is indicative of a trend.

*In MetroWest, physical fighting has not changed in recent years: lifetime fighting has remained steady at 45%.*

## WEAPONS

### CURRENT PATTERNS

- ◆ **A small, but concerning, proportion of youth report they have carried a weapon.** 14% carried a weapon, such as a gun, knife, or club, in their lifetime, and 7% carried a weapon in the past 30 days.
- ◆ **A very small number of youth (1%) have carried a weapon on school property in their lifetime.**
- ◆ **Males are far more likely to carry weapons than females.** 23% of males and 4% of females carried a weapon in their lifetime. 10% of males and 2% of females carried a weapon in the past 30 days.
- ◆ **Weapon-carrying is similar across grades.**

*Weapon-carrying is a concern among middle school youth in MW, particularly among males. In MW, 16% of youth have carried a weapon in their lifetime, and 8% have done so in the past 30 days (13% of males and 2% of females).*

### TRENDS FROM 2006 TO 2008

- ◆ **Reports of weapon-carrying are similar in 2006 and 2008.** At the two time points, 14% of youth have carried a weapon in their lifetime, and 1% have carried a weapon on school property at least once.

*There have been no substantial changes in weapon-carrying in MW.*

## BULLYING

### CURRENT PATTERNS

- ◆ **More than half of all middle school youth have been victims of bullying.** 55% were bullied in the past 12 months, and 44% were bullied on school property. One in three youth (36%) report they have bullied others.
- ◆ **A smaller, but still considerable, proportion of youth are victims of electronic bullying.** 18% of youth were bullied electronically in the past 12 months. 10% were perpetrators of electronic bullying.
- ◆ **Females are somewhat more likely to report being a victim of bullying.** Overall, bullying victimization is higher among females (62%) than males (49%). There is a similar gender difference in electronic bullying victimization, which is reported by 23% of females and 13% of males.
- ◆ **Males are more likely to self-report they have been bullying perpetrators.** 38% of males and 33% of females said they bullied someone else in the past 12 months. However, females are slightly more likely than males to report electronic bullying perpetration (11% and 8% respectively).
- ◆ **Reports of bullying are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.**

*Bullying is the most common form of violence in MW. 49% of youth in the region have been bullied in the past 12 months (51% of females and 46% of males). During the same time, 16% of youth were bullied electronically (20% of females and 12% of males).*

### 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 45% in 2006 to 55% in 2008. Bullying increased among both genders, but the change was greater for females (from 49% to 62%) than males (from 42% to 49%). Similarly, bullying on school property increased from 38% to 44%, with a greater increase for females (40% to 49%) than males (36% to 39%).
- ◆ **There may be an increase in electronic bullying.** In 2006, 15% of youth reporting electronic bullying victimization; in 2008, this proportion is 18%.

*Bullying victimization increased in MW, from 44% to 49%. Similarly, bullying on school property increased, from 39% to 43%. While bullying increased among both males and females, the increase was greater among females.*

*Despite media attention, student reports of electronic bullying did not change substantially in the region.*

## BEHAVIORS RELATED TO UNINTENTIONAL INJURY

### OVERALL PATTERNS

Although the vast majority of youth wear seatbelts regularly (92% 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 (57%) never or rarely wear a helmet, and 41% of youth who ride a bicycle never or rarely wear a helmet. Males are more likely than females to ride without helmets, and helmet use decreases from 7<sup>th</sup> to 8<sup>th</sup> 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, 18% of students were passengers in a car with a driver who had been drinking. *Note: the driver could have been a parent, other adult, or an individual under the age of 21.*

*The majority of MW youth wear seatbelts: only 4% never or rarely wear one. However, fewer youth wear helmets. 37% of MW youth never or rarely wear a helmet when riding a bicycle, and 51% never or rarely wear a helmet when rollerblading or skateboarding.*

*In MW, 21% of students rode in a car with a driver who had been drinking in their lifetime.*

### OVERALL TRENDS FROM 2006 TO 2008

Helmet use when bicycling and rollerblading/skateboarding has decreased from 2006 to 2008. Student reports of seatbelt use and riding with a driver after they had been drinking remained similar at the two time points.

*Over the past two years, helmet use among youth who rollerblade or skateboard in MW decreased slightly in the region, while helmet use on bicycles and seatbelt use did not change.*

*Riding with a driver who had been drinking also did not change in the region.*

## SEATBELT AND HELMET USE

### CURRENT PATTERNS

- ◆ **Most students (92%) 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.** 41% of bicycle riders never or rarely wear a helmet. 57% 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 (48% vs. 33%) and when rollerblading or skateboarding (68% vs. 44%). Seatbelt use is similar among males and females.
- ◆ **Helmet use declines as students get older.** 32% of 7<sup>th</sup> grade students and 50% of 8<sup>th</sup> grade students never or rarely wear helmets when bicycling. Lack of helmet use when rollerblading or skateboarding also increases from 7<sup>th</sup> grade (49%) to 8<sup>th</sup> grade (65%).

*89% of MW youth wear seatbelts all or most of the time when riding in cars.*

*Substantially fewer youth in MW wear helmets, and males are especially at risk of unintentional injury. MW males are more likely than females to never or rarely wear helmets when bicycling (42% vs. 32%) and rollerblading or skateboarding (59% vs. 44%).*

### TRENDS FROM 2006 TO 2008

- ◆ **Use of helmets has decreased.** The proportion of youth who never or rarely wore a helmet when rollerblading or skateboarding increased from 45% in 2006 to 57% in 2008. Lack of helmet use when bicycling increased from 35% to 41%.
- ◆ **Seatbelt use is similar at both time points,** with 4-5% reporting never/rarely wearing a seatbelt.

*In recent years, helmet use among MW youth who rollerblade or skateboard in MW decreased slightly: the proportion of youth who never or rarely wear a helmet increased from 48% to 51%. Helmet use among bicyclists did not change.*

*Seatbelt use in MW also remained steady.*

## DRIVING AFTER DRINKING

### CURRENT PATTERNS

- ◆ **At least once in their lifetime, 18% of youth rode in a car with a driver who had been drinking.** This is similar for males (17%) and females (19%). Note that the driver could be a parent, other adult, or someone else.
- ◆ **Riding in a car with a driver who had used alcohol is similar across grades** (17% in 7<sup>th</sup> grade and 19% in 8<sup>th</sup> grade).

*In their lifetime, 21% of MW youth rode in a car with a driver who had been drinking. This increases from 7<sup>th</sup> grade (16%) to 8<sup>th</sup> grade (25%), but does not vary by gender in the region.*

### TRENDS FROM 2006 TO 2008

- ◆ **Riding with a driver who had been drinking is similar at the two time points,** with about 16-18% reporting this at least once in their lifetime.

*In MW, the proportion of students who have ever ridden in a car with a driver who had been drinking has not changed.*

# STRESS, MENTAL HEALTH, AND SUICIDE

## OVERALL PATTERNS

Mental health is a concern for a substantial proportion of middle school youth. Stress is common, with 12% reporting their life was “very” stressful in the past 30 days. A similar proportion of youth (13%) 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. 8<sup>th</sup> grade students are also more likely than 7<sup>th</sup> grade students to report that they have experienced most of these mental health issues in their lifetime, with prevalences increasing during the high school years.

## OVERALL TRENDS FROM 2006 TO 2008

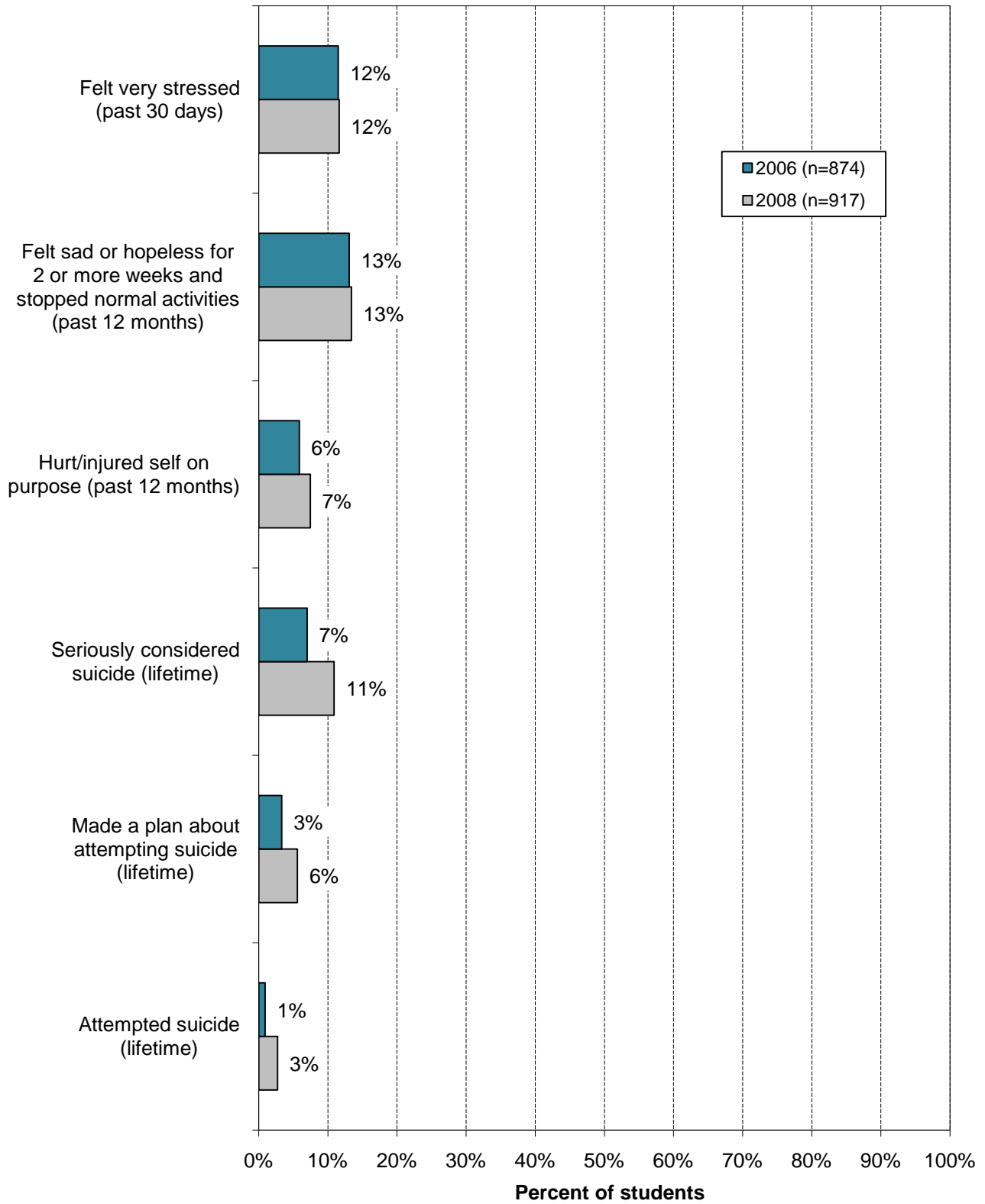
Similar proportions of students report stress, depressive symptoms, and self-injury at both time points. There may be an increase in the proportion of youth who have seriously considered suicide, but other measures related to suicide did not change substantially.

*Stress and poor mental health are a concern among middle school students in the region. In MW, 14% of youth reported that their life was very stressful in the past 30 days, 15% felt symptoms of depression in the past 12 months, and 8% hurt or injured themselves on purpose in the past 12 months.*

*In their lifetime, 11% of MW seriously considered suicide, 7% made a plan about committing suicide, and 3% actually attempted suicide.*

*In MW, there have not been any changes in stress, depression, self-injury, and suicidality.*

**Stress, Mental Health, and Suicide in 2006 and 2008**  
**Franklin Middle Schools - Grades 7 and 8**  
*MetroWest Adolescent Health Survey, 2008*





## STRESS

### CURRENT PATTERNS

- ◆ **Stress is common among middle school youth**, with 24% reporting that their life was “somewhat” stressful, and 12% reporting their life was “very” stressful in the past 30 days.
- ◆ **More females experience stress than males.** 15% of females and 8% of males said their life was “very” stressful.
- ◆ **Older students are more likely to experience stress.** Reports of recent stress increase from 7<sup>th</sup> grade (9%) to 8<sup>th</sup> grade (14%).

*14% of MW youth report that their life was very stressful in the past 30 days. This is higher among females than males (17% vs. 11%) and among 8<sup>th</sup> grade students than 7<sup>th</sup> grade students (16% vs. 11%).*

### TRENDS FROM 2006 TO 2008

- ◆ **About one in eight students report their lives are “very” stressful at both time points.**

*Reports of stress have not changed in MW in the past two years.*



## MENTAL HEALTH AND SUICIDE

### CURRENT PATTERNS

- ◆ **A substantial number of youth report depressive symptoms.** 13% 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 6% made a plan about attempting suicide in their lifetime.
- ◆ **Many youth engage in self-injury.** 7% 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, and suicidal ideation.** For example, more females than males report symptoms of depression (17% vs. 10%) and self-injury (9% vs. 6%) in the past 12 months. In their lifetime, more females seriously considered suicide (13% vs. 9%). Suicide attempts are similar among females (3%) and males (2%).
- ◆ **Suicidality and self-injury increase as students get older.** Self-injury in the past 12 months is more common among 8<sup>th</sup> grade students (9%) than 7<sup>th</sup> grade students (6%). More 8<sup>th</sup> grade students (13%) than 7<sup>th</sup> grade students (9%) report seriously considering suicide in their lifetime. Reports of depressive symptoms in the past 12 months are 13% for both grades.

*In MW, females are more likely than males to report symptoms of depression in the past 12 months (18% vs. 13%). In their lifetime, females are more likely to consider suicide (13% vs. 9%) and to make an actual suicide attempt (4% vs. 2%).*

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

### 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 eight youth report having experienced depressive symptoms, and 6-7% have engaged in self-injury in the past 12 months. There is a slight increase in the number of students who seriously considered attempting suicide in their lifetime, from 7% to 11%, but other measures of suicidality remained similar. Future data will determine whether this small difference is indicative of a trend in suicidality.

*There have been no notable changes in depressive symptoms, self-injury, and suicidality in the region.*

# WEIGHT, NUTRITION, AND PHYSICAL ACTIVITY

## OVERALL PATTERNS

Franklin youth are less likely to be overweight or obese than youth in Massachusetts. 14% are overweight, *defined as being in the 85<sup>th</sup> to 95<sup>th</sup> percentile for body mass index (BMI) by age and gender*, and 7% are obese, *defined as being in the 95<sup>th</sup> or above percentile*. BMIs are calculated from self-reported height and weight.

Males and females are similarly as likely to be overweight (14%) or obese (6-7%). However, males are substantially more likely to report unhealthy eating behaviors, such as consuming fast food (34% vs. 26%) and non-diet soda (56% vs. 40%). On the other hand, females are more likely to be trying to lose weight (46% vs. 24%). 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 substantial changes in overweight/obesity, weight control behaviors, nutrition, or physical activity.

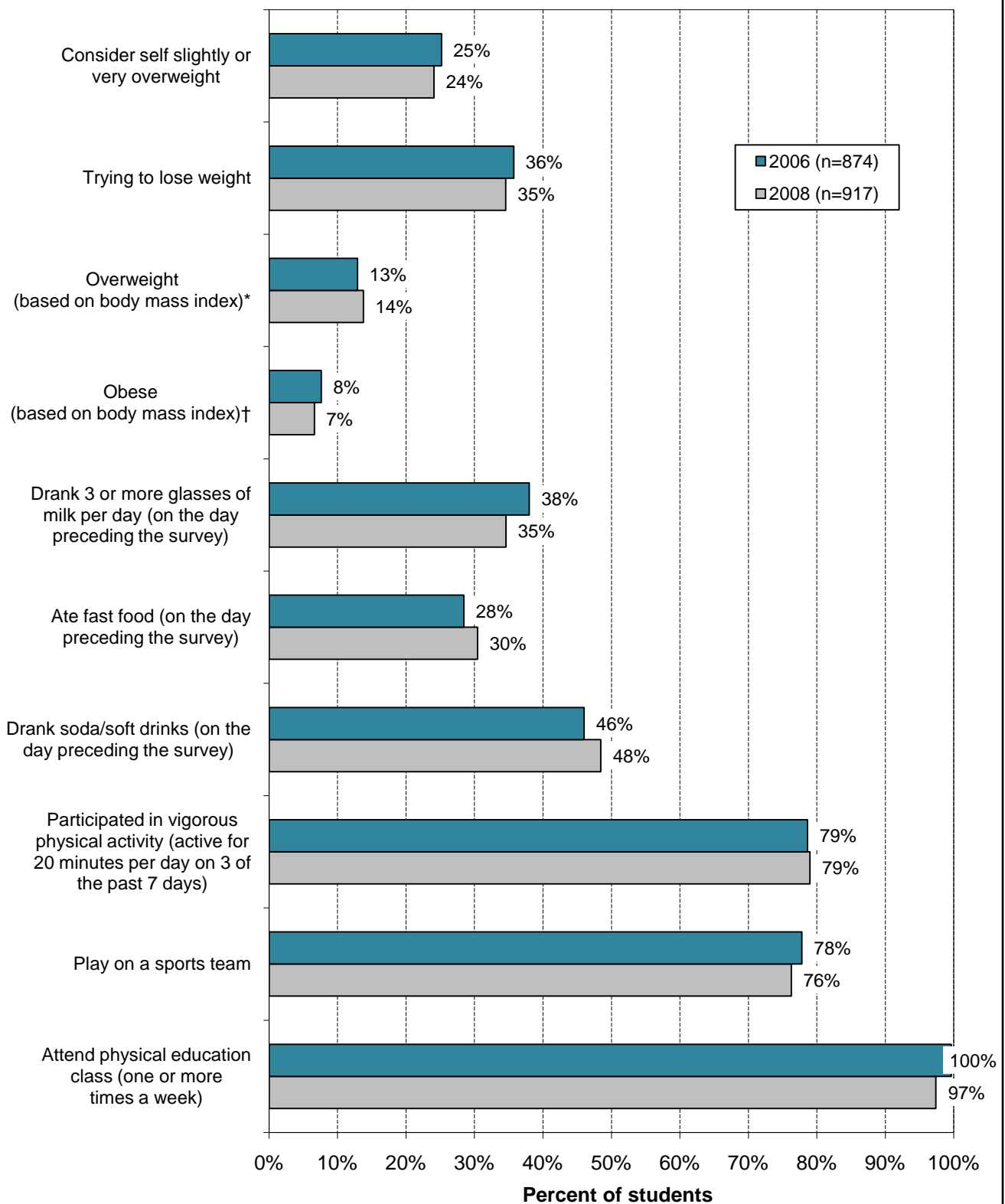
*In the MW region, 20% of students are overweight or obese. This is lower than in MA, where 28% of youth are classified this way based on BMI.*

*29% of MW youth ate fast food and 47% drank non-diet soda on the day before the survey.*

*79% of youth in the region engaged in vigorous physical activity on at least 3 of the past 7 days. 94% attended physical education class at least once in the past week.*

*Overweight/obesity, weight control, nutrition, and physical activity have remained steady in MW in the past two years.*

**Weight Perception, Body Weight, Nutrition, and Physical Activity in 2006 and 2008**  
**Franklin Middle Schools - 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 are overweight or obese.** 14% are overweight (85<sup>th</sup> to 95<sup>th</sup> percentile BMI for age and sex), and 7% are obese (95<sup>th</sup> or higher percentile BMI). This information is based on self-reported height and weight data.
- ◆ **Males and females are equally as likely to be overweight or obese.** 14% of males and females are overweight; 7% of males and 6% of females are obese.
- ◆ **Females more frequently perceive themselves as overweight.** While 20% of females are classified as overweight or obese, 25% describe themselves as “slightly” or “very” overweight, and 46% are trying to lose weight. Among males, overweight/obesity (20%) is the slightly lower than the proportion who perceive they are overweight (23%) and similar to the proportion who are trying to lose weight (24%).
- ◆ **Many youth exercise or diet to control their weight.** 63% have exercised in their lifetime to lose weight or keep from gaining weight, and 37% 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 (49% vs. 26%), fast (10% vs. 3%), and take laxatives/vomit (1% vs. less than 1%) to lose weight or keep from gaining weight.

*In MW, 13% of youth are overweight, and 7% are obese. Altogether, overweight/obesity is substantially lower in MW (20%) than the state (28%).*

*MW males are more likely than females to be overweight (14% vs. 12%) or obese (8% vs. 5%). Yet, MW females are more likely to be trying to lose weight (42% vs. 26%). They are also more likely to diet, fast, and vomit or take laxatives.*

### TRENDS FROM 2006 TO 2008

- ◆ **There have been no changes in overweight/obesity, weight perception, or weight control behaviors.**

*Overweight and obesity have remained similar in MW in the past two years. There have also been no substantial changes in weight perception and weight control behaviors.*

### CURRENT PATTERNS

- ◆ **Most students consume some fruits and vegetables.** 81% ate fruit or drank 100-percent fruit juice and 77% ate vegetables the day prior to the survey.
- ◆ **Only 35% of students consume the recommended three glasses of milk per day,** though 86% consume dairy products one or more times.
- ◆ **A substantial number of youth report drinking non-diet soda and eating fast food.** 48% drank non-diet soda and 30% consumed fast food on the day prior to the survey.
- ◆ **Males are more likely to report unhealthy eating.** More males than females ate fast food (34% vs. 26%) and drank non-diet soda (56% vs. 40%) on the day prior to the survey.
- ◆ **Consumption patterns are similar in 7<sup>th</sup> and 8<sup>th</sup> grades.**

*A majority of MW youth consumed fruit or fruit juice on the day before the survey (82%), and 80% consumed vegetables or green salad.*

*However, 29% ate fast food, and 47% drank non-diet soda the day before.*

### TRENDS FROM 2006 TO 2008

- ◆ **Overall, food consumption patterns have remained similar at the two time points.** There may be a slight decrease in vegetable consumption on the day prior to the survey, from 82% to 77%.

*Nutrition patterns have not changed in the region in the past two years.*

## PHYSICAL ACTIVITY

### 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 (76%) play on a sports team, and nearly all (97%) 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 (79% vs. 73%). Participation in PE class is similar for males and females.
- ◆ **Physical activity is similar in 7<sup>th</sup> and 8<sup>th</sup> grade.**

*79% of MW youth participate in vigorous physical activity on 3 or more days per week (83% of males and 75% of females). 73% play a team sport (76% of males and 70% of females).*

*94% of MW youth attended physical education class at least once in the past week.*

### 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%.

*Reports of physical activity and PE participation have not changed in the past two years.*

## SCHOOL ATTACHMENT AND ADULT SUPPORT

### OVERALL PATTERNS

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Protective factors promote resiliency and healthy behaviors. Findings show 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” (79% agreement) and “I feel safe in this school” (87% agreement). Three out of five students (62%) 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 (88%) have an adult they can talk to about things that are important. Yet despite these high numbers, there is a small minority of students (8%) 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

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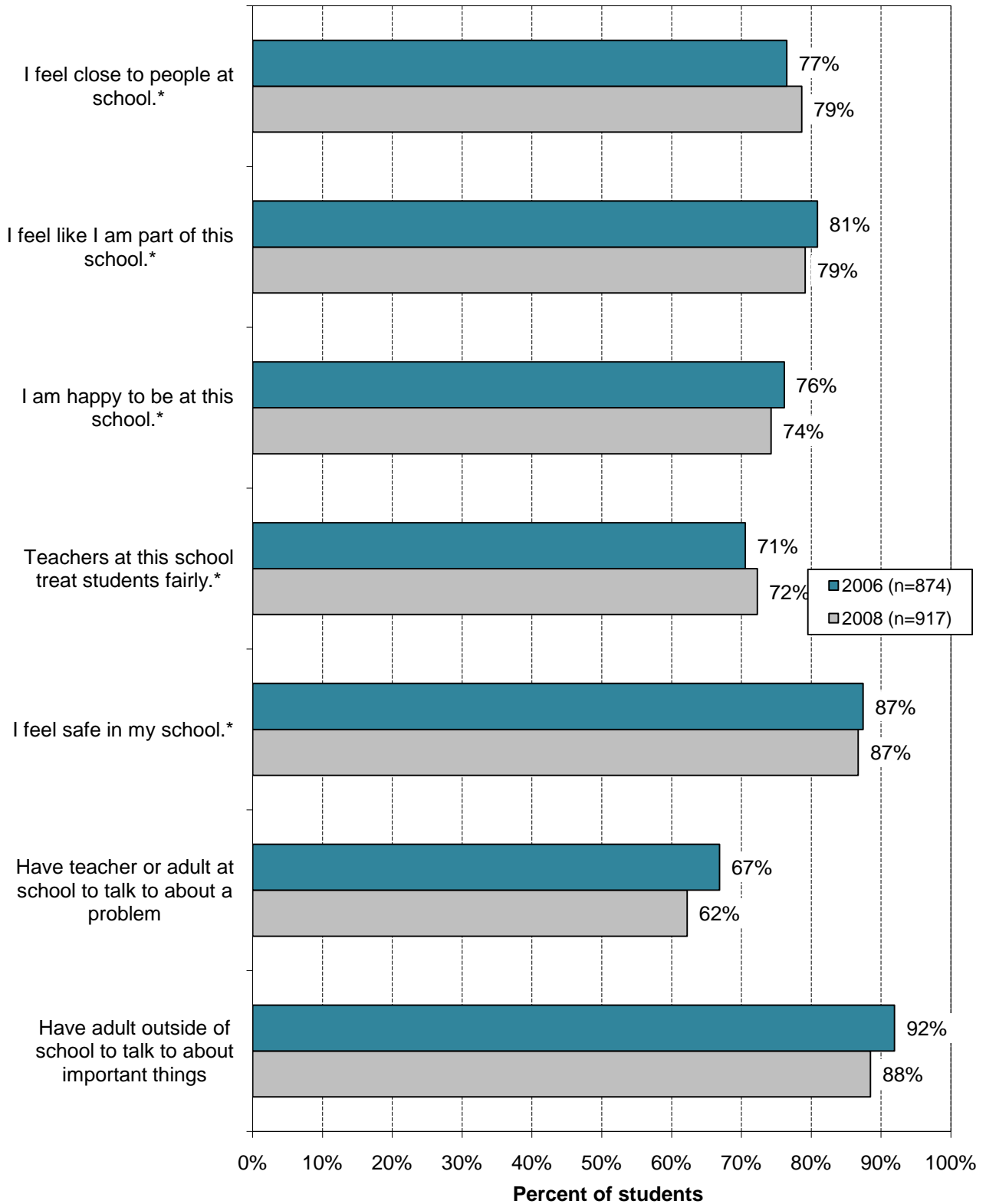
Overall school attachment has remained similar in the past two years. There may be a slight decrease in reports of adult support at school (from 67% to 62%) and outside of school (from 92% to 88%).

*Research literature shows that school attachment is associated with lower levels of deviant behavior, including less substance use, violence, and delinquency.<sup>5,6,7</sup> A majority of MW youth have positive school attachment. For example, 80% of MW youth feel safe in their schools, and 77% feel close to people at school.*

*Similarly, having a supportive adult is associated with fewer risks including less suicidality<sup>8</sup>, risky sexual activity<sup>9</sup> and substance use.<sup>10</sup> 61% of MW youth have an adult at school to talk to if they have a problem. 89% have at least one adult outside of school to talk to.*

*In MW, school attachment and adult support have not changed in recent years.*

**School Attachment and Adult Support in 2006 and 2008**  
**Franklin Middle Schools - 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:**
  - ◆ 87% feel safe in their school.
  - ◆ 79% feel close to people at school.
  - ◆ 79% feel like they are part of their school.
  - ◆ 74% are happy to be at their school.
  - ◆ 72% 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 7<sup>th</sup> to 8<sup>th</sup> grade, there are decreases in the proportion of youth who agree with the following statements: “I am happy to be at this school” (from 80% to 69%), and “I feel safe in my school” (from 89% to 84%).

*School attachment in the MW region is similar among males and females, and decreases slightly from 7<sup>th</sup> grade to 8<sup>th</sup> grade.*

### TRENDS FROM 2006 TO 2008

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

*Overall school attachment has not changed in MW in recent years.*

## ADULT SUPPORT

### CURRENT PATTERNS

- ◆ **A majority of students have supportive adults in their lives.** 62% have at least one teacher or other adult at school to talk to if they have a problem, and even more (88%) 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.** 59% of youth have a parent or family member they can talk to, and 28% have adults both in and outside of their family that they can talk to.
- ◆ **Reports of adult support are slightly higher among females than males.** 67% of females and 58% 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 similar in 7<sup>th</sup> and 8<sup>th</sup> grades.** The proportion of youth with a supportive adult outside of school is 89% in 7<sup>th</sup> grade and 88% in 8<sup>th</sup> grade. Having a supportive adult at school is also the same for both grades at 62%.
- ◆ **A small minority of students have no supportive adults in their lives.** 8% 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.

*61% of MW youth have a supportive adult at school (63% of females and 59% of males). 89% of youth have at least one supportive adult outside of school (90% of females and 87% of males).*

### TRENDS FROM 2006 TO 2008

- ◆ **Adult support both inside and outside of school may have decreased slightly.** Reports of having a supportive adult at school were 67% in 2006 and 62% in 2008. Similarly, adult support outside of school may have decreased, from 92% to 88%.

*Adult support has not changed in the region in the past two years.*

## 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 in Franklin have remained steady since 2006, bullying victimization has increased among both males and females. Other topic areas—substance use, weapon-carrying, mental health, overweight/obesity, 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 is concerning. However weapon-carrying and related threats have 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

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- <sup>1</sup> 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.
  - <sup>2</sup> 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.
  - <sup>3</sup> 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.
  - <sup>4</sup> 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.
  - <sup>5</sup> 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.
  - <sup>6</sup> 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.
  - <sup>7</sup> Bazron, B., Osher D., & Fleischman S. (2005). Creating Culturally Responsive Schools, *Educational Leadership, 63*(1), 83-84.
  - <sup>8</sup> 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.
  - <sup>9</sup> 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.
  - <sup>10</sup> Wills, T.A. & Vaughan, R. (1989). Social Support and substance use in early adolescence. *Journal of Behavioral Medicine, 12*, 321-339.