



Massachusetts
Department of
Public Health



Health and Risk Behaviors of Massachusetts Youth, 2007: The Report



May 2008



The Commonwealth of Massachusetts
MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND
SECONDARY EDUCATION
MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

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May 14, 2008

Dear Colleagues, Parents, and Students:

The Massachusetts Departments of Elementary and Secondary Education and Public Health (ESE, DPH) are pleased to present the results of two coordinated surveys of Massachusetts adolescents, the 2007 Massachusetts Youth Risk Behavior Survey (ESE) and the Massachusetts Youth Health Survey (DPH). These two surveys were supported by funding from the Centers for Disease Control and Prevention (CDC) and administered in a random selection of 124 public secondary schools by the University of Massachusetts Center for Survey Research in the spring of 2007. Combining results from both surveys, *Health and Risk Behaviors of Massachusetts Youth, 2007: The Report* presents key indicators of the behavioral and health risks reported by middle school and high school youth.

The Report provides important information about behaviors and conditions that may compromise the health, safety, and wellbeing of young people across the Commonwealth. These behaviors include tobacco, alcohol, and other drug use; behaviors leading to injuries, such as drinking and driving, fighting, and suicide attempts; dietary behaviors and physical inactivity, and sexual behaviors that may lead to sexually transmitted disease or pregnancy. The report also discusses the prevalence of health-related conditions such as overweight, chronic disease, oral health problems, and mental health concerns among our youth.

Results presented here show continued improvements in many important areas including tobacco use, alcohol and drug use, violent behavior, and suicidality. These improvements attest to the success of efforts by schools, community programs, healthcare workers, and families to foster the healthy development of young people in Massachusetts. Even so, despite clear successes, there are still behaviors in which improvements have not been seen, most notably nutrition and physical activity, and areas that warrant continued concern and attention. Stronger efforts to address these problems and to promote the health of all young people remain a priority.

Thank you for your own continued commitment to improving the lives and health of youth in Massachusetts.

Sincerely,

Jeffrey Nellhaus
Acting Commissioner
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This report is the culmination of nearly two years of hard work put forth by ESE and DPH to coordinated efforts in the interest of reducing the survey burdens on schools, providing better information to schools and other interested parties across the state regarding adolescent health-related risk behaviors, and stressing the important link between health status and academic achievement. Chiniqua Milligan of the Coordinated School Health Program, Massachusetts Department of Elementary and Secondary Education, and Paola Gilsanz, Office of Statistics and Evaluation, Massachusetts Department of Public Health, prepared the report, in collaboration with Carol Goodenow, Coordinated School Health Program, ESE, and Teresa Anderson, Office of Statistics and Evaluation, DPH. A very special thanks to Anthony Roman, University of Massachusetts, Boston Center for Survey Research, and the many people at both departments who provided invaluable input and feedback.

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Executive Summary

INTRODUCTION

Health and Risk Behaviors of Massachusetts Youth, 2007: The Report marks the first time that key health and behavioral risk indicators are reported for both middle and high school students across the Commonwealth. *The Report* is the result of collaboration between the Massachusetts Department of Elementary and Secondary Education (ESE) and Department of Public Health (DPH) to conduct two youth surveys in representative samples of Massachusetts public secondary schools in the spring of 2007. Results from ESE's Massachusetts Youth Risk Behavior Survey document significant improvements that have occurred in almost all areas of adolescent risk behavior over time. Results from DPH's Youth Health Survey provide a valuable snapshot of different middle school and high school students' health status indicators. These findings suggest that the influences of comprehensive school health programs, community efforts, and public health initiatives are having a strong positive impact on the behavior of Massachusetts adolescents and also support the continued need of these efforts.

SUMMARY OF KEY FINDINGS

Many adolescent risk behaviors have decreased since 2001. Compared to 2001, significantly fewer high school students in 2007 were smoking cigarettes, drinking alcohol, using marijuana, or engaging in physical fights. Youth also reported decreased rates of riding with an intoxicated driver or planning suicide, behaviors associated with major causes of adolescent mortality. Trend results were not available for middle school students.

Risk behaviors begin well before high school. It is clear that adolescents are engaging in risky behaviors well before they reach the 9th grade. In 2007, middle school students reported use and experimentation with tobacco, alcohol, and other drugs. Middle school students were also likely to report initiating fighting and bullying, attempting suicide, and hurting themselves on purpose. As many of these behaviors escalate through the middle school years and into high school, it is important that comprehensive health education and prevention programs not only begin in elementary school but also continue throughout the middle and high school years.

A few important areas – notably those related to nutrition, physical activity, and weight – have not improved in recent years. Many Massachusetts middle and high school students are either currently overweight or at risk of becoming overweight as adults, results that have not changed in the past few years. In 2007, significantly fewer students drank the recommended three glasses of milk per day as compared to 2001. Other indicators of good nutrition such as fruit and vegetable consumption and eating breakfast daily have also not improved in recent years, and no significant improvements can be observed in students' physical activity levels. Poor nutritional habits are also seen in the middle school population. These findings suggest that few adolescents are developing the eating and physical activity patterns that will help them maintain good health in adulthood. Schools and healthcare professionals need to strengthen their efforts to address this problem by improving nutrition education and physical education.

Factors identified in a student's life as having a protective effect on behavior are increasing. Factors such as academic achievement, a significant relationship with a parent or caregiver, a significant relationship with an adult member of the school community, and involvement in community service have been recognized as potential protective factors among adolescents. Research has shown that these factors are associated with lower rates of risk behaviors. Compared to 2001, significantly more students in 2007 felt there was a teacher in their school they could talk to if they had a problem or there was a parent or adult family member they could talk to about things that are important. Although changes in other protective factors from year to year have been small, the overall pattern of continued steady improvement is encouraging.

Many students are dealing with chronic health conditions. Many Massachusetts middle and high school students have been diagnosed with chronic health conditions that need careful management throughout the school years and into adulthood. In 2007, students reported high rates of diagnosis of allergy conditions, asthma, and diabetes. It is important that schools are properly prepared to manage the needs of these students in a safe and supportive manner; and that healthcare professionals continuously provide students and families with the education and support necessary to properly manage their conditions in the school environment.

Most students have a regular source of healthcare through which many discuss important health-related topics. Most middle and high school students report usually going to the doctor for their healthcare needs and having been seen by a dentist in the past year. Students in high school report high rates (greater than 50%) of having discussed smoking tobacco, STD prevention, drinking alcohol, illegal drug use, or birth control with their doctor. Middle school students report having these discussions, but to a lesser extent. Students in both middle and high school also report healthy eating and exercise as one of the topics discussed with their doctor. Given that students are regularly receiving some form of healthcare service, it is important for healthcare professionals to capitalize on these opportunities by providing more preventative education, especially for the middle school population.

INTRODUCTION

BACKGROUND

Health and Risk Behaviors of Massachusetts Youth, 2007: The Report summarizes findings from the 2007 administration of the Massachusetts Youth Risk Behavior Survey (MYRBS) and the Massachusetts Youth Health Survey (MYHS).

The MYRBS is conducted every two years by the Massachusetts Department of Elementary and Secondary Education (ESE) with funding from the United States Centers for Disease Control and Prevention (CDC). The survey monitors youth risk behaviors related to the leading causes of morbidity and mortality among youth and young adults. Since 1993, the MYRBS has surveyed public high school students from a scientifically selected random sample of schools across the Commonwealth.¹

At various times during the past 20 years, the Massachusetts Department of Public Health (DPH) has conducted surveys of Massachusetts youth to assess health behaviors and other health indicators. DPH surveys students in middle and high schools (grades 6 through 12). In 2003, the Center for Survey Research of the University of Massachusetts-Boston (CSR) began working with the DPH to update and administer the questionnaire then named the Massachusetts Youth Health Survey (MYHS).

As both surveys are conducted within Massachusetts public schools and cover many of the same topics, in 2005 ESE and DPH began a collaborative effort to coordinate survey administration in order to decrease the burden placed on the schools and increase the school response rate. Working with CSR, the two agencies developed revised versions of the MYRBS and MYHS. A core set of questions is common to both surveys. In 2007, CSR administered the surveys in the randomly selected schools.

SAMPLE AND PARTICIPATION

For the high school surveys, MYRBS and MYHS, the CDC selected a probability proportionate to size random sample of public high schools (schools with at least one of grades 9 through 12).¹ In the sampled schools, six classes were randomly selected; three were then randomly assigned to receive the MYRBS while three received the MYHS. Trained survey administrators from CSR administered the surveys in the participating schools. Data were collected from over 3,000 high school students within 58 schools for the MYHS and 59 schools for the MYRBS. Surveys from the 59th MYRBS school were administered by a CDC contractor: those surveys are included in both the Massachusetts and National YRBS data sets. The overall response rates (student response rate x school response rate) were 74% for the MYHS and 73% for the MYRBS.

CSR used similar scientific procedures to select a representative random sample of middle schools and classrooms within those schools. CSR survey administrators implemented the MYHS in selected schools and classes. Data were collected from over 2,700 middle school students from grades 6 through 8 within 67 schools for the MYHS. The overall response rate was 49%. The MYRBS is not administered to middle school students.

ANALYSIS AND STATISTICS PRESENTED

As a result of close adherence to the scientific sampling process and the creation of weights to account for non-response rates, the statistics presented in this report are representative of students attending public middle and high schools in Massachusetts. Since students from the same school are more likely to be similar to one another than to students from different schools, all analyses account for the effect of clustering at the school level.² Since both surveys include a random sample of public school students, not a complete census, 95% confidence intervals provide a range of values that most likely contain the true percent estimates for the population.

Results reported for *high school* students are derived from the MYRBS, except for a few instances when the data are from the MYHS and are noted as such. In most instances, results from 2001, 2003, 2005, and 2007 administrations are shown for key variables. All *middle school* results presented in this report were derived from the MYHS. Middle school results are for 2007 only; trend information is not available.

Many statistics reported in this Sentinel Report are displayed graphically; however, on occasion the text will provide further information. Group or year (MYRBS data only) comparisons depicted graphically are presented for illustrative purposes only; visible differences are not necessarily statistically significant. Only statistically significant differences across indicators are discussed in the text and designated as such in the graphs with an asterisk. Estimates were considered statistically significant if the 95% confidence intervals surrounding the estimates did not overlap.

All data collected by the MYRBS and the MYHS are based on self-report from students. Self-reported data may be subject to error for several reasons, including inaccurate recall of events or answering questions the way the students think the survey administrators would want them to respond.

¹ "Centers for Disease Control and Prevention: Methodology of the Youth Risk Behavior Surveillance System", MMWR: September 2004, Vol. 53, NO. RR-12, Centers for Disease Control and Prevention, U.S. Dept. of Health and Human Services, Atlanta Ga. 30323.

² "Sampling Techniques, 3rd Edition", William G. Cochran, 1977, John Wiley and Sons, New York.

Demographics

The demographic characteristics of the student samples are shown in Figure 1. To correct for slight variations in the demographic characteristics of actual Massachusetts middle and high school students and the characteristics of the MYRBS and MYHS, cases in the samples were statistically weighted using a protocol provided by the CDC. The weighted results presented in this report accurately reflect the gender and grade characteristics of all Massachusetts public middle and high school students in the spring of 2007.

Figure 1: Demographic Characteristics of the 2007 MYHS and MYRBS Student Samples (N, weighted %)			
	Middle School	High School	
	MYHS (n=2,727)	MYHS (n=3,216)	MYRBS (n=3,131)
Sex			
Female	1,298 (48.5%)	1,565 (49.2%)	1,598 (49.3%)
Male	1,388 (51.5%)	1,593 (50.8%)	1,524 (50.7%)
Missing	41	58	9
Grade			
6 th grade	832 (34.1%)	--	--
7 th grade	910 (32.9%)	--	--
8 th grade	966 (33.0%)	--	--
9 th grade	--	856 (27.7%)	891 (27.5%)
10 th grade	--	911 (25.3%)	743 (25.3%)
11 th grade	--	684 (24.3%)	712 (24.4%)
12 th grade	--	755 (22.6%)	760 (22.5%)
Ungraded or Other	3 (0.1%)	1 (<0.1%)	9 (0.3%)
Missing	16	9	16
Race/Ethnicity^a			
White (non-Hispanic)	1775 (66.6%)	2151 (72.8%)	2062 (72.8%)
Black or African-American (non-Hispanic)	159 (6.2%)	190 (6.8%)	157 (8.5%)
Hispanic or Latino	487 (18.3%)	539 (14.5%)	502 (12.5%)
Asian or Pacific Islander	91 (3.9%)	157 (3.1%)	189 (3.5%)
Other or Multiple Ethnicity	130 (4.9%)	141 (2.9%)	139 (2.7%)
Missing	85	38	82

^a Students were allowed to indicate multiple ethnic categories. If Hispanic/ Latino was indicated as an ethnic identification, whether alone or in combination with other ethnic categories, the student was categorized as Hispanic/Latino. The Other or Multiple Ethnicity category includes American Indian or Alaskan Natives and youth who indicated several ethnicities that did not include Hispanic/Latino.

PROTECTIVE FACTORS

HIGH SCHOOL STUDENTS

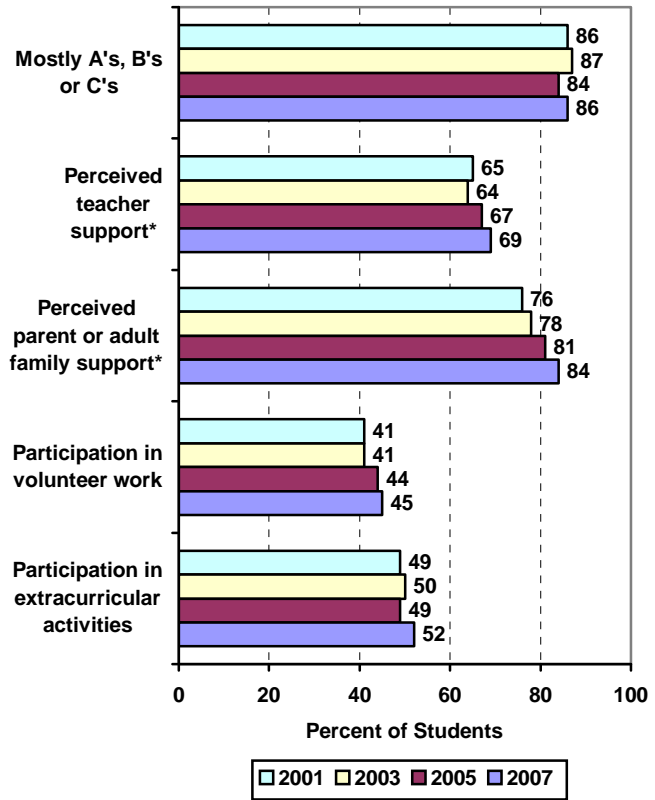
The 2007 Massachusetts Youth Risk Behavior Survey included several measures of potential protective factors among students. These included: (1) self-reported academic achievement, (2) perceived teacher or other adult support in school, (3) perceived parent or family support, (4) participation in volunteer work or community service, and (5) participation in organized extracurricular activities.

Most students (86%) reported receiving mostly A's, B's, or C's for grades in the past year.

Since 2001, there have been significant increases in the percentage of students reporting there was at least one teacher or adult in their school they could talk to if they had a problem (65% vs. 69%), and there was at least one parent or adult family member they could talk to about things that are important (76% vs. 84%).

Female students were more likely than male students to report having a teacher or another adult in school with whom they could talk about a problem (74% vs. 65%) and to report participating in volunteer work in the last month (50% vs. 41%).

Figure 2: Protective Factors Reported by High School Students, 2001-2007



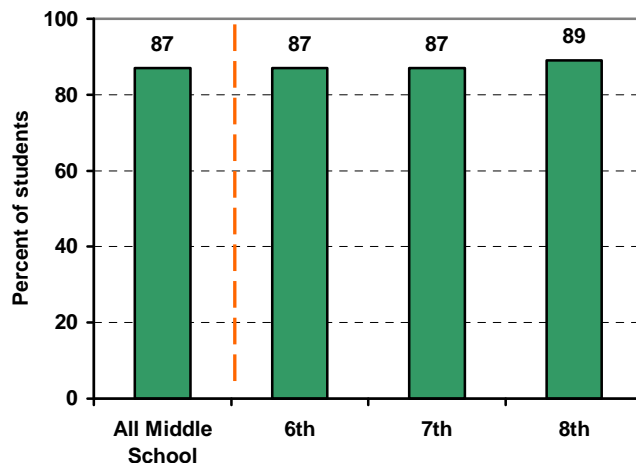
Data source: MYRBS 2001-2007

MIDDLE SCHOOL STUDENTS

The 2007 Massachusetts Youth Health Survey for middle school students included one measure for a potential protective factor: self-reported academic achievement. Academic achievement is considered as having received mostly A's, B's, or C's for grades in the past year.

Most students (87%) reported receiving mostly A's, B's, or C's for grades in the past year.

Figure 3: Percent of Middle School Students Who Received Mostly A's, B's, or C's



Data source: MYHS 2007

*Statistically significant difference found comparing 2001 and 2007

ALCOHOL USE

HIGH SCHOOL STUDENTS

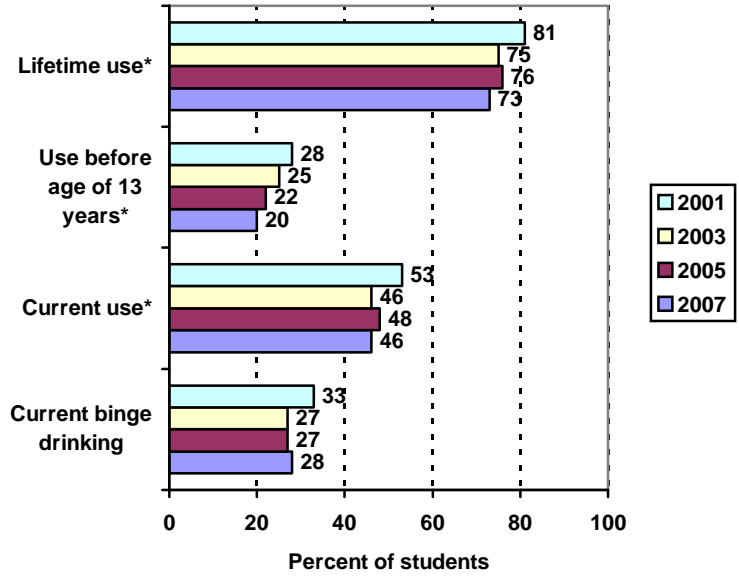
The percentage of students who reported ever having at least one drink of alcohol during their lives (lifetime use) has decreased from 81% in 2001 to 73% in 2007. The percentage of students who report having their first alcoholic drink, other than a few sips, before the age of 13 years has decreased during this time from 28% to 20%.

A significantly larger percentage of males reported having their first drink of alcohol before the age of 13 compared to females (23% vs. 16%).

Forty-six percent (46%) of students reported having an alcoholic beverage in the previous 30 days (current use). Slightly more than one quarter (28%) of high school students reported binge drinking (having five or more drinks of alcohol in a row within a couple of hours) in the previous 30 days.

Five percent (5%) of students reported having had at least one drink of alcohol on school property on one or more of the past 30 days.

Figure 4: Alcohol Use Among High School Students, 2001-2007



Data source: MYRBS 2001-2007

MIDDLE SCHOOL STUDENTS

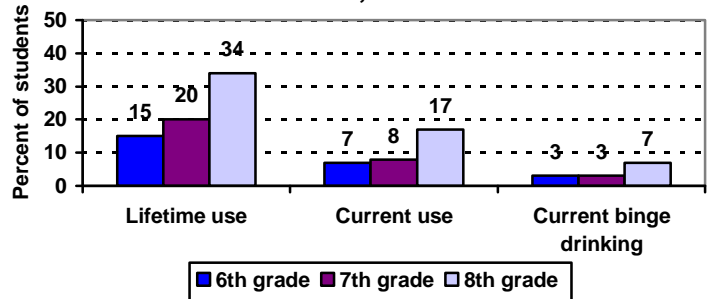
All alcohol use indicators increase among middle school students by grade level. The percentage of middle school students who reported lifetime use of alcohol more than doubles between 6th grade (15%) and 8th grade (34%). The largest increase occurs from 7th grade to 8th grade.

Similarly, the largest increase in current drinking is found from 7th grade (8%) to 8th grade (17%). In 2007, fewer than one in ten 6th grade students reported currently drinking.

Binge drinking was not common among 6th and 7th graders, with only 3% from each grade reporting having done so in the previous 30 days. Again, an increase is found among 8th graders, with 7% reporting this behavior.

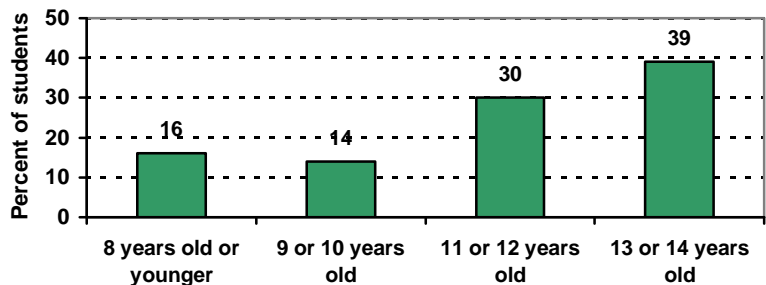
Among middle school students above the age of 13 who drank, the largest proportion reported having their first drink between the ages of 13 and 14 years.

Figure 5: Alcohol Use Among Middle School Students, 2007



Data source: MYHS 2007

Figure 6: Age of First Alcohol Consumption Among Middle School Students, 2007



Data source: MYHS 2007

TOBACCO USE

HIGH SCHOOL STUDENTS

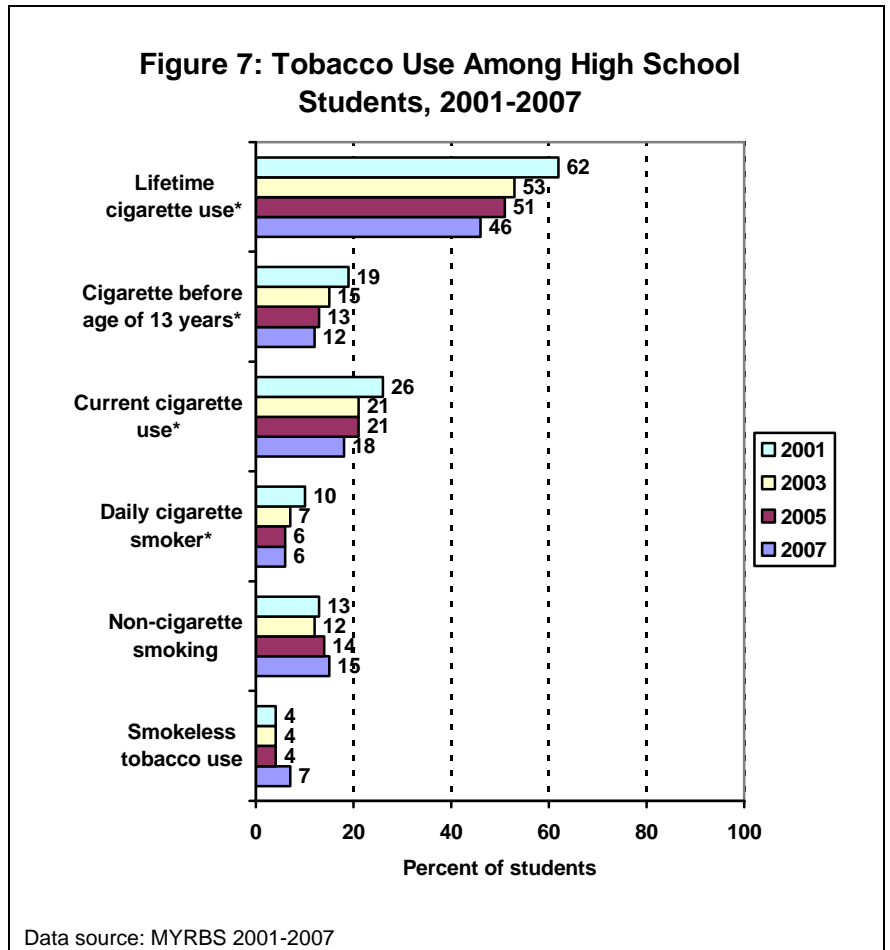
All indicators of cigarette smoking have significantly declined among Massachusetts high school students since 2001.

In 2001, approximately one in four high school students (26%) reported smoking on one or more of the past 30 days (current smoking). In 2007, approximately one in five (18%) reported this behavior.

Fifteen percent (15%) of high school students reported smoking cigars, cigarillos, or little cigars during the previous 30 days. A significantly greater proportion of males (21%) reported this behavior than females (8%).

Overall, 7% of high school students reported smokeless tobacco use (chewing tobacco, snuff, or dip) in the past 30 days. Males were five times more likely to report this behavior than females (11% vs. 2%).

Seven percent (7%) of students reported smoking cigarettes on school property on one or more of the past 30 days, a significant decrease from 12% reported in 2001.

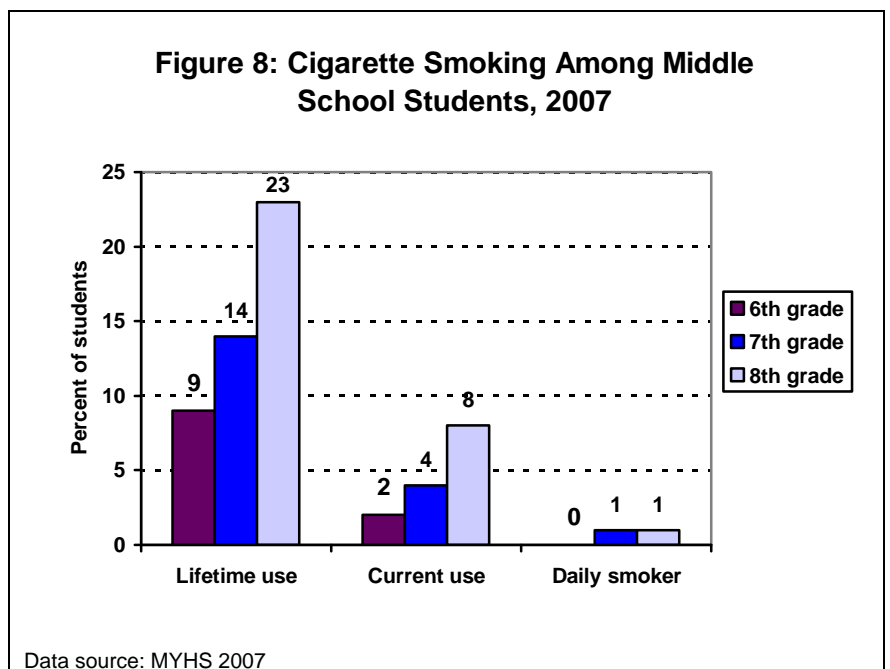


MIDDLE SCHOOL STUDENTS

Among Massachusetts middle school students, the percentage of students who report ever trying a cigarette, even one puff (lifetime use), and the percentage who currently smoke increased with grade level. For both these indicators, the largest jump occurred from 7th grade to 8th grade. Lifetime use and current use increased from 14% to 23% and 4% to 8%, respectively.

Middle school students were not likely to smoke daily or use smokeless tobacco in the previous 30 days, with approximately 1% reporting each behavior.

Three percent (3%) of middle school students reported smoking cigars, cigarillos, or little cigars in the previous 30 days. Males (2%) were more likely to report this behavior than females (1%).



*Statistically significant difference found comparing 2001 and 2007

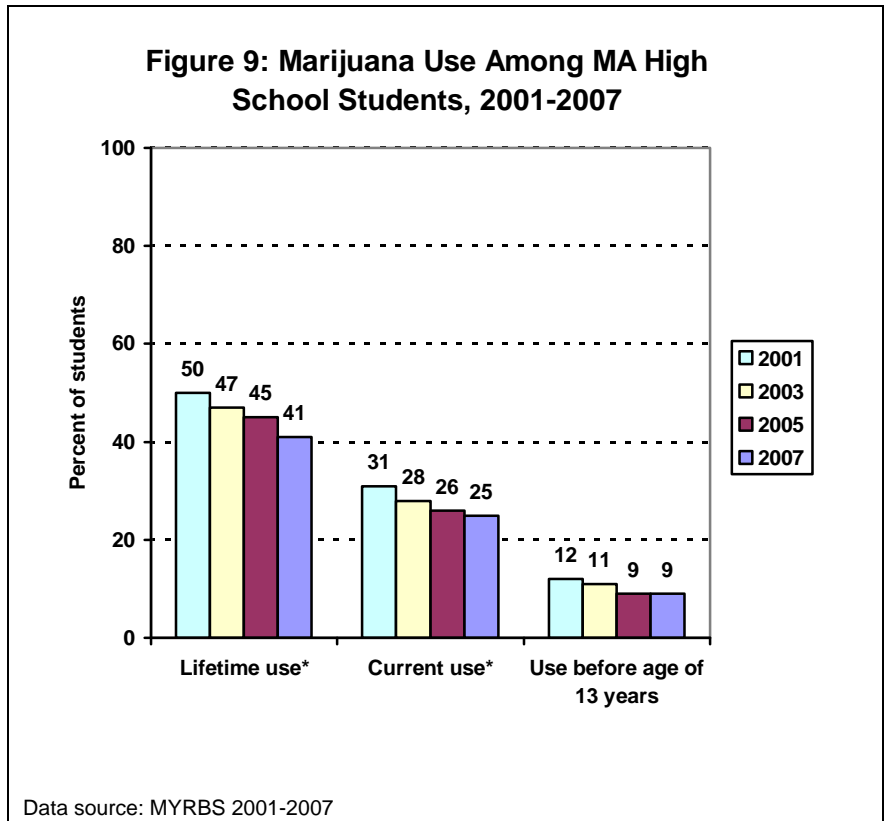
MARIJUANA USE

HIGH SCHOOL STUDENTS

Since 2001, marijuana use has declined significantly among high school students. The percentage of students who reported having ever used marijuana has dropped from 50% to 41%. In 2007, marijuana use in the past 30 days (current use) was 25%, down from 31% in 2001.

Five percent (5%) of students reported using marijuana on school property in the past 30 days.

Almost half (49%) of high school students stated that they believe smoking marijuana occasionally would be a serious threat to their health. (MYHS 2007)

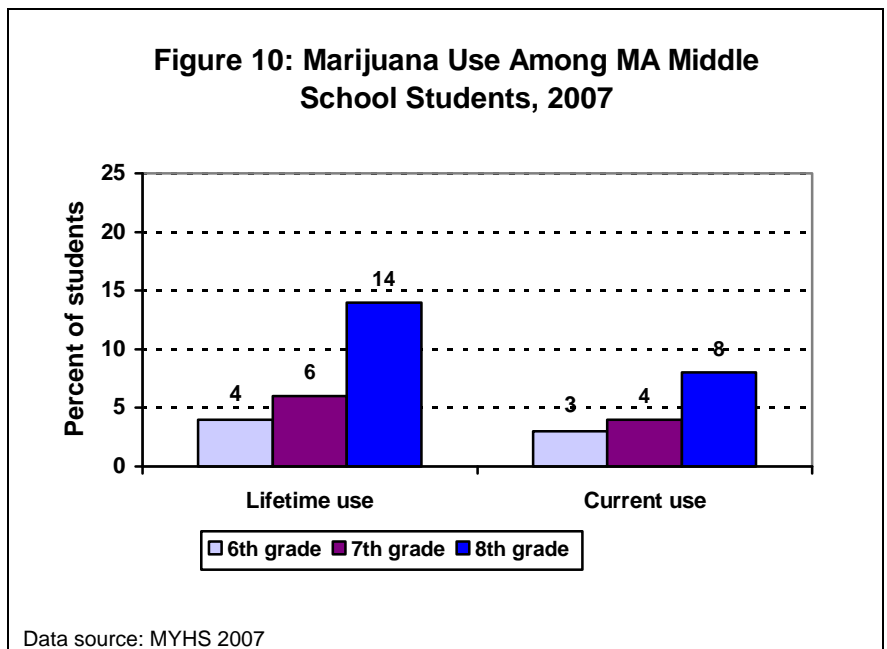


MIDDLE SCHOOL STUDENTS

A total of 8% of middle school students reported having used marijuana at least once in their lives. Among students who had used marijuana, 12 years old was the mean age of first use. Current use of marijuana was 5%.

Both current and lifetime marijuana use among middle school students increased by grade level.

In regards to perception of risk, the MYHS found that 83% of the middle school students thought smoking marijuana occasionally would be a serious risk to their health.



OTHER DRUG USE

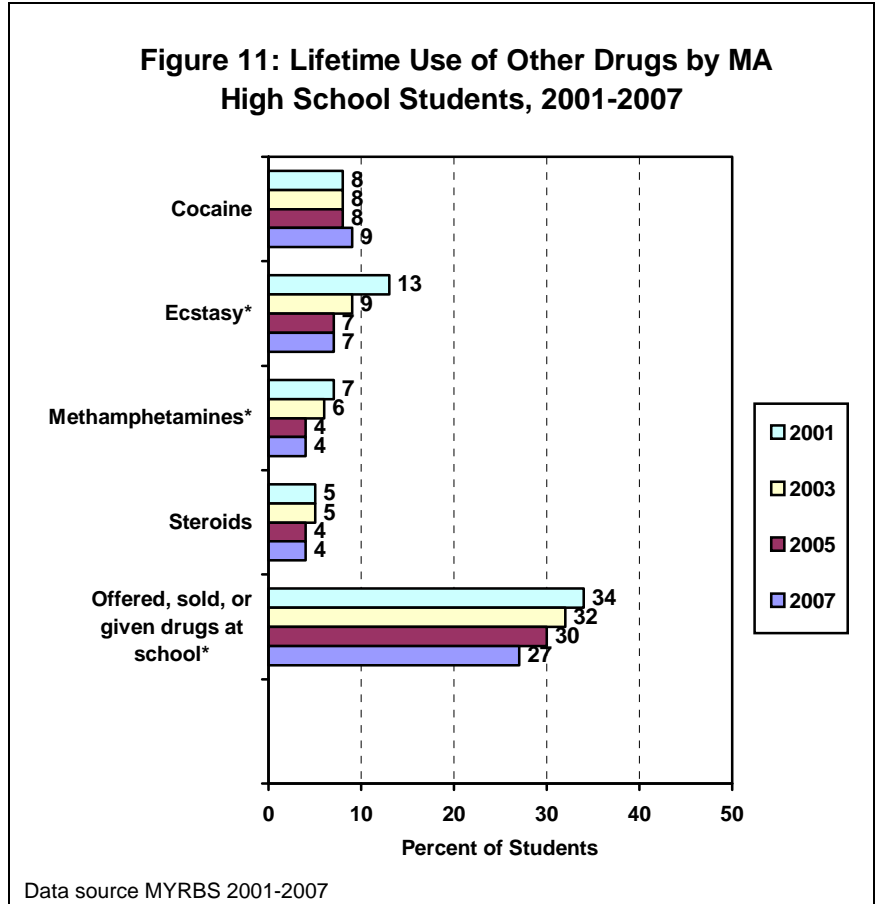
HIGH SCHOOL STUDENTS

Since 2001, there have been significant decreases in the percentage of students who reported ecstasy use, methamphetamine use and being offered, sold, or given drugs at school.

Twenty-seven percent (27%) of high school students reported being offered, sold, or given an illegal drug by someone on school property during the previous 12 months. A significantly larger percentage of males reported this than females (31% and 23%, respectively).

In 2007, 18% of high school students reported ever taking a prescription drug that was not their own. Six percent (6%) reported taking it during the previous 30 days. (MYHS 2007)

The MYHS assessed high school students' perception of risk of inhalants and OxyContin. Ninety-two percent (92%) of students thought that sniffing or huffing inhalants would be a serious risk to their health. Similarly, 91% thought that occasionally using OxyContin that was not prescribed to them would be a threat to health. (MYHS 2007)

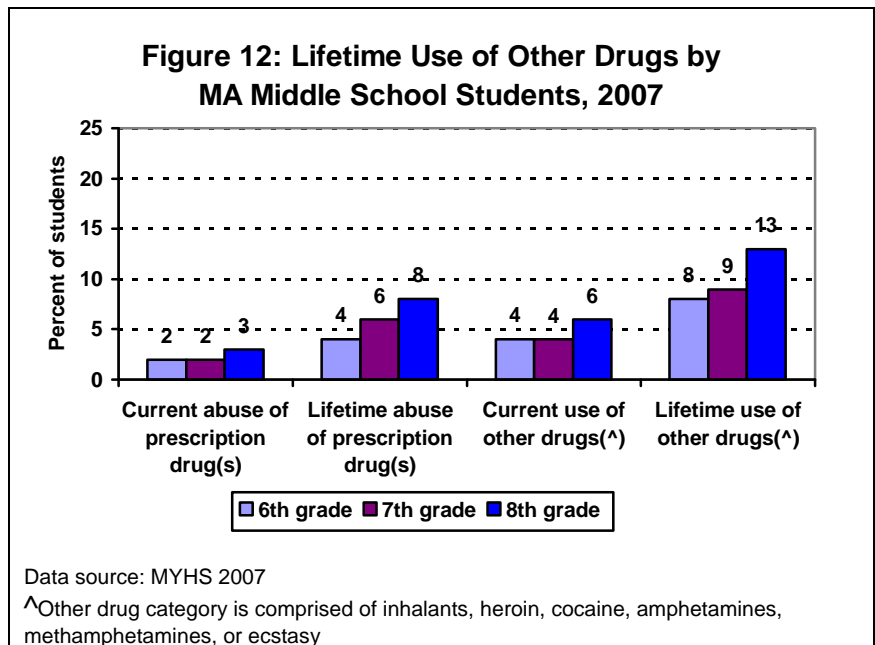


MIDDLE SCHOOL STUDENTS

While 6% of middle school students reported ever having taken drugs from prescriptions that were not their own, only 3% had done so in the past 30 days. A greater proportion of females than males reported ever taking prescription drugs that were not their own (8% vs. 4%).

Overall, 10% of middle school students reported some use of illegal drugs other than marijuana in their lifetime. The other drug category included inhalants, heroin, cocaine, amphetamines, methamphetamines, and ecstasy. Half as many (5%) students reported using these drugs in the past 30 days.

Sniffing or huffing inhalants and occasionally using OxyContin that was not prescribed to them were thought to be serious risks to their health by 89% and 90%, respectively.



* Statistically significant difference found comparing 2001 and 2007

DIETARY BEHAVIORS

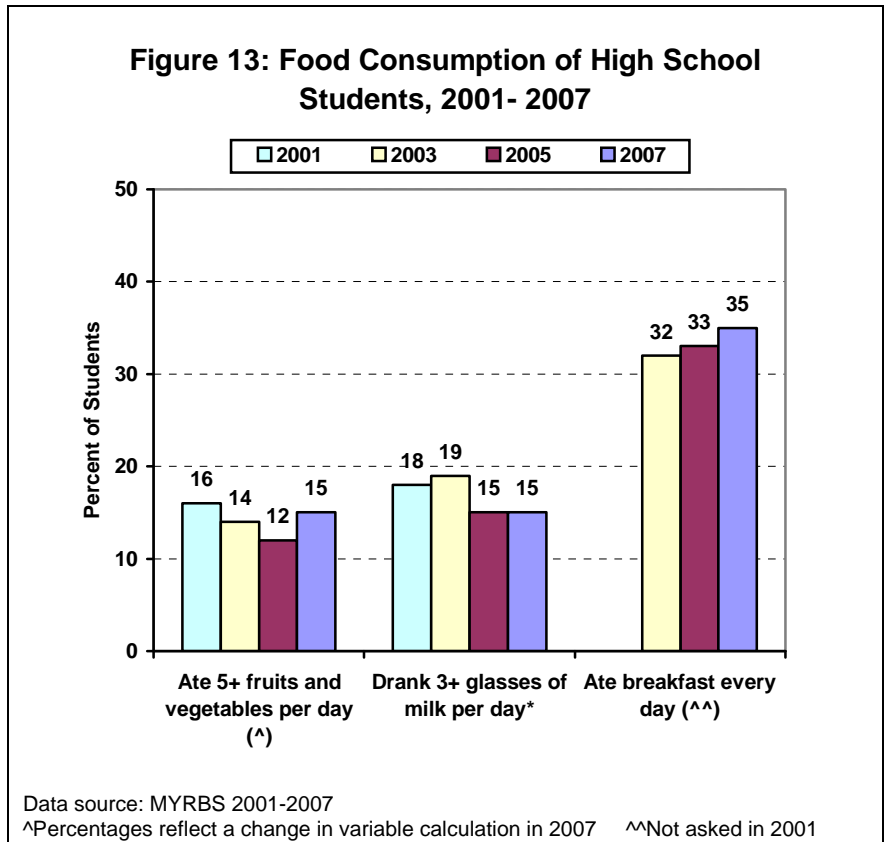
HIGH SCHOOL STUDENTS

Fifteen percent (15%) of high school students reported consuming the recommended five or more servings of fruit and vegetables per day.

Only 15% of students drank the recommended three glasses of milk per day, a significant decrease since 2001. Males were nearly twice as likely as females to drink three or more glasses of milk (19% vs. 10%, respectively).

Thirty-five percent (35%) of high school students reported eating breakfast every day in the week before the survey; 14% did not eat breakfast on any of the past seven days. Male students (39%) were more likely than female students (30%) to report having eaten breakfast every day.

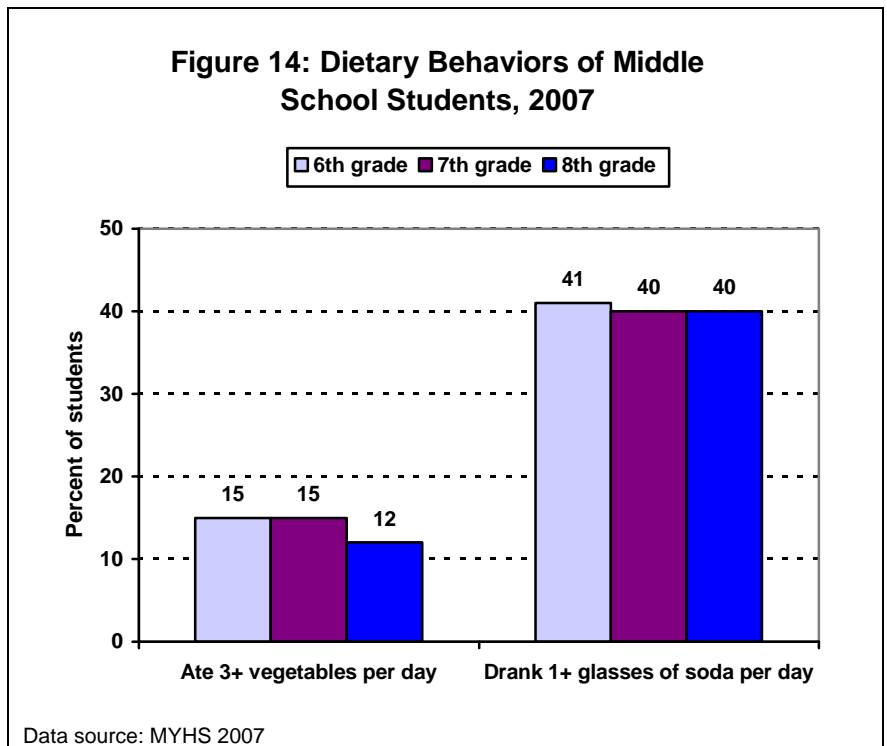
One quarter (25%) of students said that they drank non-diet soda one or more times per day during the past seven days. Male students (32%) were more likely than female students (18%) to report this behavior.



MIDDLE SCHOOL STUDENTS

Fourteen percent (14%) of middle school students reported consuming three or more servings of vegetables the day before the survey. Approximately one in four middle school students (26%) reported eating no vegetables during the previous day. Males and females ate similar quantities of vegetables per day.

Four out of every ten students (40%) reported drinking one or more glasses of non-diet soda on the day preceding the survey. Though consumption of non-diet soda was the same across grades, a greater proportion of males (43%) reported this behavior than females (37%).



PHYSICAL ACTIVITY

HIGH SCHOOL STUDENTS

Forty-one percent (41%) of students reported that they were physically active for a total of at least 60 minutes per day on five or more of the past seven days (recommended amount of physical activity).

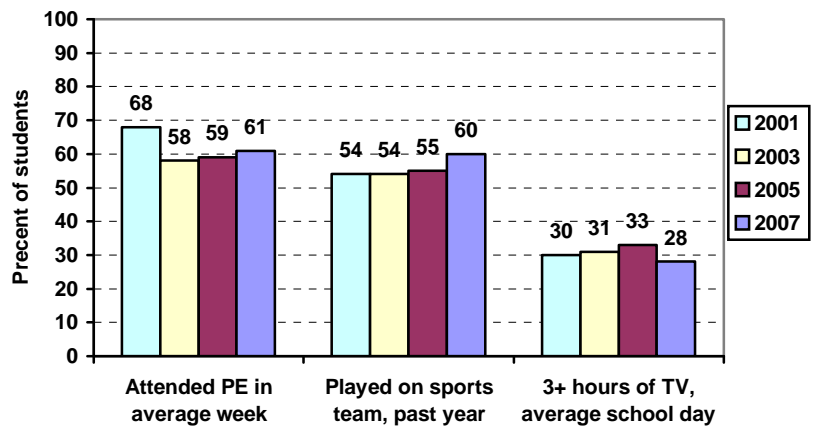
Male students were more likely than female students to report the recommended amount of physical activity (50% vs. 32%).

Physical activity declined with grade level. Ninth grade students were more likely than twelfth grade students to report 60 minutes or more of physical activity per day for five a more days in past week (49% vs. 36%), attending Physical Education class one or more times in an average week (69% vs. 43%), and playing on one or more sports teams in the past year (70% vs. 53%).

In 2007, 30% of students reported three or more hours per day of non-school related video game and/or computer usage and 28% reported three or more hours per day of watching television.

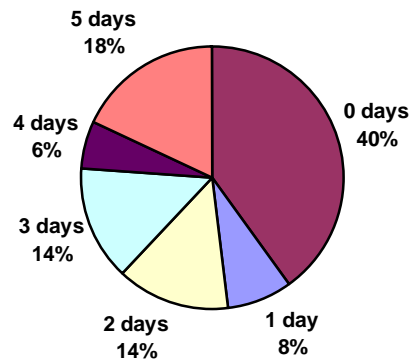
Male students were more likely than female students to report three or more hours per day of non-school related video game and/or computer usage (32% vs. 26%).

Figure 15: Physical Activity of High school Students, 2001-2007



Data source: MYRBS 2001-2007

Figure 16: Number of Days Per Week High School Students Attended PE Classes



Data source: MYRBS 2007

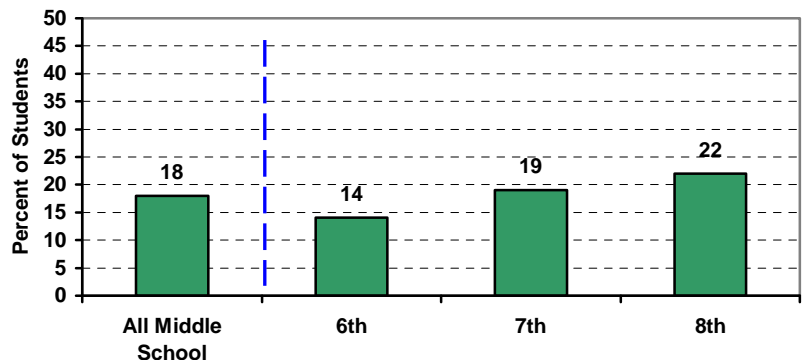
MIDDLE SCHOOL STUDENTS

Eighteen percent (18%) of students reported using the Internet for three or more hours on an average school day.

The percent of students reporting three or more hours of Internet usage per day increased with grade in school.

Overall, 34% of middle school students reported walking to or from school at least once during the previous five school days.

Figure 17: Three or More Hours of Internet Usage Among Middle School Students, 2007



Data source: MYHS 2007

* Statistically significant difference found comparing 2001 and 2007.

WEIGHT AND WEIGHT CONTROL

HIGH SCHOOL STUDENTS

According to their Body Mass Index, calculated on the basis of self-reported height and weight, 15% of students were “at risk of overweight” (i.e., greater than or equal to 85th percentile but less than 95th percentile for body mass index, by age and sex, based on reference data) and 11% were overweight (i.e., greater than or equal to 95th percentile for body mass index, by age and sex, based on reference data).

Twenty-nine percent (29%) of adolescents perceived themselves to be slightly or definitely overweight, a significant decrease since 2001 (33%).

Nearly one half (46%) reported that they were trying to lose weight.

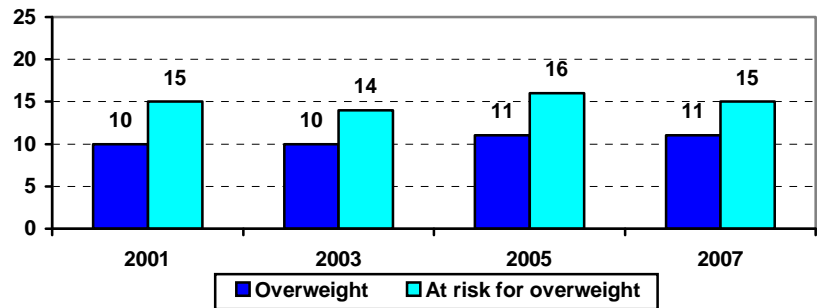
Eleven percent (11%) of students reported trying to control their weight by fasting or going without eating for 24 hours or more, a significant decrease since 2001 (14%).

Vomiting or using laxatives to control weight was reported by 5% of students.

Male students were more likely than female students to be definitely overweight (15% vs. 7%, respectively); however, they were less likely to perceive themselves as overweight (22% vs. 36%) or trying to lose weight (29% vs. 63%).

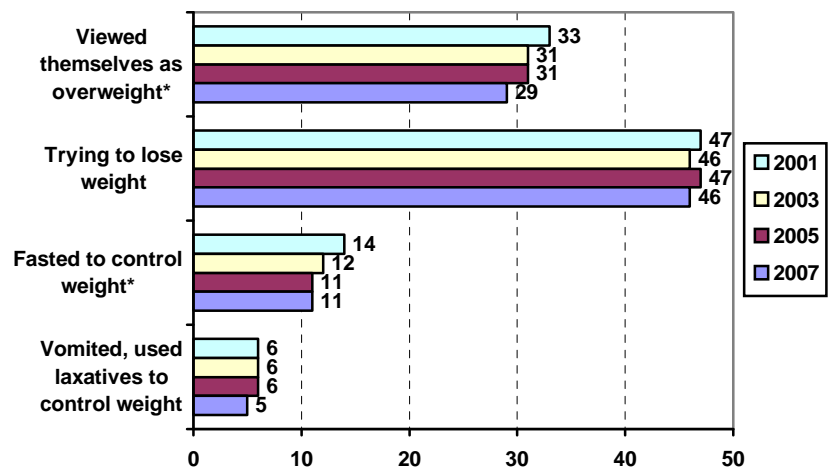
Six percent (6%) of students indicated that they used diet pills, powders, or liquids without a doctor’s prescription to try to control their weight.

Figure 18: High School Students Who Are Overweight or At Risk for Overweight, 2001-2007



Data source: MYRBS 2001-2007

Figure 19: Weight Perception and Weight Control Among High School Students, 2001-2007



Data Source: MYRBS 2001-2007

MIDDLE SCHOOL STUDENTS

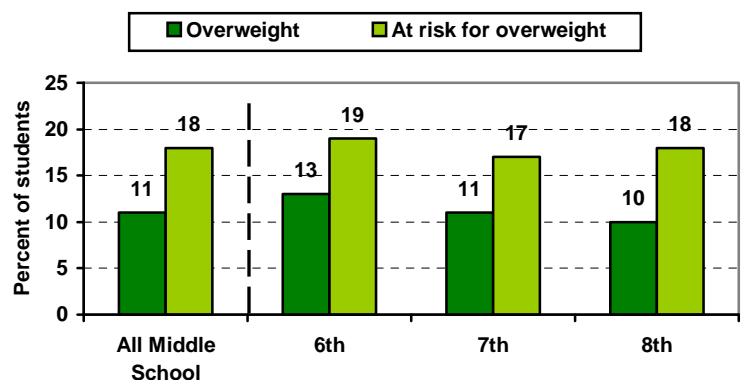
Eighteen percent (18%) of middle school students were at risk for being overweight and 11% were definitely overweight.

One-quarter (26%) of middle school students perceived themselves to be slightly or very overweight.

Across all grades, male students were more likely than female students to be definitely overweight.

Despite the fact that a greater proportion of boys were at risk of overweight or definitely overweight than girls (33% vs. 25%), a greater proportion of girls viewed themselves as slightly or very overweight (27% vs. 24%).

Figure 20: Middle School Students Who Are Overweight or At Risk for Overweight, 2007



Data source: MYHS 2007

PERSONAL SAFETY

HIGH SCHOOL STUDENTS

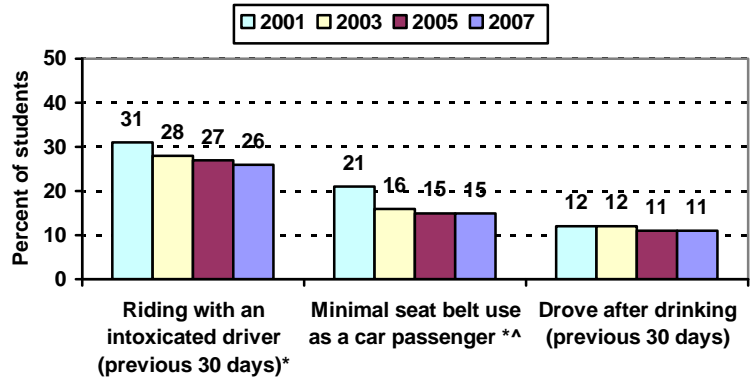
Students' motor vehicle safety has improved since 2001. The percentage of students who rode with an intoxicated driver decreased from 31% in 2001 to 26% in 2007. During the same time period, the percentage of students who reported never or rarely wearing a seat belt (minimal use) while a passenger in a car went from 21% to 15%.

In 2007, 11% of students reported driving after drinking in the past 30 days.

More than half (55%) of high school students reported having a paying job in the previous 12 months. Among these students, 3% reported being injured at a paid job badly enough to seek care from a medical professional during the previous year. (MYHS 2007)

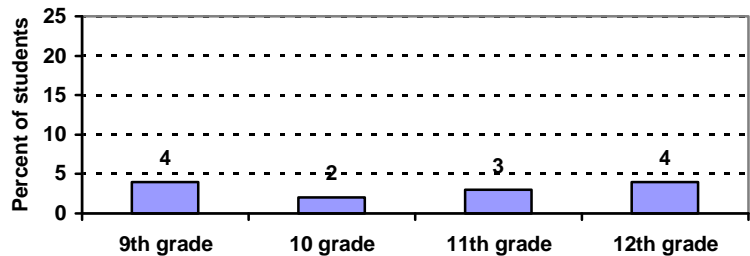
A significantly greater percentage of males reported being injured at a job than females (3% vs. 1%). (MYHS 2007)

Figure 21: Motor Vehicle Safety Among MA High School Students, 2001-2007



Data source: MYRBS 2001-2007
 ^never or rarely using a seat belt

Figure 22: Percent of MA High School Students Who Reported On-the-Job Injuries, 2007



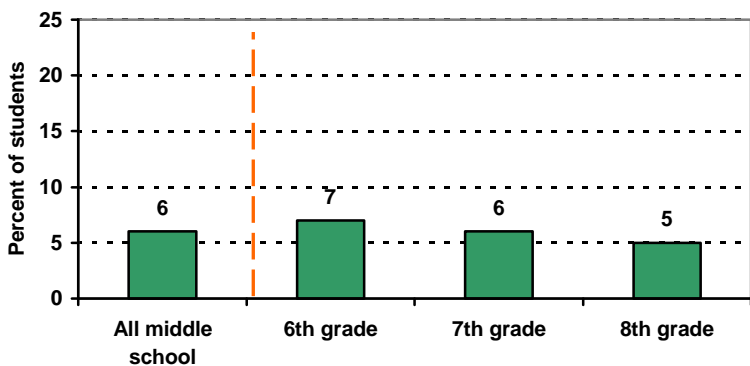
Data source: MYHS 2007

MIDDLE SCHOOL STUDENTS

One in four middle school students (25%) reported having a paid job other than babysitting or yard work in the previous year. Of these students, approximately 6% reported being injured at a paid job badly enough to seek medical care during the past year.

The percentage of working students reporting such an injury decreased by one percentage point for each increase in middle school grade level.

Figure 23: Percent of MA Middle School Students Who Reported On-the-Job Injuries, 2007



Data source: MYHS 2007

*Statistically significant difference found comparing 2001 and 2007

VIOLENCE-RELATED BEHAVIORS AND EXPERIENCES

HIGH SCHOOL STUDENTS

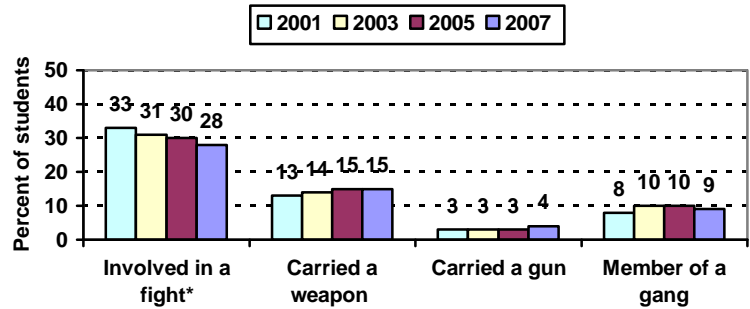
The percentage of high school students who reported having been in a fight in the past year significantly decreased from 33% in 2001 to 28% in 2007.

Significantly more male than female high school students reported carrying a weapon in the previous thirty days (24% vs. 5%), carrying a gun in the past 30 days (13% vs. 4%), and being a member of a gang in the past year (6% vs. 1%).

Overall, 11% of high school students reported being physically hurt (e.g., being shoved, slapped, hit, or forced into any sexual activity) by a date in 2007.

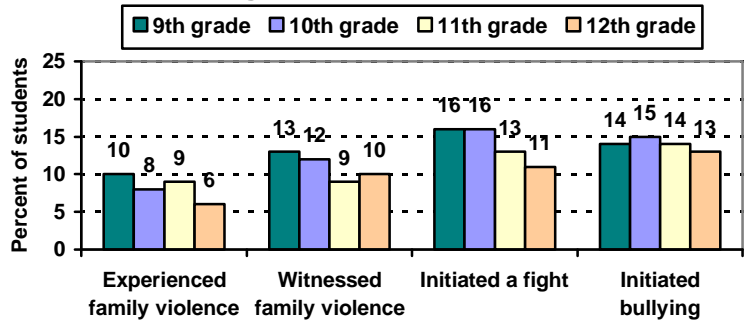
Fourteen percent (14%) of high school students reported that they had bullied or pushed someone around during the previous 12 months. The percentage of boys who reported this sort of behavior was twice that of girls (18% vs. 9%). In 2007, 22% of students reported having been the victim of bullying. (MYHS 2007)

Figure 24: Physical Violence Indicators Among MA High School Students, 2001-2007



Data source: MYRBS 2001-2007

Figure 25: Physical Violence Indicators Across MA High School Grades, 2007



Data source: MYHS 2007

MIDDLE SCHOOL STUDENTS

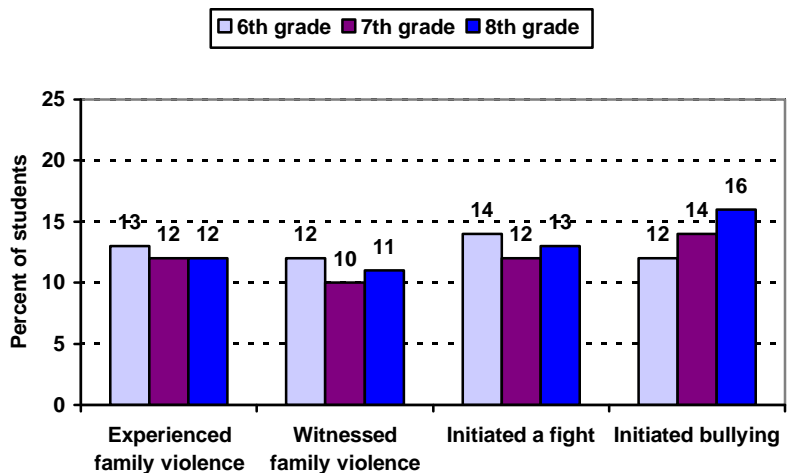
Overall, 12% of middle school students reported being physically hurt by a family member in the previous 12 months.

Approximately 14% of middle school students admitted to bullying or pushing someone around during the previous 12 months. A similar percentage (13%) reported that they started a fight with someone during the previous year.

Among all middle school students, 6% reported being physically hurt by a date.

Significantly more male than female middle school students reported initiating a physical fight (17% vs. 8%), bullying (17% vs. 11%), being bullied (16% vs. 10%), and/or experiencing dating violence (7% vs. 4%).

Figure 26: Physical Violence in MA Middle School Students, 2007



Data source: MYHS 2001

VIOLENCE-RELATED BEHAVIORS AND EXPERIENCES AT SCHOOL

HIGH SCHOOL STUDENTS

In 2007, 5% of students skipped school at least once in the 30 days before the survey because they felt unsafe either at school or on their way to or from school.

Twenty-two percent (22%) of students reported being bullied at school in the past year. Being bullied included being repeatedly teased, threatened, hit, kicked, shunned, or excluded by another student or group of students.

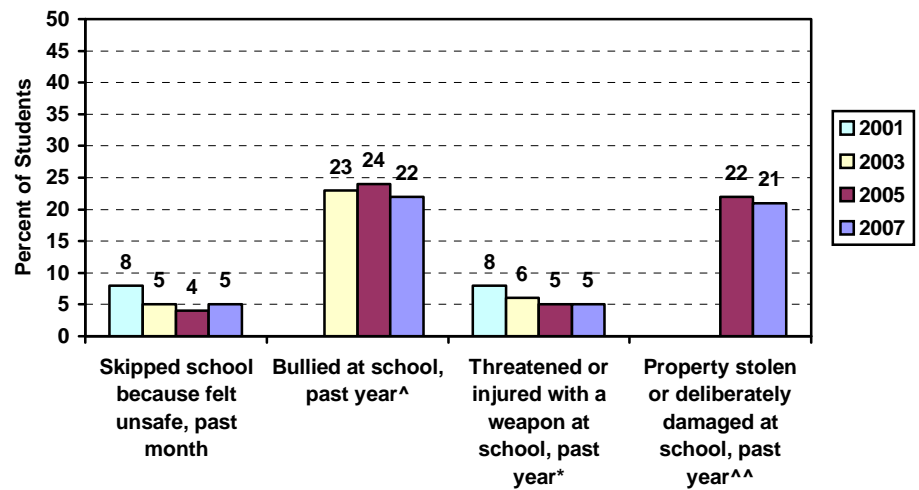
The percentage of high school students who reported having been threatened or injured with a weapon at school in the past year significantly decreased from 8% in 2001 to 5% in 2007. Male students were more than two times more likely than female students (8% vs. 3%) to report this.

Over one-fifth of students (21%) reported that at some time in past 12 months their property (such as books, car, or personal property) had been stolen or deliberately damaged at school. Male students were more likely than female students to report stolen or damaged property (25% vs. 18%).

Five percent (5%) of all students carried a weapon on school property in the 30 days before the survey. Male students were more than two times more likely than female students to report carrying a weapon on school property (7% vs. 3%).

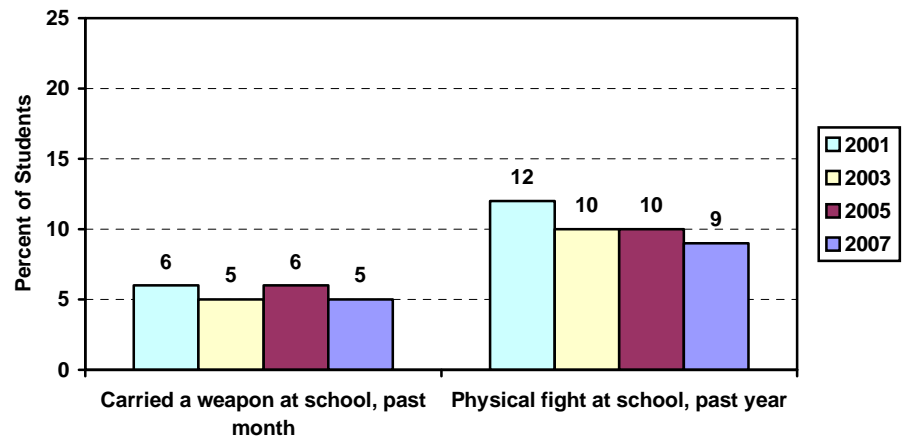
Fighting on school property was significantly more common among male students (12%, compared to 8% of females). Overall, 9% of students were in a fight on school property in the 12 months before the survey.

Figure 27: Violence-Related Experience at School Among High School Students, 2001-2007



[^] Not asked in 2001 ^{^^} Not asked in 2001 or 2003
Data source: MYRBS

Figure 28: Violence-Related Behaviors at School Among High School Students, 2001-2007



Data source: MYRBS

(Note: Questions regarding violence related behaviors and experiences on school property only appear on the Youth Risk Behavior Survey and therefore are only asked of high school students)

* Statistically significant difference found comparing 2001 and 2007

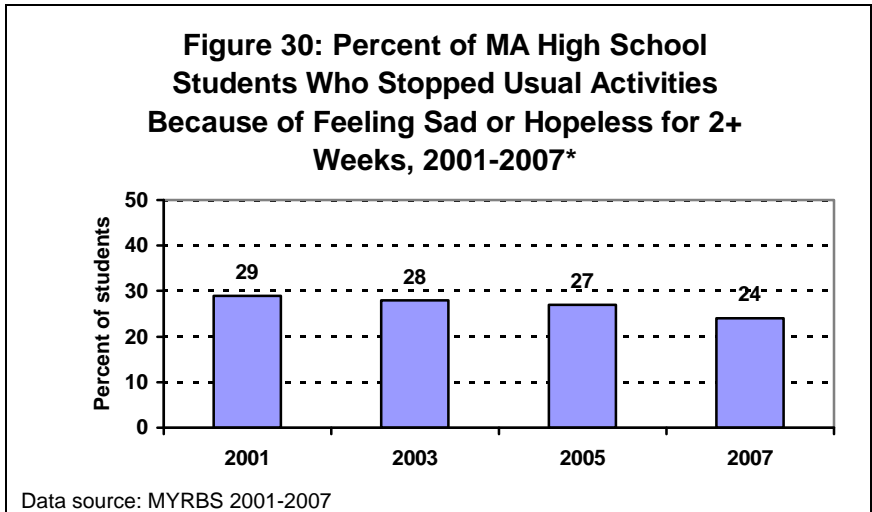
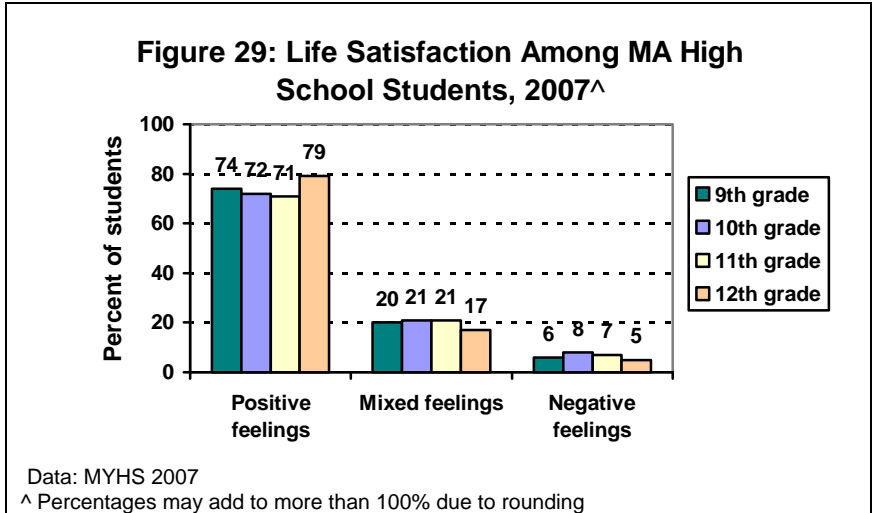
Mental Health

HIGH SCHOOL STUDENTS

When asked, "In general, how satisfied are you with your life?" Massachusetts high school students responded positively. Almost three out of four students (74%) reported that they were delighted, pleased, or mostly satisfied with life. (MYHS 2007)

In 2007, 45% of high school students reported that in the previous 12 months they had felt the need to talk to someone other than a family member regarding their feelings and/or current issues in their lives. A larger proportion of females than males reported feeling a need to talk to someone other than family member (59% vs. 31%). (MYHS 2007)

Between 2001 and 2007, there was a significant decline in the percentage of high school students who report feeling so sad or depressed daily for at least two weeks during the previous year that they discontinued usual activities (29% and 24%, respectively). In 2007, a significantly larger percentage of females than males reported feeling this way (31% vs. 17%).

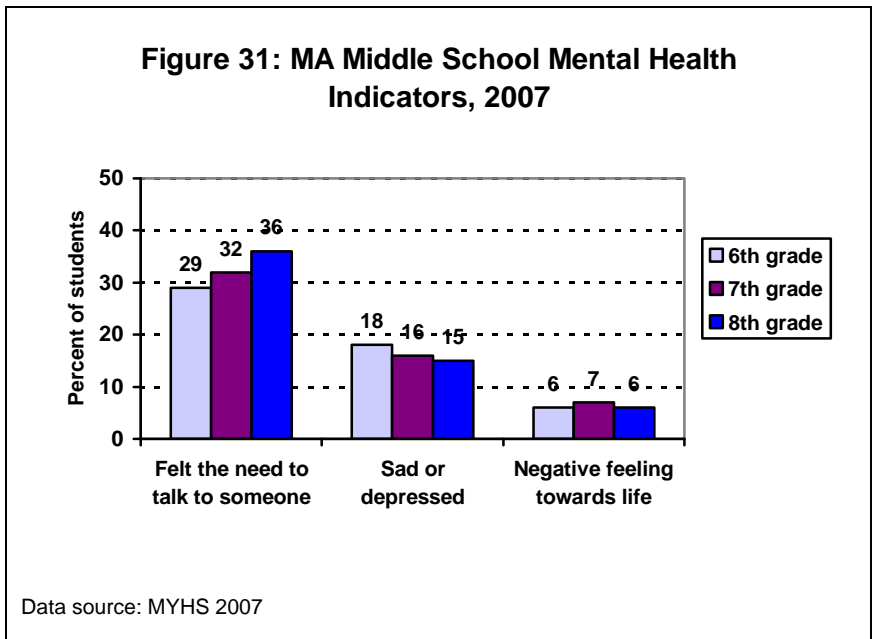


MIDDLE SCHOOL STUDENTS

Overall, 75% of middle school students reported being delighted, pleased, or mostly satisfied with life; 6% of students reported that they were mostly dissatisfied, unhappy or felt terrible. The remainder reported having mixed feelings.

Overall, 17% of Massachusetts middle school students reported feeling so sad or depressed daily for at least two weeks that they discontinued usual activities. Thirty-two percent (32%) felt they needed to talk to someone other than a family member about their feelings in the past year.

A significantly greater proportion of girls compared with boys reported feeling depressed (20% vs. 13%) and of feeling the need to talk to an adult outside their family (40% vs. 25%).



SUICIDALITY AND NON-SUICIDAL SELF-INFLICTED INJURY

HIGH SCHOOL STUDENTS

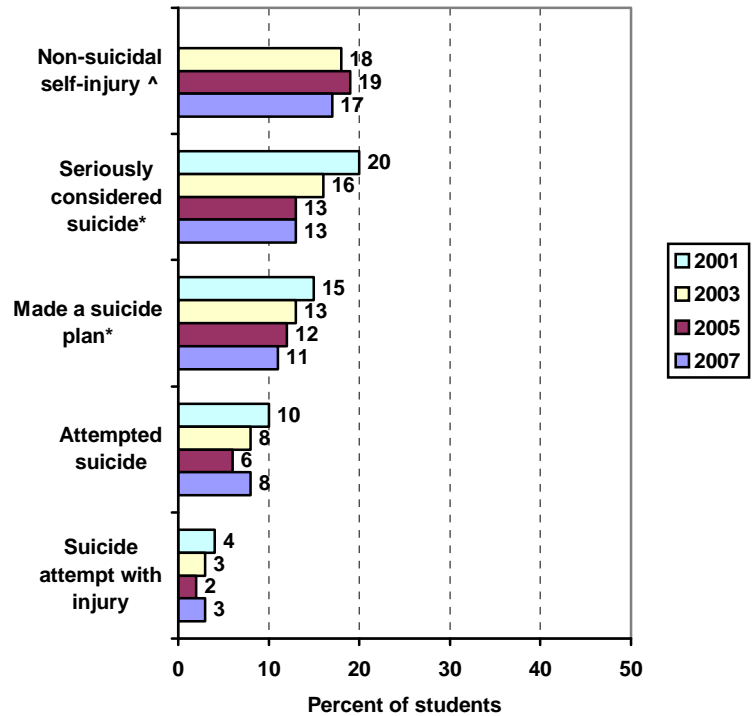
The prevalence of suicidal thoughts and behaviors among youth, as well as non-suicidal self-injury (e.g., cutting, burning or otherwise hurting oneself on purpose without the intent to die), are indicators of the mental health of this population.

Overall, 13% of students in 2007 reported they seriously considered suicide and 11% made a suicide plan within the past year; both represent a significant drop since 2001.

In 2007, 8% of high school students reported attempted suicide in the past year. Seventeen percent (17%) of students reported hurting themselves on purpose in the past year.

Suicidal thoughts as well as non-suicidal self harm were more prevalent among females than males. Twenty-two percent (22%) of female students reported non-suicidal self harm (vs. 12% among males), 16% seriously considered suicide (vs. 9% among males), and 13% reported making a suicide plan (vs. 9% among males). However, the percentage of females (9%) who reported attempting suicide in the previous year was not significantly greater than that of males (6%).

Figure 32: Suicidality and Non-Suicidal Self-Injury Among MA High School Students, 2001-2007



Data source: MYRBS 2001-2007
^Not asked in 2001

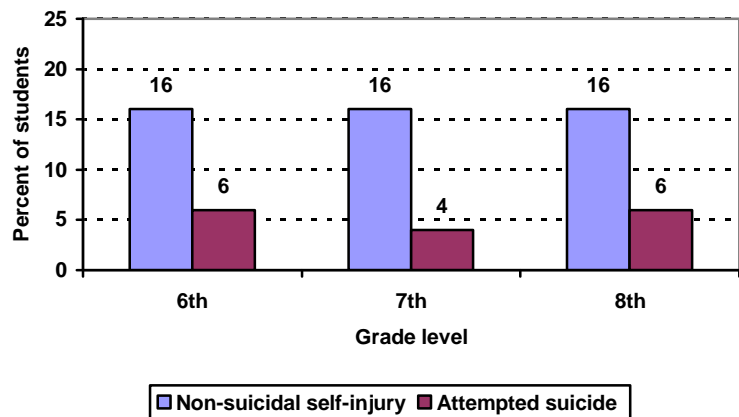
MIDDLE SCHOOL STUDENTS

Sixteen percent (16%) of middle school students reported non-suicidal self-injury during the previous year.

Six percent (6%) of middle school students reported attempting suicide one or more times in the past year.

During the past year, there were no differences between grades in the percentage of students who reported attempted suicide or non-suicidal self-injury.

Figure 33: Suicidality and Non-Suicidal Self-Injury Among MA Middle School Students, 2007



Data source: MYHS 2007

*Statistically significant difference found comparing 2001 and 2007

SEXUAL BEHAVIORS

HIGH SCHOOL STUDENTS

There have been small fluctuations in sexual behaviors between 2001 and 2007. In 2007, fewer than half of all high school students (44%) reported having ever had sexual intercourse; one-third (33%) had intercourse in the previous three months (recent sexual intercourse); and twelve percent (12%) of students reported having four or more partners in their lives.

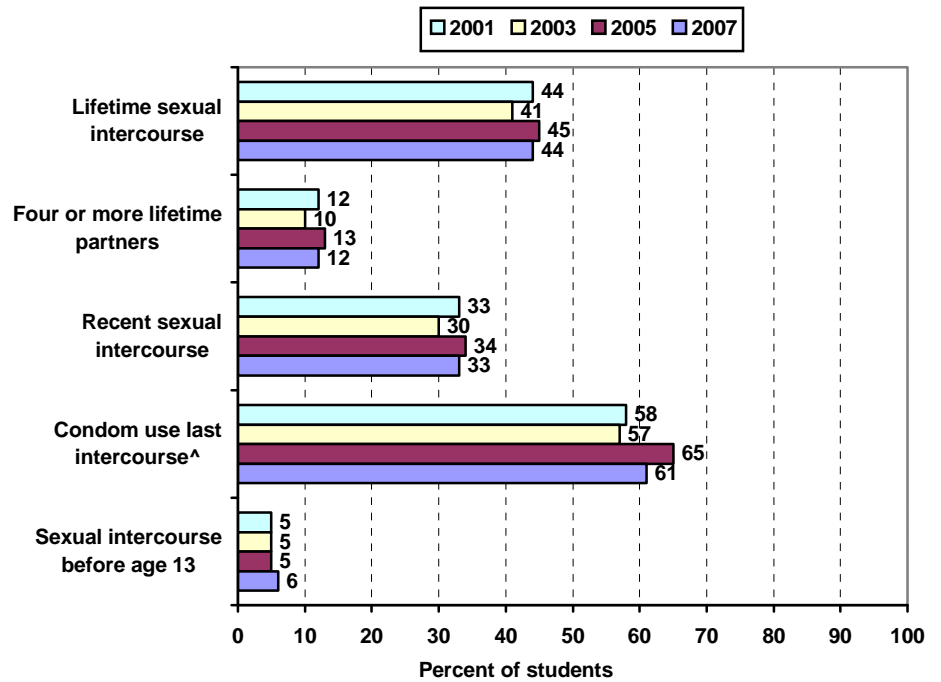
The percent of students who reported lifetime sexual intercourse more than doubled between 9th and 12th grade students (26% vs. 64%). The percentage of students who reported 4 or more partners approximately tripled across these two groups (6% in 9th grade vs. 19% in 12th grade students).

Approximately half (49%) of high school students reported speaking with their parents or another adult in the family about sexuality or ways to prevent HIV infection, other sexually transmitted diseases (STDs), or pregnancy during the past year.

In 2007, half (50%) of high school students reported being taught at school how to use a condom. Eighty-nine percent (89%) of students reported receiving HIV/AIDS education in school, a significant drop since 2005 (93%).

Five percent (5%) of students reported having been or gotten someone pregnant, and 3% reported having been diagnosed with HIV infection or any other STD during their lifetime.

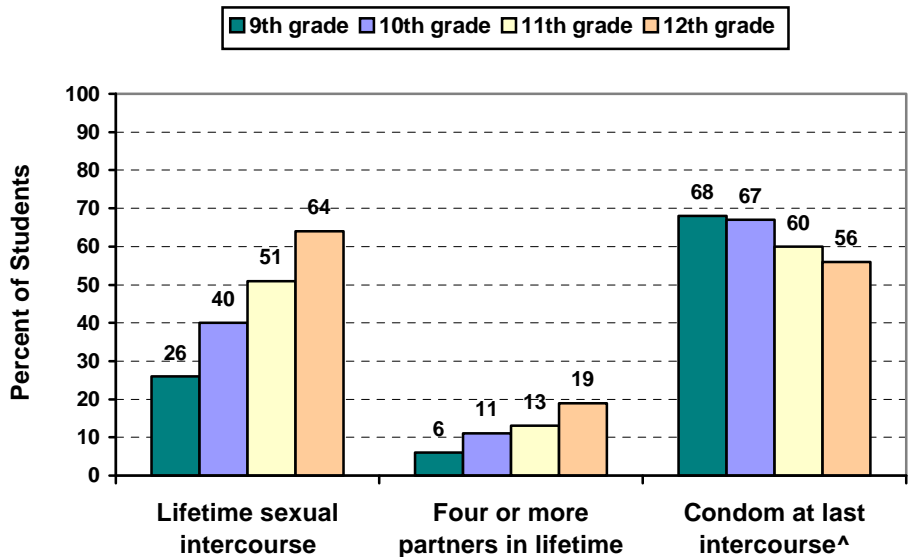
Figure 34: Lifetime and Recent Sexual Behaviors Reported by High School Students, 2001-2007



Data source: MYRBS 2001-2007

[^] Among students reporting intercourse in the previous three months

Figure 35: Sexual Behaviors by Grade, 2007



Data source: MYRBS 2001-2007

[^] Among students reporting intercourse in the previous three months

ORAL HEALTH

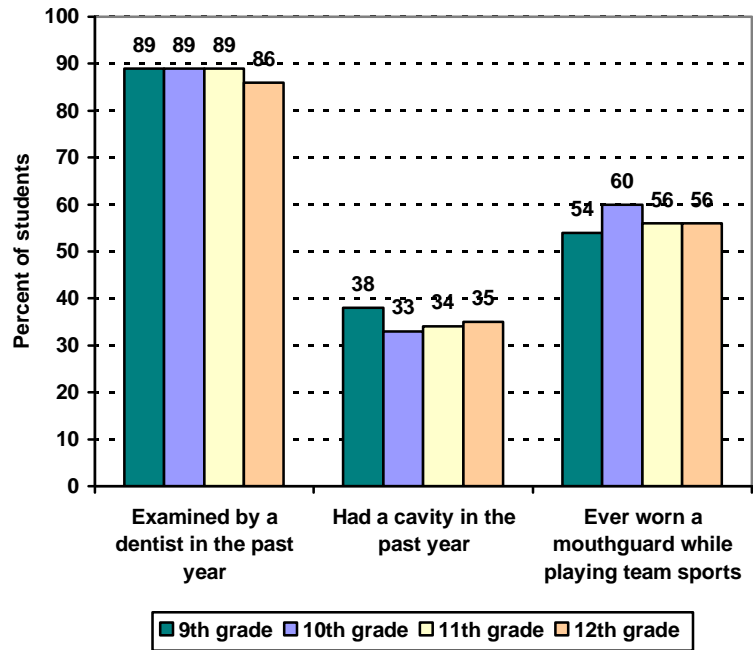
HIGH SCHOOL STUDENTS

Oral health indicators remain approximately constant across high school grade levels. Nearly nine out of ten high school students (88%) had been seen by a dentist in the past year.

Approximately one in three (35%) high school students reported having a cavity in the previous year.

Over half (57%) of all high school students reported ever wearing a mouthguard while playing on team sport.

Figure 36: MA High School Student Oral Health Indicators, 2007



Data source: MYHS 2007

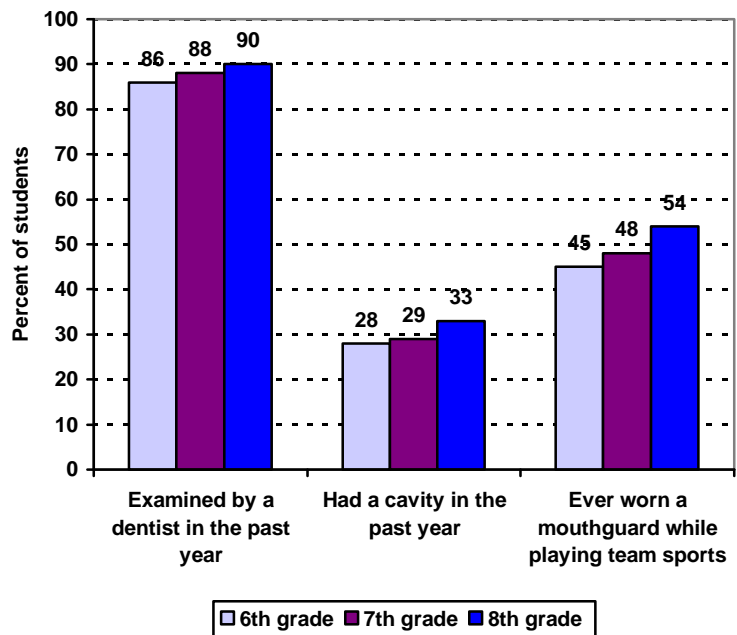
MIDDLE SCHOOL STUDENTS

Overall, 88% of middle school students had been examined by a dentist in the previous year.

Three in ten (30%) of middle school students reported having a cavity in any tooth during the previous year.

Nearly half (49%) of middle school students reported ever wearing a mouthguard while playing a team sport.

Figure 37: MA Middle School Oral Health Indicators, 2007



Data source: MYHS 2007

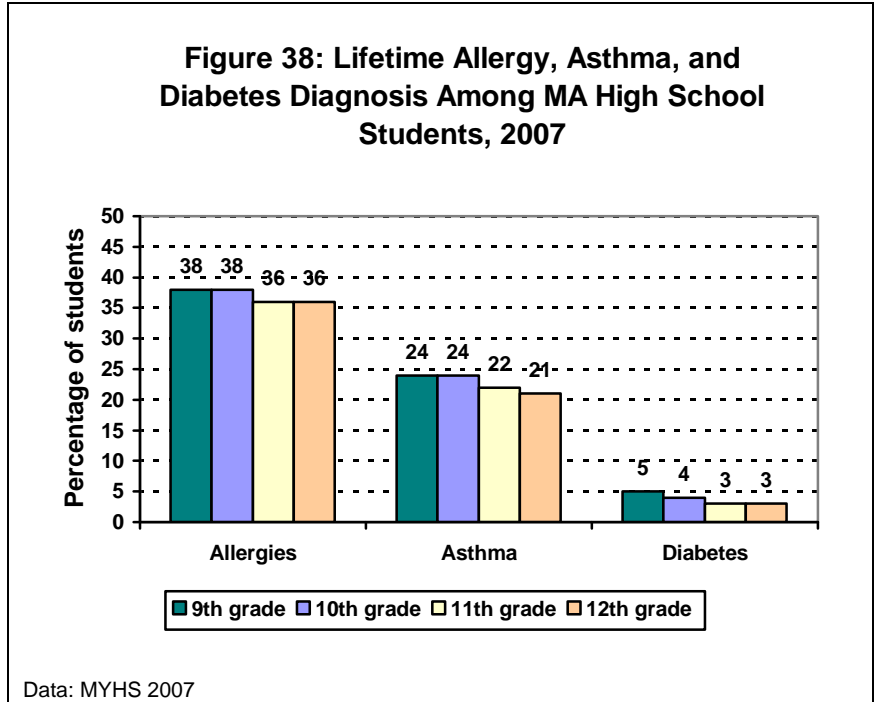
CHRONIC CONDITIONS

HIGH SCHOOL STUDENTS

Among high school students, 37% reported being told by a health care professional that they had allergies.

Twenty-three percent (23%) of high school students reported ever being told by a health care professional that they had asthma.

Four percent (4%) of high school students reported ever being told by a health care professional that they had diabetes.

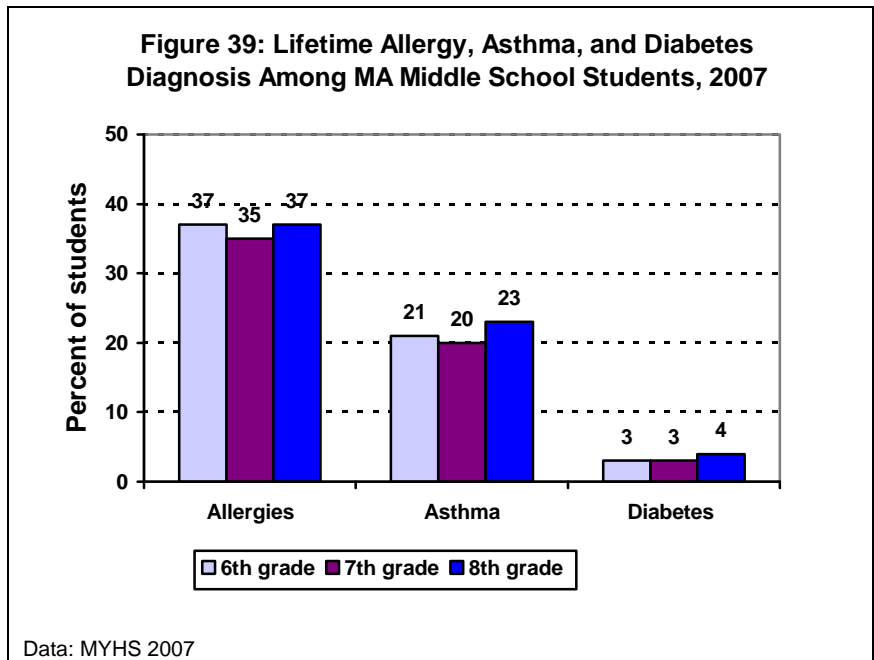


MIDDLE SCHOOL STUDENTS

Thirty-six percent (36%) of middle school students reported being told by a health care professional they had allergies.

Among middle school students, 21% reported ever receiving an asthma diagnosis.

Overall, 3% of middle school students reported being told by a health care professional they had diabetes.



HEALTHCARE SERVICES

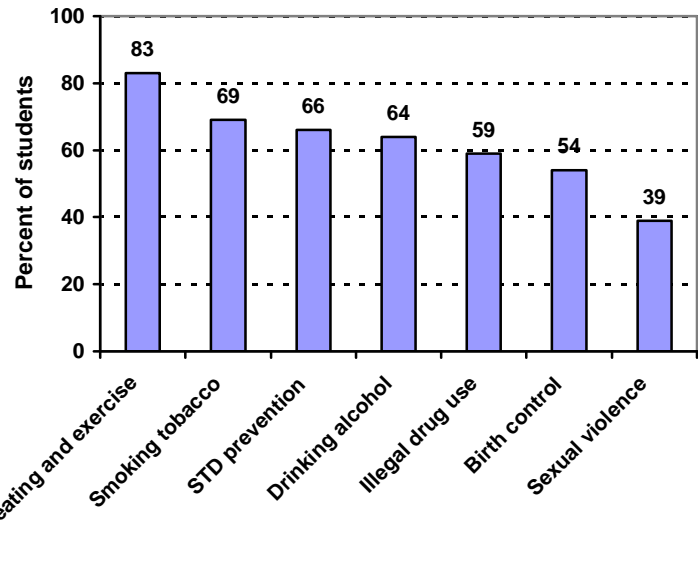
HIGH SCHOOL STUDENTS

Most high school students (85%) reported usually going to a doctor's office for their healthcare needs. The second most common response was a health clinic (8%) either in a community or a hospital. Three percent (3%) reported that they did not consistently go to the same place and 2% reported not going anywhere for their healthcare needs.

More than 50% of high school students reported having a discussion with a doctor regarding each of the following: preventing pregnancy (54%), preventing STDs (66%), illegal drugs (59%), drinking alcohol (64%), or smoking tobacco (69%). Eighty-three percent (83%) reported discussing healthy eating and exercise habits with their doctor.

Thirty-nine percent (39%) of high school students reported discussing sexual violence or dating violence with their doctor. This occurred in a significantly greater proportion of high school females (45%) than high school males (32%).

Figure 40: Topics Ever Discussed Between Doctors and MA High School Students, 2007



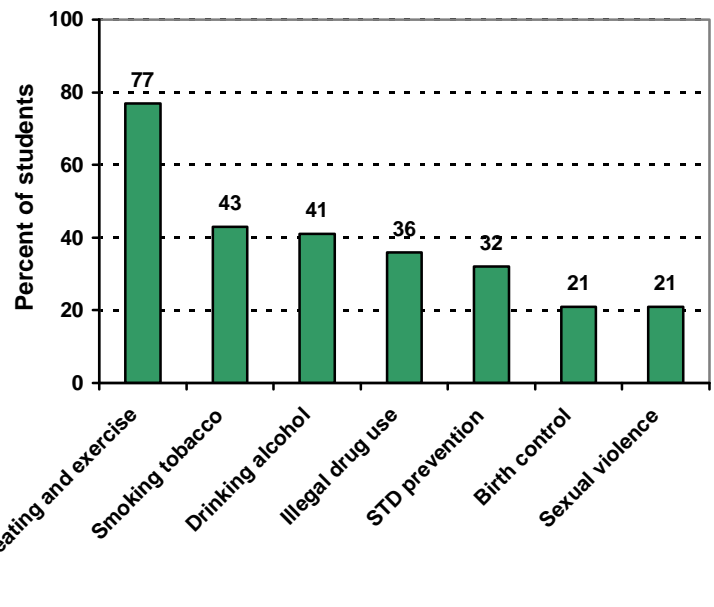
Data source: MYHS 2007

MIDDLE SCHOOL STUDENTS

Most middle school students (80%) reported usually going to a doctor's office for their healthcare needs. The second most common response was health clinic either in a community or hospital (10%). Five percent (5%) of middle school students reported that they did not consistently go to the same place for care and 2% reported some other place. Another 2% reported not going anywhere for their healthcare needs. Less than 1% reported a school nurse or a school-based health clinic or the Emergency Room as their usual site of care.

More than 3 out of 4 (77%) reported discussing healthy eating and exercise habits with their doctor. Less than 50% of middle school students reported having a discussion with a doctor regarding each of the following: sexual or dating violence (21%), preventing pregnancy (21%), preventing STDs (32%), illegal drugs use (36%), drinking (41%), or smoking (43%).

Figure 41: Topics Ever Discussed Between Doctors and MA Middle School Students, 2007



Data source: MYHS 2007



This document was prepared by the
Massachusetts Department of Elementary and Secondary Education
And the
Massachusetts Department of Public Health

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