

2003 MASSACHUSETTS
YOUTH RISK BEHAVIOR SURVEY RESULTS

EXECUTIVE SUMMARY

Massachusetts Department of Education
School Nutrition, Safety, and Climate Unit
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INTRODUCTION AND SURVEY METHODS

The Massachusetts Youth Risk Behavior Survey (MYRBS) is conducted every two years by the Massachusetts Department of Education with funding from the United States Centers for Disease Control and Prevention (CDC). The survey monitors adolescent risk behaviors related to the leading causes of morbidity and mortality among youth and adults. These behaviors include tobacco, alcohol, and other drug use; behaviors related to intentional and unintentional injuries; high-risk sexual behaviors; poor dietary patterns; and lack of physical activity.

The 2003 MYRBS was conducted in the spring of 2003 in 50 randomly selected public high schools across the Commonwealth. In total, 3,624 students in grades 9 through 12 participated in this voluntary and anonymous survey. Because of the high student and school response rates, the results of this survey can be generalized to apply to all public high schools across Massachusetts.

RESULTS

TOBACCO USE

Every measure of tobacco use among Massachusetts public high school students has decreased significantly over the past ten years:

- Lifetime cigarette smoking (any cigarette smoking in one's life) decreased from 62% in 2001 to 53% in 2003.

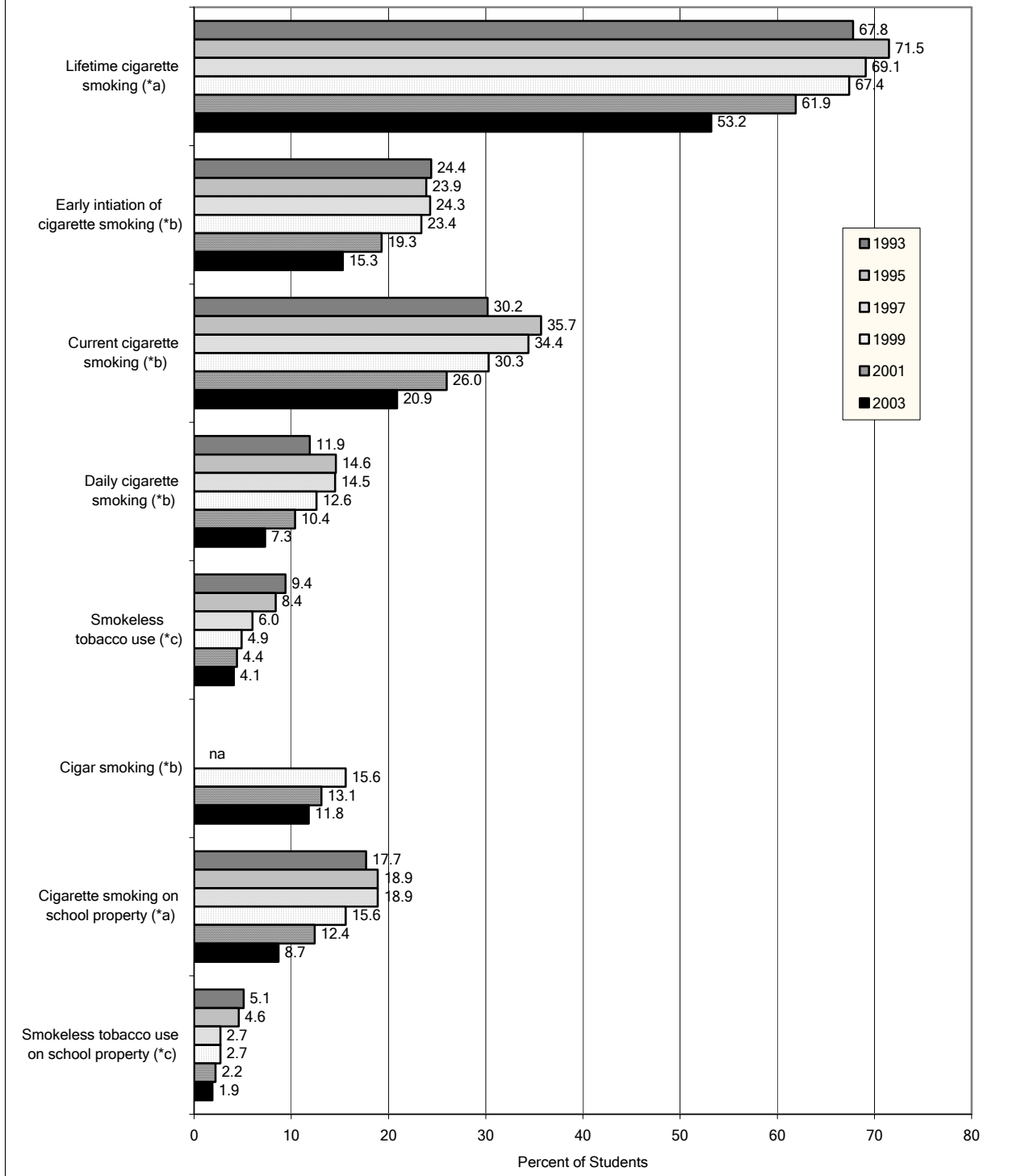
- Early initiation of cigarette smoking (i.e., smoking before age 13) decreased from 23% in 1999 to 15% in 2003.
- Current cigarette smoking (i.e., any smoking in the 30 days before the survey) decreased from 30% in 1999 to 21% in 2003.
- Daily cigarette smoking (i.e., smoked every day for the 30 days before the survey) decreased from 13% in 1999 to 7% in 2003.
- Smokeless tobacco use was cut in half from 8% in 1995 to 4% in 2003.
- Cigar smoking decreased from 16% in 1999 to 12% in 2003.
- Smoking on school property decreased from 12% in 2001 to 9% in 2003.

ALCOHOL USE

For the first time significant decreases were observed in almost all measures of alcohol use:

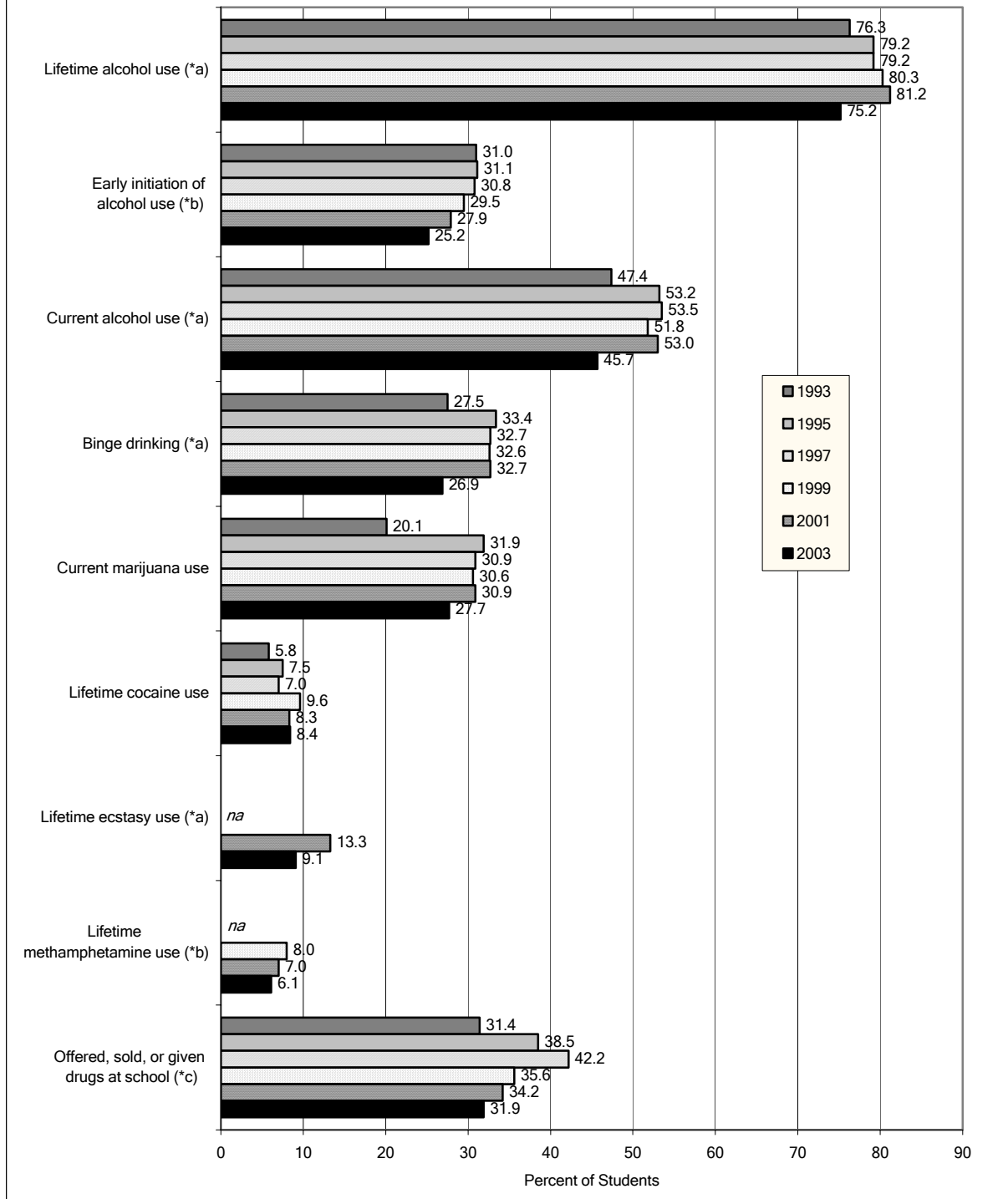
- Lifetime alcohol use decreased from 81% in 2001 to 75% in 2003.
- Early initiation of alcohol use (i.e., before age 13) decreased from 30% in 1999 to 25% in 2003.
- Current alcohol use (i.e., in the 30 days before the survey) decreased from 53% in 2001 to 46% in 2003.
- Binge drinking (i.e., consuming five or more drinks in a row within a couple of hours) in the past month decreased from 33% in 2001 to 27% in 2003.

Figure A. Changes in Tobacco Use Behaviors Among Massachusetts High School Students, 1993 to 2003



(*a) Statistically significant decrease from 2001, $p < .05$; (*b) Statistically significant decrease from 1999, $p < .05$; (*c) Statistically significant decrease from 1995, $p < .05$; Note: (na) Measure not available in all years.

Figure B. Changes in Alcohol and Illegal Drug Use Behaviors Among Massachusetts High School Students, 1993 to 2003



(*a) Statistically significant decrease from 2001, $p < .05$; (*b) Statistically significant decrease from 1999, $p < .05$; (*c) Statistically significant decrease from 1997, $p < .05$; Note: (na) Measure not available in all years

ILLEGAL DRUG USE

- Less than half (47%) of all Massachusetts high school students in 2003 reported having ever used an illegal drug in their lifetimes.
- Marijuana remains the most commonly used illegal drug; 47% used marijuana in their lifetimes, 11% used marijuana before age 13, and 28% used marijuana in the 30 days before the survey.
- Lifetime ecstasy use decreased significantly from 13% in 2001 to 9% in 2003.
- Lifetime methamphetamine use also decreased significantly from 8% in 1999 to 6% in 2003.
- Lifetime use rates of other drugs did not change significantly: 8% used cocaine, 5% used steroids illegally, 3% used heroin, and 2% reported injected drug use.
- Being offered, sold, or given a drug on school property decreased significantly from 42% in 1997 to 32% in 2003.

VIOLENCE-RELATED BEHAVIORS AND EXPERIENCES

Weapon-carrying, physical fighting, and violence-related experiences have decreased significantly since 1993:

- Weapon-carrying in the 30 days before the survey decreased from 19% in 1997 to 14% in 2003.
- Gun-carrying in the 30 days before the survey was cut in half from 6% in 1993 to 3% in 2003.
- Physical fighting decreased from 37% in 1999 to 31% in 2003.
- Weapon-carrying and physical fighting on school property both decreased from 1999 (7% to 5% and 14% to 10% respectively).

- Fewer students in 2003 skipped school because they felt unsafe either at school or on their way to or from school (5% down from 8% in 2001).
- Fewer students in 2003 were threatened or injured with a weapon on school property (6% down from 9% in 1999).
- Fewer students in 2003 reported experiencing dating violence (11% down from 14% in 1997).

There were no observed changes in other measures of violence-related behaviors and experiences:

- 10% of students were involved in a gang in the year before the survey;
- 10% had ever experienced sexual contact against their will; and
- 23% were bullied at school in the year before the survey.

SUICIDAL BEHAVIOR

Significant decreases were observed in suicidal thinking:

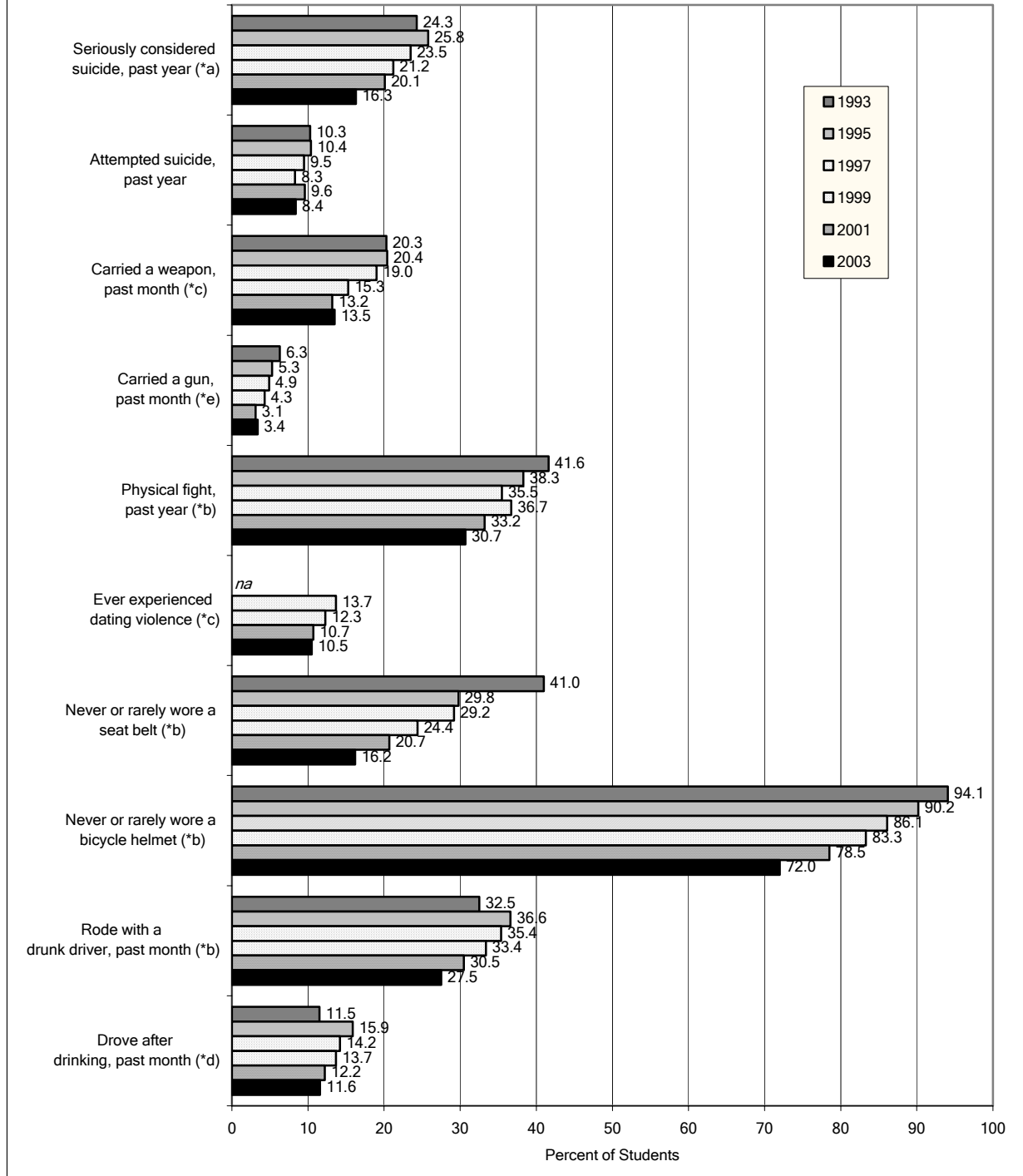
- Having seriously considered suicide in the past year decreased from 20% in 2001 to 16% in 2003.
- Having made a suicide plan decreased from 17% in 1999 to 13% in 2003.

Small but not yet significant decreases were observed in:

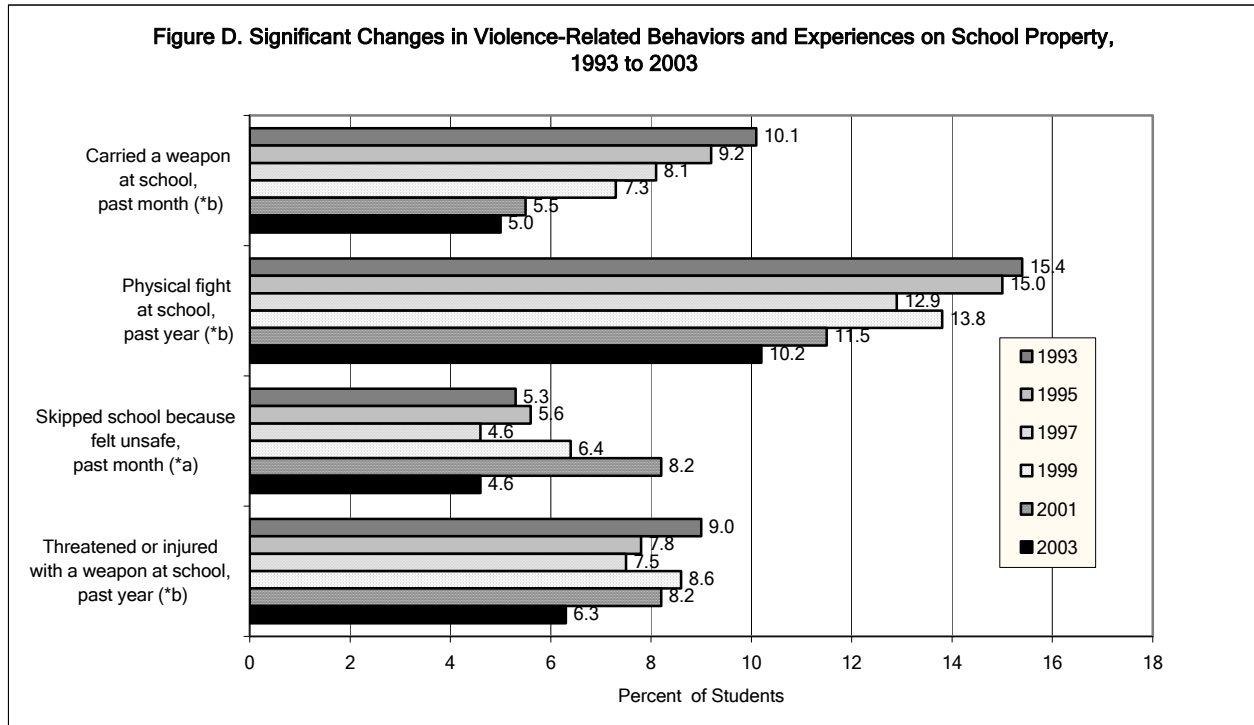
- Having felt sad or hopeless for two weeks or more (30% in 1999 to 28% in 2003); and
- Having attempted suicide in the past year (10% in 2001 to 8% in 2003).

In addition, 3% of students received medical treatment for a suicide attempt that resulted in an

Figure C. Changes in Violence and Safety-Related Behaviors Among Massachusetts High School Students, 1993 to 2003



(*a) Statistically significant decrease from 2001, $p < .05$; (*b) Statistically significant decrease from 1999, $p < .05$; (*c) Statistically significant decrease from 1997, $p < .05$; (*d) Statistically significant decrease from 1995, $p < .05$; Note: (na) Measure not available in all years



(*a) Statistically significant decrease from 2001, $p < .05$; (*b) Statistically significant decrease from 1999, $p < .05$

injury, poisoning, or overdose. Eighteen percent (19%) of students reported cutting, burning, or bruising themselves on purpose.

- Twelve percent (12%) drove after drinking in the 30 days before the survey (down from 16% in 1995).

BEHAVIORS RELATED TO UNINTENTIONAL INJURIES

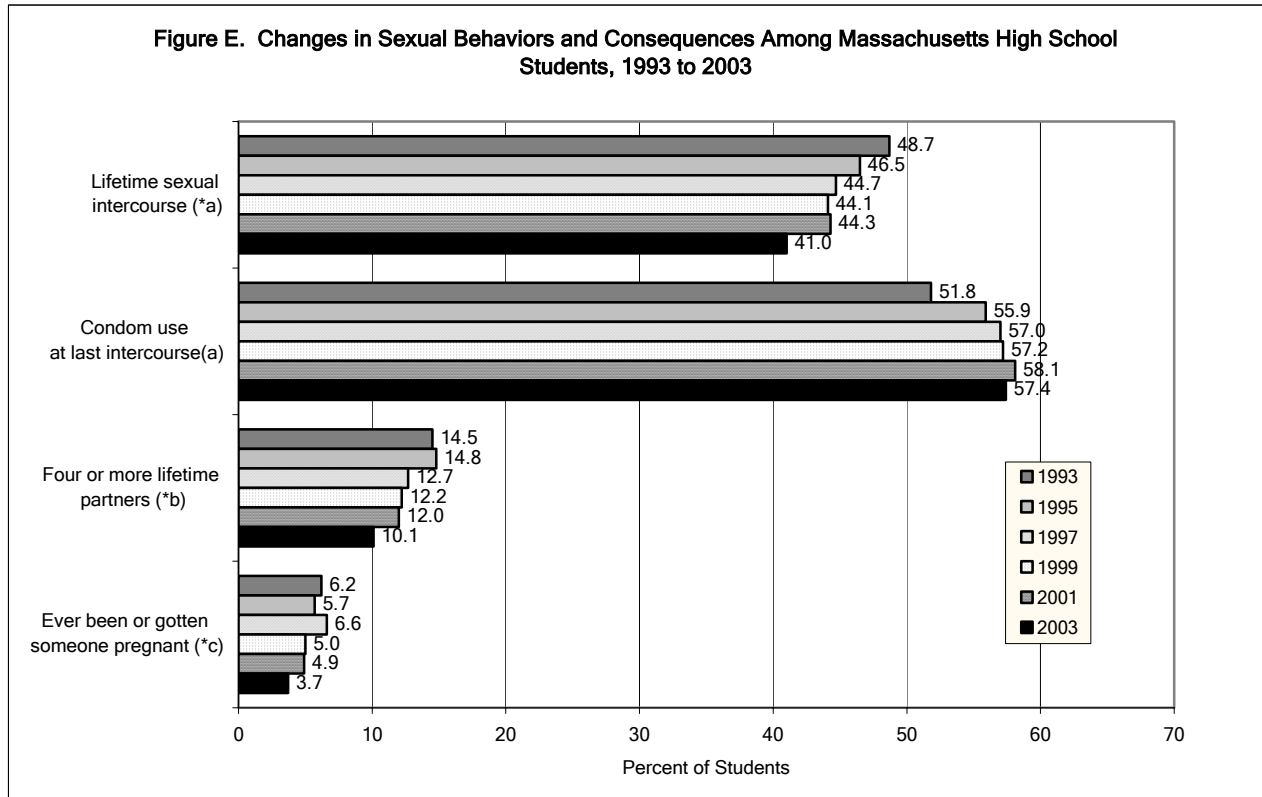
All behaviors related to unintentional injuries decreased significantly:

- Sixteen percent (16%) of all students reported never or rarely wearing a seat belt when riding in a vehicle (down from 24% in 1999).
- Seventy-two percent (72%) of students who rode a bike in the year before the survey reported never or rarely wearing a bicycle helmet (down from 83% in 1999).
- Twenty-eight percent (28%) of students reported riding in the past month with a driver who had been drinking (down from 33% in 1999).

SEXUAL BEHAVIORS AND SEXUALITY EDUCATION

Many measures of sexual behavior among Massachusetts high school students have decreased significantly over the past ten years:

- The percent of students who ever had sexual intercourse in their lifetimes decreased from 49% in 1993 to 41% in 2003.
- The percent of students who had sexual intercourse before age 13 decreased from 8% in 1995 to 6% in 2003.



(*a) Statistically significant decrease from 1993, $p < .05$; (*b) Statistically significant decrease from 1995, $p < .05$; (*c) Statistically significant decrease from 1997, $p < .05$; Note: (a) Among students who had sexual intercourse in the three months before the survey

- The percent of students who had sexual intercourse with four or more people in their lifetimes decreased from 15% in 1995 to 10% in 2003.
- The percent of students who had ever been or gotten someone pregnant decreased from 7% in 1997 to 4% in 2003.

In addition, small but not yet significant changes occurred in:

- Recent sexual intercourse (i.e., sexual intercourse in the three months before the survey) (down from 33% in 2001 to 30% in 2003); and
- Condom use among sexually active students (i.e., students who had sexual intercourse in

three months before the survey) (up from 52% in 1993 to 57% in 2003).

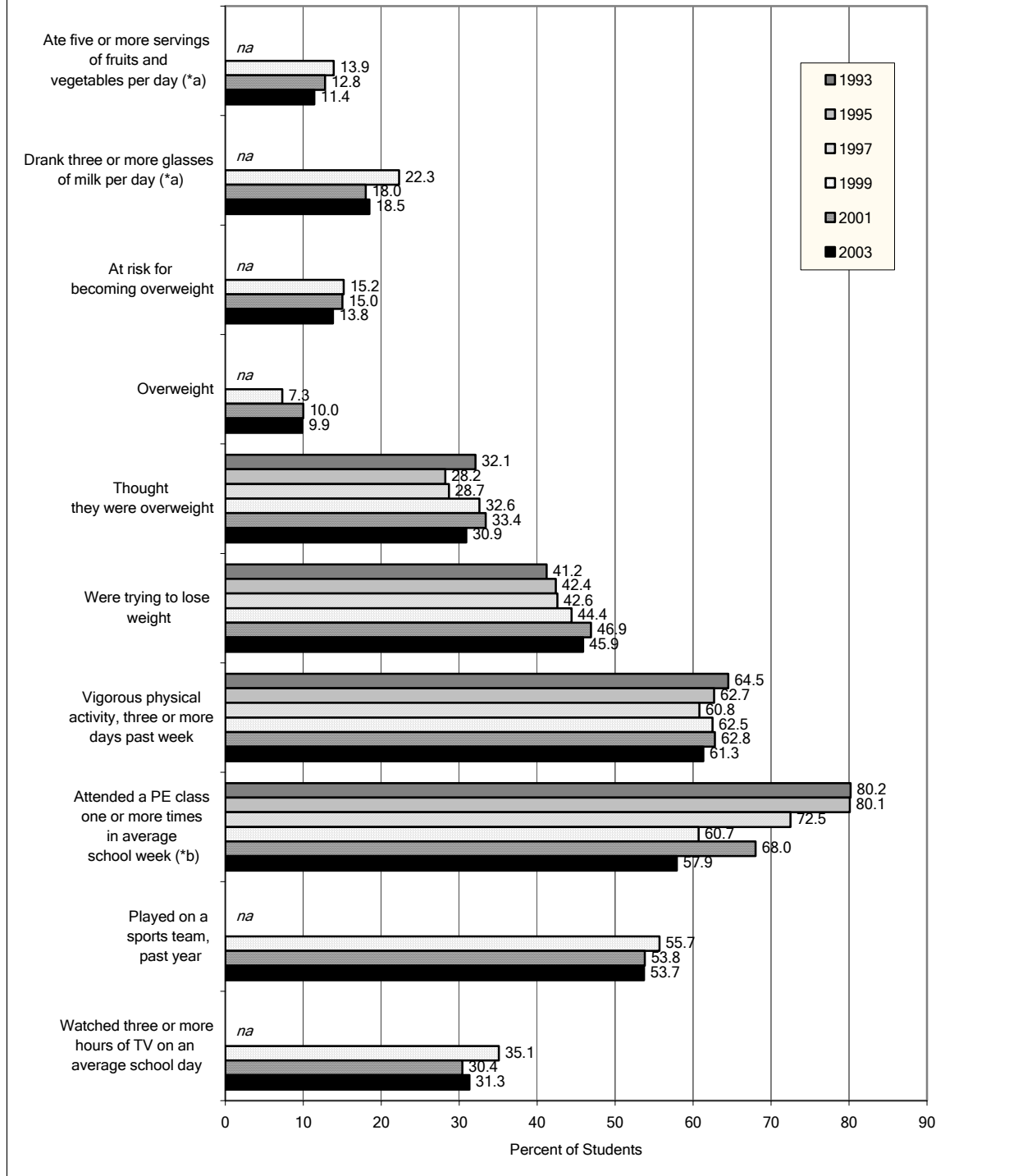
Unfortunately, the percent of students who have ever been diagnosed with HIV or another STD increased significantly from 3% in 2001 to 6% in 2003.

AIDS PREVENTION EDUCATION

Compared to their peers, student who received HIV/AIDS education in school were significantly less likely to report sexual risk behaviors.

- The vast majority (92%) of students were taught about AIDS or HIV infection in school.

Figure F. Changes in Nutrition, Weight Control, and Physical Activity Behaviors Among Massachusetts High School Students, 1993 to 2003



(*a) Statistically significant decrease from 1999, $p < .05$; (*b) Statistically significant decrease from 1997, $p < .05$; Note: (na) Measure not available in all years

- Half of all students (48%) were taught in school how to use condoms.
- Half of all students (49%) had a conversation with a parent or other adult family member in the past year about sexuality or how to prevent HIV, STDs, or pregnancy.

DIETARY AND WEIGHT CONTROL BEHAVIORS

Measures of good nutrition have decreased significantly since 1999:

- The percent of students who ate five or more servings of fruits or vegetables per day decreased from 14% in 1999 to 11% in 2003.
- The percent of students who drank three or more glasses of milk per day - the amount needed to provide recommended daily levels calcium - decreased from 22% in 1999 to 19% in 2003.

Other measures of nutrition and weight control remained unchanged:

- One-third of all students (32%) ate breakfast every day in the week before the survey. (This was a new question in 2003.)
- According to their Body Mass Index, 14% of students were at risk of becoming overweight and 10% were overweight.
- One-third (31%) of all students thought they were overweight and roughly one-half (46%) were trying to lose weight.
- Three-quarters (77%) of students tried to lose weight or control their weight through dieting and exercise - a significant increase over 71% reported in 2001.
- Seventeen percent (17%) of students used an unhealthy method of weight control including fasting for 24 hours or more (12%), using diet pills, powders, or liquids without a doctor's advice (7%), or using laxatives or vomiting (6%).

PHYSICAL ACTIVITY

The percent of students who report attending a physical education class at least once in an average school week dropped significantly from 73% in 1997 to 58% in 2003. Other measure of physical activity have not changed significantly since 1993:

- Sixty-one percent (61%) of students participated in aerobic activities that caused them to sweat or breathe hard (i.e., vigorous physical activity) for at least 20 minutes on at least three of the seven days before the survey.
- Twenty-four percent (24%) of students participated in activities that did not make them sweat or breathe hard (i.e., moderate physical activity) for at least 30 minutes on at least five of the seven days before the survey.
- Forty-eight percent (48%) of all students did exercises to strengthen or tone their muscles (such as push-ups, sit-ups, or weight lifting) on at least three of the seven days before the survey.
- More than half of all students (54%) played on a sports team in the year before the survey.
- Thirty-one percent (31%) watched three or more hours of television on an average school day.

SUMMARY OF OTHER KEY FINDINGS

Almost all risk behaviors were significantly associated with lower rates of academic achievement. Students who reported participating a risk behavior were generally less likely than students who did not to report receiving mostly A's, B's, or C's in school in the year before the survey.

Some groups of students have significantly higher rates than their peers of certain risk behaviors. Male students, urban students, sexual minority students, and recent immigrants generally had higher rates than

their peers of substance use, violence, and sexual behaviors.

Risk behaviors cluster together. Students who engage in one high-risk or health-compromising behavior are often likely to engage in other risk behaviors as well.

Certain factors in a student's life have a protective effect on behavior, including perceived adult support in and out of school and participation in volunteer work or other extra-curricular activities.

CONCLUSION

The 2003 MYRBS results highlight continued and significant progress in reducing adolescent risk behaviors in the Commonwealth. For the most part, this pattern of improvement in nearly all risk categories began in 1995, two years after the beginning of the distribution of Health Protection Funds, which provided financial support for strengthening health education and prevention programs in schools. The significant improvements evident in the 2003 MYRBS represent nearly a decade of effective health education and school health programs.

A few areas, notably those related to nutrition and physical activity, have not improved in recent years. In fact, in 2003 fewer students than in previous years participated in physical education classes or ate the recommended five servings of fruits or vegetables. This is of special concern because of the current national epidemic of obesity.

It is important that the positive momentum in most areas be sustained, and that efforts to improve dietary behaviors and physical activity among youth be strengthened. Comprehensive school health programs and continued emphasis on the relationship between health and academic achievement can contribute toward these goals.