



## YOUTH OBESITY AND WEIGHT ISSUES

### Overview

A significant portion (25-30%) of 10-17 year olds in Massachusetts are overweight or obese. This report is based on findings of the Massachusetts Youth Risk Behavior Survey and includes statistics broken down by self-reported behaviors of middle and high school students, particularly those related to diet and physical activity and the school environments that contribute to these behaviors.

### **Massachusetts Youth Risk Behavior Survey (MYRBS)**

- **Geography:** State
- **Year:** 2009
- **Website:** <http://apps.nccd.cdc.gov/youthonline/App/Results.aspx?LID=MA>

### Key Findings:

- Overweight (students who were  $\geq$  85th percentile but  $<$  95th percentile for body mass index, by age and sex, based on reference data)-2,511 or 14.3% (12.5–16.3); 1,205 females/1,306 males)
- Obese (students who were  $\geq$  95th percentile for body mass index, by age and sex, based on reference data)-2,511 or 10.9% (9.3–12.9); 1,205 females/1,306 males
- Described themselves as slightly or very overweight-2,671 or 28.8% (26.8–31.0); 1,318 females and 1,347 males
- Did not exercise to lose weight or to keep from gaining weight (during the 30 days before the survey)-2,633 or 41.3% (38.7–44.0); 1,309 females/1,319 males
- Did not eat less food, fewer calories, or low-fat foods to lose weight or to keep from gaining weight (during the 30 days before the survey)- 2,660 or 61% (58.8-63.2); 1,316 females/1,339 males
- Went without eating for 24 hours or more to lose weight or to keep from gaining weight (during the 30 days before the survey)-2,655 or 8.2% (6.8–9.9); 1,319 females/1,331 males
- Took diet pills, powders or liquids to lose weight or to keep from gaining weight (without a doctor's advice, during the 30 days before the survey)-2,636 or 5.1% (4.1–6.3); 1,311 females/1,320 males
- Vomited or took laxatives to lose weight or to keep from gaining weight (during the 30 days before the survey)- 2,628 or 4.8% (3.9–5.8); 1,303 females/1,321 males

### **Massachusetts Youth Risk Behavior Survey (MYRBS)**

- **Geography:** By state
- **Years Available:** 2007
- **Website:** [www.doe.mass.edu](http://www.doe.mass.edu)

### Key Findings:

- **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.
- **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%).

#### **Massachusetts Public Health Association (MPHA)**

- **Geography:** State
- **Years Available:** 2010
- **Website:** [www.mphaweb.org](http://www.mphaweb.org)

#### **Key Findings:**

- Massachusetts is experiencing an epidemic of childhood obesity and overweight. Between 25-30 percent of the state's 10- 17-year olds are overweight or obese. These children face serious health consequences, including higher risk of developing diabetes, asthma, heart disease, depression, and low self esteem.
- The costs of childhood obesity include health effects such as diabetes, cardiovascular disease, sleeping problems and sleep apnea, and social effects such as stigmatization and teasing. Annual medical costs are \$200 more for an overweight or obese child compared to a healthy weight child in Massachusetts.
- Overweight and obese children are more likely to become obese adults, creating an increasing burden of health costs and consequences over the life course. Children's productivity is impacted when they are obese or overweight, and academic performance and test scores may suffer.
- Currently just 30 percent of Massachusetts schools have wellness policies that meet minimum federal requirements for nutrition and physical activity.

#### ***Childhood Obesity in Massachusetts: Costs, Consequences and Opportunities for Change* Policy Brief, the Massachusetts Health Policy Forum**

- **Geography:** State
- **Years Available:** August, 2008
- **Website:** [www.masshealthpolicyforum.brandeis.edu](http://www.masshealthpolicyforum.brandeis.edu)

#### **Key Findings:**

- While recent data suggest the problem may be stabilizing, the number of overweight adolescents (in MA) has tripled in the last thirty years. The health and economic consequences of this epidemic are severe.

***The Obesity Epidemic and Massachusetts Students, 2009 Massachusetts Youth Risk Behavior Survey (MYRBS), Massachusetts Department of Elementary and Secondary Education and Massachusetts Department of Public Health***

- **Geography:** State
- **Years Available:** 2009
- **Website:** [www.mass.gov](http://www.mass.gov)

**Key Findings:**

The 2009 MA YRBS is the source of information except where noted. Middle school information is from the 2009 MA Youth Health Survey.

- **High School and Middle School Students:**
  - 25% were either overweight or obese (11% obese).
  - **Unhealthy Dietary Behaviors**
    - 86% ate fewer than 5 servings of fruits and vegetables per day.
    - 25% reported drinking at least 1 can or glass of soda per day.
    - 64% skipped breakfast on some days.
  - **Physical Inactivity**
    - 66% of high school students and 67% of middle school students did not meet the recommended levels of physical activity (60 minutes per day) on at least 5 days per week.
    - 41% did not attend physical education during an average school week, and 82% did not have daily physical education.
    - 35% had not been taught how to follow a personal fitness plan in school.
    - 41% had not played on any sports teams in the past 12 months.
    - 66% of high school students and 58% of middle school students did not walk or bike to school.
    - 30% watched 3 or more hours of television on an average school day. (Center for Disease Control recommends no more than 2 hours of non-school media time per day.)
    - 30% played video games or used the Internet for non-school activities for or more hours on an average school day.
- **Status of school health programs (from 2008 MA School Health Profiles):**
  - 18% did not require any health education course.
  - 21% did not have a written curriculum for health education, and 36% did not have plans for how to assess student performance.
  - 21% did not have a lead health education teacher with Massachusetts certification to teach health education.
  - 4% did not require a physical education course in any grade of the school, and 25% did not require physical education in all grades.
  - 27% allowed students to be exempted from physical education for participation in sports, other courses, or activities.
  - 24% did not administer a physical fitness test to students in any grade in the past year. Of those that had, 66% never sent results of fitness tests home to parents, and 71% never shared aggregate fitness scores with school administration.
  - 13% did not have a written curriculum for physical education, and 15% did not have plans for how to assess student performance.
  - 59% did not have a policy prohibiting or discouraging the use of physical activity as punishment.
  - 43% allowed the sale of less nutritious foods and beverages (e.g., candy, soda, cookies) outside the school food service program.

- **84% did not always offer fruits or non-fried vegetables in vending machines, school stores, canteens, snack bars, and during celebrations when foods and beverages were offered.**
- **30% allowed advertising of candy, fast food restaurants, or soft drinks.**