



## Massachusetts *State Nutrition, Physical Activity, and Obesity Profile*

Obesity has important consequences on our nation's health and economy. It is linked to a number of chronic diseases, including coronary heart disease, stroke, diabetes, and some cancers (NIH Clinical Guidelines, 1998). Among adults, the medical costs associated with obesity are estimated at 147 billion dollars (Finkelstein, 2009). Many American communities are characterized by unhealthy options when it comes to diet and physical activity. We need public health approaches that make healthy options available, accessible, and affordable for all Americans.

# Massachusetts - State Nutrition, Physical Activity, and Obesity Profile

CDC's Division of Nutrition and Physical, and Obesity (DNPAO) supports the nation's capacity to address public health in all policies and establish successful and sustainable interventions to support healthy eating and active living. The Division provides support (i.e., implementation and evaluation guidance, technical assistance, training, surveillance and applied research, translation and dissemination, and partnership development) to states, communities and national partners to implement policy, system, and environmental strategies. The goal is to improve dietary quality, increase physical activity and reduce obesity across multiple settings—such as child care facilities, workplaces, hospitals and medical care facilities, schools, and communities.

## State Population of Massachusetts

- Estimated Total Population 2010<sup>(1)</sup>  
= 6,547,629
  - Adults age 18 and over<sup>(2)</sup>  
= 78.3% of the total population in 2010
  - Youth under 18 years of age<sup>(1)</sup>  
= 21.7% of the total population in 2010
- <sup>(1)</sup> U.S. Census Bureau. State and County QuickFacts. 2011. Available online at <http://quickfacts.census.gov/qfd/index.html>.
- <sup>(2)</sup> Calculated estimated = 100% minus percent of the total population under 18 years old, using State and County QuickFacts, 2010 data from the U.S. Census.

## Adult Overweight and Obesity

### Overweight and Obesity<sup>(3)</sup>

- 59.3% were overweight, with a Body Mass Index of 25 or greater.
- 23.0% were obese, with a Body Mass Index of 30 or greater.

### Dietary Behaviors<sup>(4)</sup>

- 36.8% of adults reported having consumed fruits at the recommended level of 2 or more times per day.
- 28.1% of adults reported having consumed vegetables at the recommended level of 3 or more times per day.

### Physical Activity<sup>(5)</sup>

- 49.3% of adults achieved at least 300 minutes a week of moderate-intensity aerobic physical activity or 150 minutes a week of vigorous-intensity aerobic activity (or an equivalent combination).
- 20.9% of Massachusetts' adults reported that during the past month, they had not participated in any physical activity.

#### Source of Adult Obesity Data:

<sup>(3)</sup> CDC. Behavioral Risk Factor Surveillance System: Prevalence and Trend Data—Overweight and Obesity, U.S. Obesity Trends, Trends by State 2010. Available online at <http://www.cdc.gov/brfss/>

#### Source of Adult Fruit and Vegetable Data:

<sup>(4)</sup> CDC. *MMWR* September 2010 State-Specific Trends in Fruit and Vegetable Consumption Among Adults United States, 2000–2009. Available online at <http://www.cdc.gov/mmwr/pdf/wk/mm5935.pdf>

#### Source of Adult Physical Activity Data:

<sup>(5)</sup> CDC. BRFSS Behavioral Risk Factor Surveillance System: Prevalence and Trend Data—Physical Activity, U.S. Physical Activity Trends by State 2009–2010. Available online at <http://www.cdc.gov/brfss/>

## Adolescent Overweight and Obesity

### Overweight and Obesity<sup>(6)</sup>

- 14.3% were overweight ( $\geq 85^{\text{th}}$  and  $< 95^{\text{th}}$  percentiles for BMI by age and sex, based on reference data).
- 10.9% were obese ( $\geq 95^{\text{th}}$  percentile BMI by age and sex, based on reference data).

### Unhealthy Dietary Behaviors<sup>(6)</sup>

- **Fruit and vegetable consumption:** data not available.
- **Sugar-sweetened beverage consumption:** 21.0% drank a can, bottle, or glass of soda or pop (not including diet soda or diet pop) at least one time per day during the 7 days before the survey.

### Physical Activity<sup>(6)</sup>

- **Achieved recommended level of activity:** Only 17.0% were physically active\* for a total of at least 60 minutes per day on each of the 7 days prior to the survey.
- **Participated in daily physical education:** 17.9% of adolescents attended daily physical education classes in an average week (when they were in school).

### Physical Inactivity<sup>(6)</sup>

- **No activity:** 23.3% did not participate in at least 60 minutes of physical activity on any day during the 7 days prior to the survey.
- **Television viewing time:** 30.4% watched television 3 or more hours per day on an average school day. (continued on next page)

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## ✦ The 2010 Massachusetts School Health Profiles assessed the school environment, indicating that among high schools<sup>(7)</sup>

- 48.4% did not sell less nutritious foods and beverages anywhere outside the school food service program.
- 15.9% always offered fruits or non-fried vegetables in vending machines and school stores, canteens, or snack bars, and during celebrations whenever foods and beverages were offered.
- 73.0% prohibited all forms of advertising and promotion of candy, fast food restaurants, or soft drinks in all locations. All school-related locations were defined as in school buildings; on school grounds, including on the outside of the school building, on playing fields, or other areas of the campus; on school buses or other vehicles used to transport students; and in school publications.

### Sources of Adolescent Obesity, Fruit and Vegetable, Sugar-sweetened Beverages, and Physical Activity Data:

\* Physical activity defined as “any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.”

<sup>(6)</sup> CDC, Division of Adolescent and School Health. The 2009 Youth Risk Behavior Survey. Available online at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>

<sup>(7)</sup> CDC, Division of Adolescent and School Health. The 2010 School Health Profiles. Available online at <http://www.cdc.gov/healthyyouth/profiles/index.htm>

## Child Overweight and Obesity

### ✦ Breastfeeding<sup>(8)</sup>

Increasing breastfeeding initiation, duration, and exclusivity is a priority strategy in CDC’s efforts to decrease the rate of childhood obesity throughout the United States.

- 76.9% of infants were Ever Breastfed.
- 46.0% of infants were Breastfed for at least 6 months.

### ✦ Body Mass Index<sup>(9)\*</sup>

Among Massachusetts’ children aged 2 years to less than 5 years\*

- 16.3% were overweight (85<sup>th</sup> to < 95<sup>th</sup> percentile BMI-for-Age).
- 16.1% were obese ( $\geq$  95<sup>th</sup> percentile BMI-for-Age).

### Sources of Breastfeeding Data:

<sup>(8)</sup> CDC. Division of Nutrition, Physical Activity, and Obesity Breastfeeding Report Card 2011. Centers for Disease Control and Prevention National Immunization Survey, Provisional Data, 2008births. Available online at <http://www.cdc.gov/breastfeeding/data/reportcard2.htm>

### Sources of Child Obesity Data:

<sup>(9)</sup> CDC. Division of Nutrition, Physical Activity, and Obesity. 2010 Pediatric Nutrition Surveillance System, Table 6 (PedNSS). [http://www.cdc.gov/pednss/pednss\\_tables/tables\\_health\\_indicators.htm](http://www.cdc.gov/pednss/pednss_tables/tables_health_indicators.htm)

\* BMI data only includes low-income children from the PedNSS sample and do not represent all children.

\* BMI data is based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

## Massachusetts’ Response to Obesity

### ✦ Public School Height and Weight Measurements

Massachusetts is measuring the heights and weights of all public school students in grades 1, 4, 7, and 10. Using the measurements to calculate body mass index (BMI), schools will determine whether a child has a healthy weight when compared to other children of the same sex and grade level. Results will be mailed or directly communicated to parents or guardians of every student who was screened. For more information about BMI screening in schools, visit the School Health Screening webpage: <http://www.mass.gov/eohhs/provider/guidelines-resources/services-planning/school-health/school-health/school-health-screening.html>.

### ✦ Healthy Food Procurement: Executive Order 509

Executive Order 509 (EO 509), part of the Mass In Motion Statewide Initiative, specifically requires those state agencies responsible for large-scale food purchasing (e.g., hospitals and resident institutions) to follow healthy nutritional guidelines in their food service operations. To assist government agencies in becoming compliant with the regulation, the Department of Public Health is making available numerous resources including helpful websites and videos on topics presenting healthy approaches to food purchasing and preparation. To view the State Agency Food Standards and other 509-related resources, visit: <http://www.mass.gov/eohhs/consumer/wellness/wellness/policies-wellness/>.

### ✦ Mass in Motion Municipal Leadership Grants

Mass in Motion is the first statewide health initiative to be supported by all of the Commonwealth’s major health-funding foundations in addition to other leading health organizations, including:

- Blue Cross Blue Shield of Massachusetts
- Blue Cross Blue Shield of Massachusetts Foundation
- The Boston Foundation The Harvard Pilgrim Health Care Foundation
- The MetroWest Community Health Care Foundation
- The Tufts Health Plan Foundation

Because of these partnerships, grants are available to cities and towns that are making wellness initiatives a priority at the community level.

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## Mass in Motion Website

A state-sponsored Mass in Motion website ([www.mass.gov/massinmotion](http://www.mass.gov/massinmotion)) promotes eating better and moving more at home, work, and in the community. The objective of the website is to reach professionals and the public with simple, practical, cost-effective ways to improve eating habits and increase physical activity. An Ask the Experts feature and Blog offers ways to improve diet and physical exercise routines as well as suggestions for getting involved in building healthier communities.

## Workplace Wellness Program

A state-sponsored Workplace Wellness Program is expanding to help employers create work environments that encourage healthy behaviors while reducing absenteeism and health insurance costs. One half of the state agencies currently participating in the program will implement at least one evidence-based policy and/or environmental change strategy.

## Safe Routes to Schools Pilot Program

Safe Routes to School (SRTS) is a nation-wide program that enables community leaders, schools, and parents to create safe environments that encourage children to enjoy walking or bicycling to school every day. By making a physically active transportation option convenient, safe, and fun, SRTS integrates health, fitness, traffic relief, environmental awareness, and safety into an overarching community-based program. The Massachusetts Department of Public Health together with WalkBoston, the Executive Office of Transportation, and the Harvard Pilgrim Healthcare Foundation are funding a Safe Routes to Schools pilot program in 4 communities.

## Board of Health Model Resolution: The Built Environment

A model state resolution entitled: "Board of Health Resolution: Planning for a Healthier Future through the Built Environment and Community Design" reintroduces public health as a priority in land-use decisions. The resolution has been successful in facilitating land-use discussions among stakeholders at the local level. Community liaisons are encouraging all local boards to adopt the model resolution.

## Contact Information

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## References

NIH. Clinical Guidelines Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report. 1998. Available online at [http://www.nhlbi.nih.gov/guidelines/obesity/ob\\_gdlns.htm](http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm)

Finkelstein, EA, Trogon, JG, Cohen, JW, and Dietz, W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. Health Affairs 2009; 28(5): w822-w831.

