Child and Adolescent Obesity in Rhode Island

November 6, 2014
Thank You

Special thanks to

for their support of this Issue Brief
Thank You

And to all those who provided input
Defining Childhood Obesity

**Obese:** BMI at or above 95<sup>th</sup> percentile

**Overweight:** BMI between 85<sup>th</sup> – 95<sup>th</sup> percentile

**BMI Limitations**

- Not a Diagnostic Tool
- Racial/Ethnic Considerations
- Lean/Fat Mass Distinction Issues
Over the past 40 years, the prevalence of childhood obesity has tripled.

Today, nearly 1 in 3 children are either obese or overweight.

Prevalence of Obesity by Age

1 in 12 preschoolers
1 in 6 elementary school-age children
1 in 5 adolescents
# Rhode Island Data

## Obesity Among Children and Adolescents, Rhode Island, 2002-2013

<table>
<thead>
<tr>
<th></th>
<th>'02-'03</th>
<th>'04-'05</th>
<th>'06-'07</th>
<th>'08-'09</th>
<th>'10-'11</th>
<th>'12-'13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten*</td>
<td>17%</td>
<td>20%</td>
<td>19%</td>
<td>16%</td>
<td>17%</td>
<td>NC</td>
</tr>
<tr>
<td>7th Grade*</td>
<td>NA</td>
<td>NA</td>
<td>17%</td>
<td>19%</td>
<td>17%</td>
<td>NC</td>
</tr>
<tr>
<td>High School**</td>
<td>10%</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
<td>11%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Sources and Notes:

* Rhode Island Department of Health, Office of Immunization, School Years 2002-2003 through 2010-2011. Data are based on a sample of recorded heights and weights at kindergarten and seventh grade and may not truly reflect the population. BMI was recorded by a physician.

** Rhode Island Department of Health, Center for Health Data and Analysis, *Rhode Island Youth Risk Behavior Survey*, 2003-2013. Data are collected biennially during odd years. BMI was calculated using self-reported student responses.

Obesity is defined as BMI at or above 95th percentile for age and sex.

NA: Data not available.

NC: Data no longer collected.
In Rhode Island in 2013, 22,185 children ages one to four were enrolled in WIC

11% were obese (2,521)

29% were at risk for being obese (6,401)

Positive RI Trends

Since 2011, there has been a 13% decline in the number of RI children ages one to four participating in WIC who are obese (2,882 to 2,521).
In Rhode Island during the 2012–2013 school year, 2,427 children ages three to five were enrolled in a Head Start program.

- 20% were obese (545)
- 15% were overweight (425)

**National Comparison**

- 15% were obese
- 13% were overweight
High School Students

• No change of obesity and overweight since 2001

• Between 2011–2013,

  11% reported being obese (7th best nationally)

  16% reported being overweight (37th best nationally)

Disparities

A greater percentage of lesbian, gay, bisexual, or questioning (17%) and male (13%) students reported being obese than their heterosexual (10%) or female (8%) peers.

Additionally, a disproportionate number of obese high school students were male (63%).
Factors Contributing to Obesity

Childhood Obesity

- Individual/Family
- Sociocultural
- Environmental (School/Community)
A majority of students (regardless of BMI) were limiting screen time as recommended by the AAP, but obese and overweight students reported higher levels of longer screen time.

**National Rankings**: Middle of the Pack

**RI Trends**: Down of TV Time; Up of Computer/Video Game Time
A majority of normal weight and overweight students reported being physically active 4+ days/wk, while a majority of obese students reported being active 3 or less days/wk.

**National Ranking:** 32nd for Daily Physical Activity

**RI Trends:** Daily Physical Activity
In Rhode Island between 2011–2013, all high school students regardless of their weight status, were equally as likely to consume too few fruits and vegetables and too much soda.

Fruits & Vegetables

78% of students reported eating <5 fruits/vegetables a day

RI Trends: ↓ in 5+ servings of fruits/vegetables a day

Soda

22% of students reported consuming 1+ cans of soda a day

RI Trends: ↓ in daily soda consumption 1+ cans of soda
## Positive Health Behaviors

### Rhode Island Students Engaging in Positive Health Behaviors by Grade Level & District, 2013-2014

<table>
<thead>
<tr>
<th></th>
<th>Screen Time 2 or Less Hrs/Day</th>
<th>Breakfast 3+ Days/Wk</th>
<th>Physically Active 3+ Days/Wk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elementary School</td>
<td>High School</td>
<td>Elementary School</td>
</tr>
<tr>
<td><strong>Four Core Cities</strong></td>
<td>68%</td>
<td>45%</td>
<td>88%</td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td>80%</td>
<td>53%</td>
<td>93%</td>
</tr>
<tr>
<td><strong>Rhode Island</strong></td>
<td>75%</td>
<td>48%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Source and Notes:

Screen time is defined as time spent playing video games, watching TV, or playing on the computer that is not related to homework.

Physical activity is defined as at least 60 minutes per day.

*Four core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

**Rural as defined by the Rhode Island Department of Health and includes the Burrillville, Chariho, Coventry, Exeter-West Greenwich, Foster, Glocester, Jamestown, Little Compton, New Shoreham, Portsmouth, Scituate, Tiverton, and Westerly school districts.
In Rhode Island, students are required to receive – Average of 100 minutes per week of Health and PE

Nationally, weekly recommended amount of PE is –
150 minutes in elementary school
225 minutes in middle and high school

Rhode Island schools are mandated to provide daily recess as well as physical activity opportunities other than PE.

Physical activity, including school-based activity, improves academic achievement.

Obese/overweight students experience poorer academic achievement than their normal-weight peers.
Rhode Island middle and high schools are improving the nutritional quality of the foods they distribute and sell, as well as implementing a number of strategies to increase healthy food choice.

<table>
<thead>
<tr>
<th>Decreased Availability of Unhealthy Foods</th>
<th>Increased Promotion of Healthy Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>82%</td>
<td>90% place fruits/vegetables near cashier</td>
</tr>
<tr>
<td>81%</td>
<td>81% use attractive fruits/vegetable displays</td>
</tr>
<tr>
<td>80%</td>
<td>76% serve locally/regionally grown food</td>
</tr>
<tr>
<td>76%</td>
<td>51% provided nutrition info to students/parents</td>
</tr>
<tr>
<td>75%</td>
<td>49% offer self-serve salad bar to students</td>
</tr>
</tbody>
</table>
• Weight-based victimization, bullying, or bias that is directed towards obese/overweight youth can result in a wide range of negative outcomes.

• Weight-based bias and bullying can be perpetuated by peers, educators, parents, the media, and others, and can have long-lasting effects, even after weight loss.

• In Rhode Island in 2013, being bullied due to one’s weight was reported by

  13% of middle school students

  12% of high school students
Built Environment

Access to Outdoor Recreation Space:
In Rhode Island in 2011 –

19% of the total land area is dedicated to outdoor public recreation space

86% of residents live nearby
(defined as either .25 miles or 5 miles away)

Safe Places to Play and Be Active:
In Rhode Island in 2013 –

82% of high school students reported feeling safe when walking outside
Access to Healthy Affordable Food
In Rhode Island in 2013 –

27% of residents live in a food desert
(defined as living more than 1 mile from a supermarket, supercenter, or large grocery store in urban tracts or 10 miles in rural tracts)

Proximity to Fast Food/Convenience Stores
In Rhode Island in 2013 –

Average of 2 fast food and convenience stores per square mile
Rural Environments

• Childhood obesity is growing disproportionately in rural America.

• Families residing in rural communities often face distinct challenges in combating childhood obesity because of the availability and proximity of healthy food retailers, medical providers, public transportation, and physical activity facilities, among others.

• The Rhode Island Department of Health has designated 16 communities as rural/non-metropolitan.
Recommendations

- Individual/Family
- Sociocultural
- Environmental (School/Community)

Childhood Obesity
Recommendations

Families

• Make healthy choices easy choices

Health Care System

• Professional development

• Oral health care providers

• Breastfeeding policies/programs

• Health plans

• Evidence–based opportunities/programs
Recommendations

**Schools**
- School district Health and Wellness Subcommittees
- Required PE time
- Elementary recess
- Physical activity opportunities
- School meal programs
- Professional development relating to weight-based bullying/bias/stigma

**Child Care and After-School Programs**
- Licensing standards
- Professional development and tools
Recommendations

Communities

• Expand opportunities for physical activity
• Foster access to healthy foods
• Consider financial incentives
• Tailored policies/practices

Data and Coordination

• KIDSNET
• Youth surveys
• Coordinate and collaborate