Progress Update on Child & Adolescent Obesity in Rhode Island

#HealthyRIKids
Thank You

Special thanks to

Blue Cross Blue Shield of Rhode Island

for their continued support
Thank You
And to all those who provided input
Physical Activity in Schools

- Data regarding obesity, physical activity, recess, physical education, and school policies.

- Recommendations aimed at increasing physical activity of children and adolescents before, during, and after-school are included.

- Strong emphasis on the need for improved recess and physical education.
Benefits of Physical Activity

**FIGURE 2 Composite Attentional Allocation of 20 Students Taking the Same Test**

These two brain images, taken from the top of the head, represent the average amount of students’ neural activity during a test following sitting and walking for 20 minutes. The color blue represents lower neural activity, while the color red denotes higher brain activity in a given region.

*After 20 minutes of sitting quietly*  
*After 20 minutes of walking*

Image courtesy of Charles Hillman, University of Illinois at Urbana-Champaign
Physical Activity by RI Students

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</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>NC</td>
<td>55%</td>
<td>51%</td>
<td>55%</td>
<td>50%</td>
<td>NA</td>
</tr>
<tr>
<td>High School</td>
<td>32%</td>
<td>42%</td>
<td>44%</td>
<td>47%</td>
<td>45%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: *Youth Risk Behavior Survey*, Rhode Island, 2005-2015. *Physically active is defined as at least 60 minutes per day. NC: Data not collected. NA: Data collected, but not yet available. Related *SurveyWorks!* elementary (4th & 5th grade) data is only available for 2013 (62%) and 2014 (63%).
Recess School District Wellness Policies

Of 34 available RI school district wellness policies*

• **13 districts prohibit withholding recess**
  (Barrington, Burrillville, Central Falls, Cranston, East Greenwich, Foster, Lincoln, Newport, North Providence, Providence, Smithfield, Tiverton, Woonsocket)

• **5 districts restrict but do not prohibit withholding recess**
  (Bristol Warren, Chariho, Coventry, East Providence, Pawtucket)

• **10 districts require 20 minutes or more of daily recess**
  (Burrillville, Chariho, Coventry, Cumberland, Foster, Lincoln, New Shoreham, Smithfield, Tiverton, Woonsocket)

• **5 districts prioritize physical activity time over remedial or extra instruction**
  (Burrillville, East Greenwich, Lincoln, Newport, Smithfield)

• **2 districts mandate recess be scheduled before lunch**
  (Foster, Tiverton)
Recess for RI Survey Data

**Playground Adequacy**
- **Ideal** 21%
- **Adequate** 57%
- **Lacking** 22%

**Space for Indoor Recess**
- **Ideal** 1%
- **Adequate** 20%
- **No Indoor Space** 79%

**Recess Duration**
- <10 Minutes 10%
- 10-20 Minutes 72%
- 20-30 Minutes 18%

**Withhold Recess for Discipline**
- Yes 70%
- No 30%
Physical Education

In Rhode Island, students are required to receive an average of 100 minutes per week of health and PE instruction.

Nationally, the weekly recommended amount of PE alone is 150 minutes in elementary school and 225 minutes in middle and high school.
## Physical Education Attendance

### Rhode Island Students Who Attend Physical Education 1+ Days* by Grade Level Race/Ethnicity

#### Middle School

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>92%</td>
<td>91%</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>White</td>
<td>94%</td>
<td>93%</td>
<td>89%</td>
<td>94%</td>
</tr>
<tr>
<td>Black</td>
<td>86%</td>
<td>84%</td>
<td>83%</td>
<td>78%</td>
</tr>
<tr>
<td>Hispanic**</td>
<td>87%</td>
<td>86%</td>
<td>86%</td>
<td>77%</td>
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</table>

#### High School

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>91%</td>
<td>88%</td>
<td>90%</td>
<td>87%</td>
<td>79%</td>
<td>82%</td>
<td>78%</td>
<td>77%</td>
<td>73%</td>
</tr>
<tr>
<td>White</td>
<td>92%</td>
<td>92%</td>
<td>90%</td>
<td>87%</td>
<td>82%</td>
<td>83%</td>
<td>81%</td>
<td>81%</td>
<td>79%</td>
</tr>
<tr>
<td>Black</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>90%</td>
<td>77%</td>
<td>85%</td>
<td>72%</td>
<td>69%</td>
<td>68%</td>
</tr>
<tr>
<td>Hispanic**</td>
<td>84%</td>
<td>75%</td>
<td>86%</td>
<td>82%</td>
<td>66%</td>
<td>78%</td>
<td>70%</td>
<td>67%</td>
<td>61%</td>
</tr>
</tbody>
</table>


*Days are defined as in an average week when they were in school.

**Hispanic students can be of any race.

NA: Data collected, but insufficient sample to report.
Recommendations

• Increase PE time
• Provide professional development
• Enact stronger recess standards
• Improve indoor recess and physical activity opportunities
• Enact a comprehensive school physical activity program
• Reduce disparities
• Engage local district Health and Wellness Subcommittees
• Strengthen related data collection and reporting
2014 Issue Brief

• Data regarding obesity and overweight, health behaviors, and environmental measures.

• Recommendations aimed at families, health care system, communities, schools, child care and after-school programs.

• Strong emphasis on the need for improved data and coordination.
Defining Childhood Obesity

**Obese:** BMI at or above 95\textsuperscript{th} percentile

**Overweight:** BMI between 85\textsuperscript{th} – 95\textsuperscript{th} percentile

**BMI Limitations**

- Not a Diagnostic Tool
- Racial/Ethnic Considerations
- Lean/Fat Mass Distinction Issues
Available BMI Data

OBESITY & OVERWEIGHT AMONG RHODE ISLAND HIGH SCHOOL STUDENTS 2001-2015

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obese</td>
<td>9%</td>
<td>10%</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
<td>11%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Overweight</td>
<td>14%</td>
<td>14%</td>
<td>15%</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: Youth Risk Behavior Survey, Rhode Island, 2001-2015. BMI calculated using self-reported student response. Obesity is defined as BMI at or above the 95th percentile for age and sex. Overweight is defined as BMI between the 85th and 95th percentiles for age and sex.

Obesity starts early - in 2015, 17% of children ages two to four enrolled in WIC and 20% of children age three to five enrolled in Head Start were obese. In 2015, 12% of Rhode Island high school students reported being obese and 15% reported being overweight.
BMI Data Collection & Public Reporting Findings

Rhode Island KIDS COUNT Findings from Stakeholder Discussions:
Opportunities for Systematic BMI Data Collection & Public Reporting

Important Considerations & Key Takeaways:

- Rhode Island currently has no statewide surveillance of clinical BMI data for children and adolescents.

- Rhode Island KIDS COUNT is researching systems or instruments that could be used for systematic BMI data collection and public reporting. Outlined below are (1) current sources of BMI data (self-reported or clinical) and (2) instruments/organizations that could possibly be utilized to collect additional BMI data in Rhode Island. Benefits and barriers are described, as are emerging national practices.

- An ideal BMI surveillance system in Rhode Island would have the following elements: (a) a large sample size of children of various ages (i.e., toddlers, elementary, middle, and high school students) and (b) clinical BMI data that is recorded by a trained professional. The information would be (c) updated regularly and (d) shared publicly with various stakeholders, including communities, schools, medical professionals, health organizations, policymakers, and funders so that prevention and intervention for at-risk, overweight, and obese children and adolescents can occur early and at all ages.

<table>
<thead>
<tr>
<th>Instrument/Organization</th>
<th>Reach</th>
<th>Reporting Parameters</th>
<th>Pros</th>
<th>Barriers</th>
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<tbody>
<tr>
<td>Statewide</td>
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<tr>
<td>KIDSNET</td>
<td>All RI children born since 1997</td>
<td>Currently no BMI collection</td>
<td>Very large sample; existing interface with providers; successful track record of collecting data; opt-out enrollment; national BMI EHR reporting parameters exist</td>
<td>Administrative capacity and resources; EHR variations and associated funding; legal authority</td>
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<tr>
<td>RI Department of Health</td>
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<tr>
<td>CurrentCare</td>
<td>43,700 RI children under age 18</td>
<td>Limited clinical BMI data; Not publicly reported</td>
<td>Large sample; growing enrollment; existing interface with providers; adding consumer interface</td>
<td>Limited clinical BMI data currently available; potentially skewed sample; legal authority; administrative capacity; opt-in enrollment</td>
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<tr>
<td>RI Quality Institute</td>
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<tr>
<td>Institutional</td>
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<tr>
<td>FitnessGram, ASPEN (school health record systems)</td>
<td>142,959 RI children enrolled in grades K-12</td>
<td>BMI recorded by relevant staff; Infrequent public reporting</td>
<td>25 states (including CT, MA, &amp; ME) collect data relating to BMI through schools, captive audience; school physical forms with BMI information annually collected; various screening programs occur</td>
<td>Administrative capacity and resources; difficulty with aggregation and reporting; RIDE does not mandate BMI collection; technology platforms vary and may not collect BMI data; legal concerns</td>
</tr>
</tbody>
</table>

January 2016
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