

# PROMOTING INCREASED PHYSICAL ACTIVITY IN SCHOOLS

Over the past four decades, the prevalence of childhood obesity in America has tripled, and today 17% of U.S. children ages 2-19 are obese.<sup>1,2</sup>

U.S. Children are Obese

17%

Over the past 15 years, children's access to school-based fitness activities has declined.<sup>3</sup>

Schools, including early learning programs, can prioritize increasing children's physical activity levels through recess, physical education, classroom activity breaks, afterschool/extracurricular activities, safe routes to school walking programs, and shared use/joint use agreements between school facilities and community organizations.<sup>4</sup>

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

	2001	2003	2005	2007	2009	2011	2013	2015
Obese	9%	10%	13%	11%	10%	11%	11%	12%
Overweight	14%	14%	15%	16%	17%	15%	16%	15%

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.

The epidemic of childhood obesity that is occurring across the nation is also evident among Rhode Island children and youth. 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.<sup>5,6,7</sup>

Regular physical activity has been shown to improve strength and endurance, help control weight, prevent chronic disease, and have positive effects on the brain, including improved attention, processing, memory, and coping. It has also been shown to improve academic achievement, including grades and standardized test scores.<sup>8,9,10</sup>

## RHODE ISLAND STUDENTS PHYSICALLY ACTIVE 5 DAYS BY GRADE LEVEL 2005-2015

	2005	2007	2009	2011	2013	2015
Middle School	NC	55%	51%	55%	50%	NA
High School	32%	42%	44%	47%	45%	44%

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%).

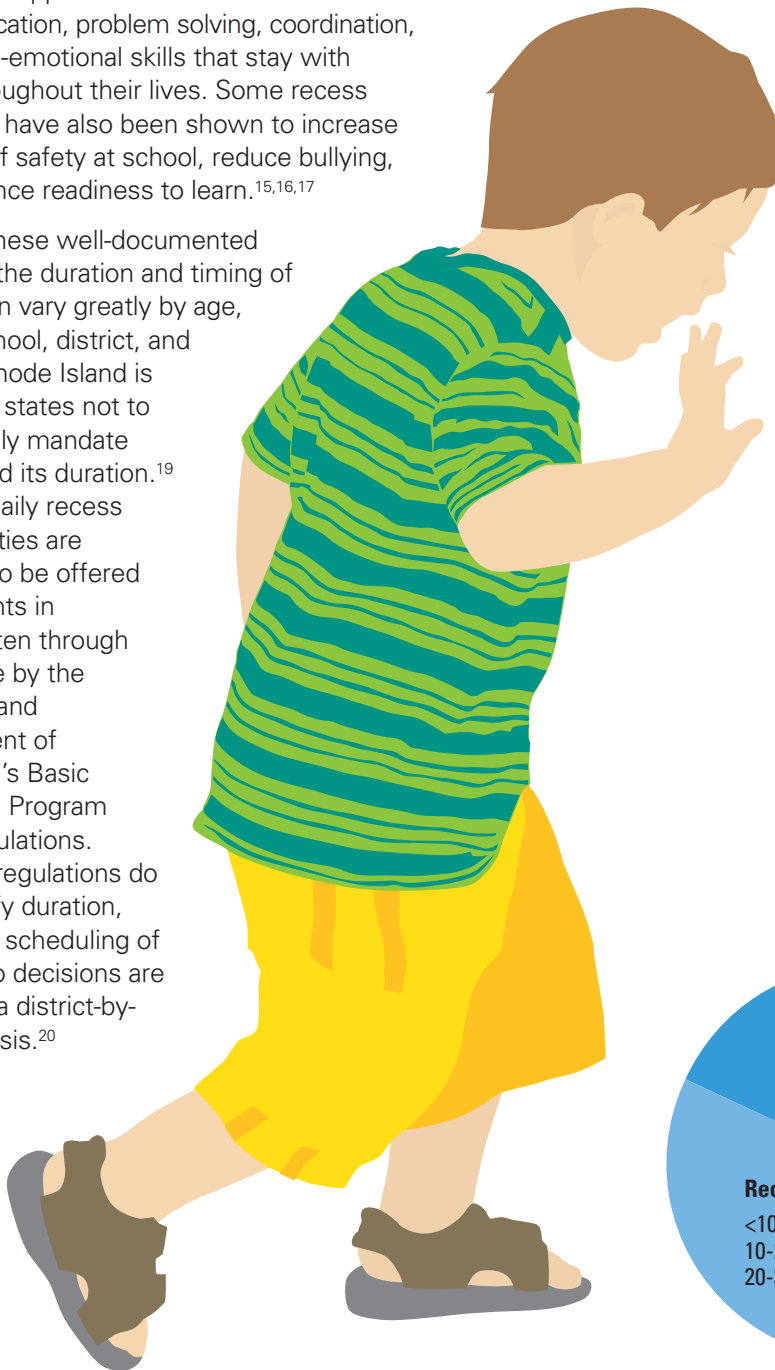
While no single factor is driving the increased prevalence of obesity, increasing physical activity is one strategy that can be taken along with others to help prevent and reduce the burden of child and adolescent obesity.<sup>11</sup> However, too few children are physically active for at least 60 minutes per day, the recommended amount to achieve these positive outcomes.<sup>12,13</sup>

# RECESS

**Regularly scheduled recess** provides students with an ongoing opportunity to get part of their recommended daily amount of vigorous to moderate physical fitness through self-directed play and/or participation in a supervised activity.<sup>14</sup>

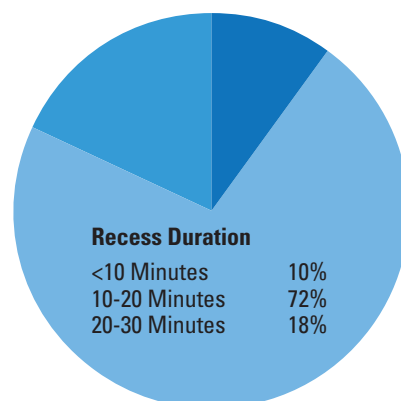
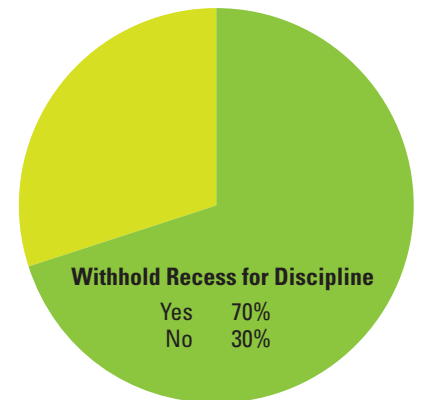
Recess is an important component in optimizing a child's social, emotional, physical, and cognitive development. Not only does recess make children more attentive and productive in the classroom, it also provides them with opportunities to learn valuable communication, problem solving, coordination, and social-emotional skills that stay with them throughout their lives. Some recess programs have also been shown to increase feelings of safety at school, reduce bullying, and enhance readiness to learn.<sup>15,16,17</sup>

Despite these well-documented benefits, the duration and timing of recess can vary greatly by age, grade, school, district, and state.<sup>18</sup> Rhode Island is one of 43 states not to legislatively mandate recess and its duration.<sup>19</sup> Instead, daily recess opportunities are required to be offered for students in kindergarten through fifth grade by the Rhode Island Department of Education's Basic Education Program (BEP) regulations. The BEP regulations do not specify duration, quality, or scheduling of recess, so decisions are made on a district-by-district basis.<sup>20</sup>



A review of 34 available school district wellness policies found Rhode Island schools vary in adoption of recommended practices. For example, 13 districts prohibit withholding recess for disciplinary or other reasons and 5 restrict, but do not prohibit, withholding recess. Five districts prioritize physical activity time over remedial or extra instruction. Nine districts require 20 minutes or more of daily recess and 2 districts mandate that recess be scheduled before lunch.<sup>21,22,23</sup>

A recent survey of 90 Rhode Island elementary school principals also found recess implementation varied across the state, despite 85% of the principals agreeing that recess is necessary for children's optimum learning and development (the four pie charts below show other principal survey results).<sup>24</sup>



# PHYSICAL EDUCATION

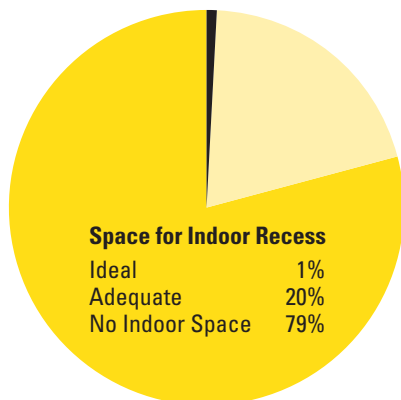
**Physical education (PE)** is another opportunity for all children to learn about and engage in developmentally appropriate vigorous or moderate physical activity safely under the direct supervision of a trained educator during the school day.<sup>25,26</sup>

PE curriculum and instruction are designed to develop age-appropriate motor skills, knowledge and behaviors of physical fitness, sportsmanship, emotional intelligence, self-efficacy, and active living.<sup>27</sup> In addition to its many physical benefits, PE also supports positive development of cognitive skills, academic behavior, and achievement.<sup>28</sup>

In Rhode Island, students are required to receive an average of 100 minutes per week of health and PE instruction. Recess, free play, and after-school activities are not counted as PE.<sup>29</sup>

Nationally, the weekly recommended amount of PE alone is 150 minutes in elementary school and 225 minutes in middle and high school.<sup>30</sup> However, in the U.S., an estimated 4% of elementary schools, 3% of middle schools, and 4% of high schools have PE requirements that are aligned with these national guidelines.<sup>31</sup>

Rhode Island is also one of 22 states that does not grant exemptions/waivers to school districts regarding PE time or credit requirements.<sup>32</sup>



Time spent in PE classes among Rhode Island high school students has decreased from 1997 to 2015, and racial and ethnic disparities exist in PE attendance.<sup>33</sup>

### RHODE ISLAND STUDENTS WHO ATTEND PHYSICAL EDUCATION 1+DAYS\* BY GRADE LEVEL RACE/ETHNICITY

#### MIDDLE SCHOOL

	2007	2009	2011	2013
All	92%	91%	88%	88%
White	94%	93%	89%	94%
Black	86%	84%	83%	78%
Hispanic**	87%	86%	86%	77%

#### HIGH SCHOOL

	1997	2001	2003	2005	2007	2009	2011	2013	2015
All	91%	88%	90%	87%	79%	82%	78%	77%	73%
White	92%	92%	90%	87%	82%	83%	81%	81%	79%
Black	NA	NA	NA	90%	77%	85%	72%	69%	68%
Hispanic**	84%	75%	86%	82%	66%	78%	70%	67%	61%

Source: Youth Risk Behavior Survey, Rhode Island, 1997-2015.

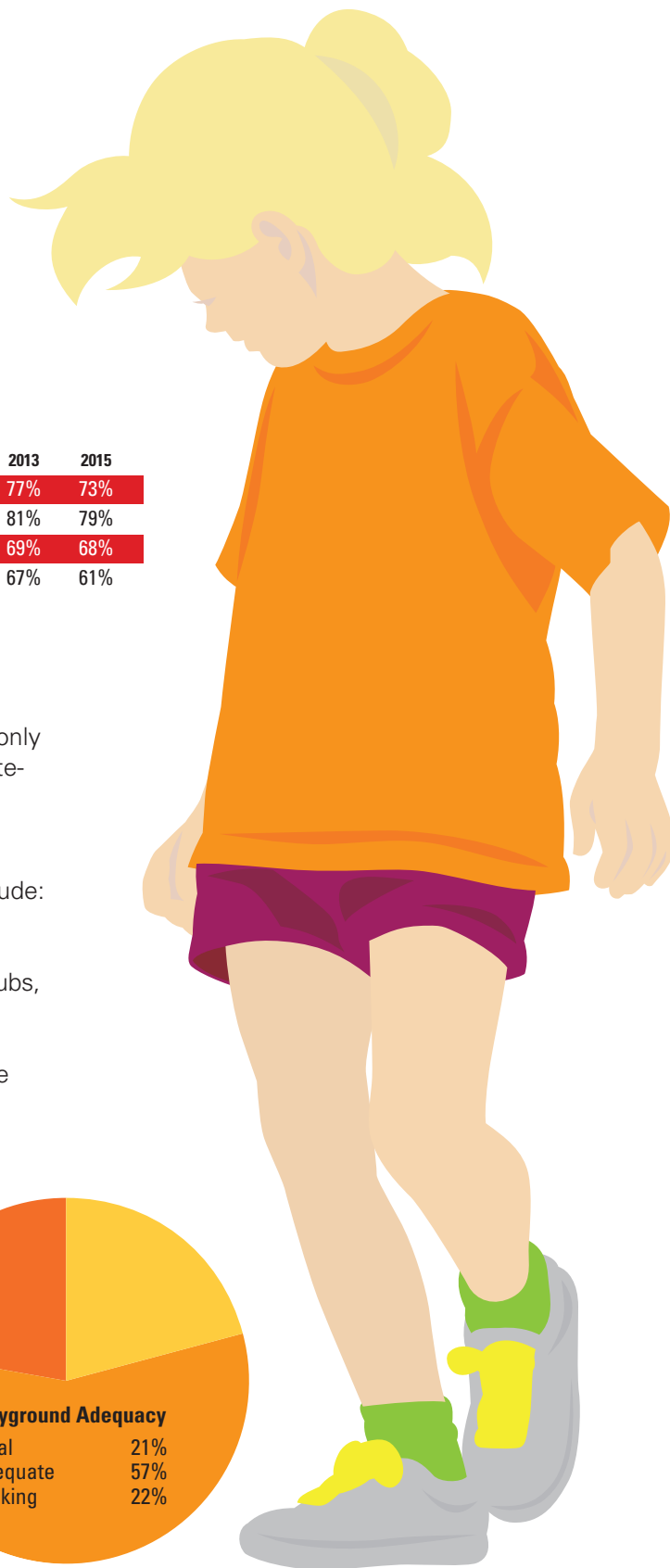
\*Days are defined as in an average week when they were in school.

\*\*Hispanic students can be of any race.

NA: Data collected, but insufficient sample to report.

Because most elementary and middle school students spend only 10%-40% percent of PE time engaged in vigorous- or moderate-intensity physical activity, it is recommended that schools implement additional strategies to help students achieve their recommended amount of daily physical activity.<sup>34</sup> Examples reported by Rhode Island middle and high schools in 2014 include:

- 88% offered interscholastic sports,
- 75% offered intramural sports programs or physical activity clubs,
- 66% had a joint use agreement for school/facilities,
- 27% offered physical activity breaks in classrooms during the school day outside of PE.<sup>35</sup>



#### PLAYGROUND ADEQUACY

##### Ideal 21%

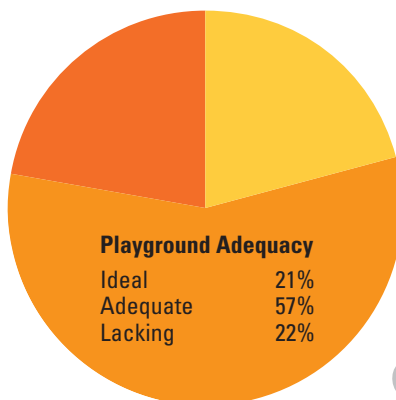
Well-maintained with ample space & high-quality equipment/supplies

##### Adequate 57%

Fairly well-maintained, but lacking space/equipment/supplies

##### Lacking 22%

Poorly maintained with not enough space & no equipment/supplies



# RECOMMENDATIONS



## **PE TIME**

The number of minutes required for Physical Education (PE) in Rhode Island should be increased to 150 minutes per week for elementary school (30 minutes per day) and 225 minutes per week for middle and high school (45 minutes per day), with at least 50% of class-time dedicated to vigorous- or moderate-intensity physical activity. PE exemptions should continue to be prohibited.

## **PROFESSIONAL DEVELOPMENT**

PE teachers should be provided with annual professional development opportunities to strengthen the quality of PE. In addition, all educators (including early childhood educators) should be provided with training on how to incorporate physical activity regularly and safely in their classroom.

## **RECESS TIME**

Elementary school recess should be required to be a minimum of 20 minutes per day, allow for both structured and self-directed play, not be withheld as punishment or for academic reasons, and optimally be scheduled before lunch. Recess also should not be substituted for remedial or extra academic instruction as it may be counterproductive to achieving desired educational outcomes.

## **INDOOR RECESS AND PHYSICAL ACTIVITY**

Best practices for indoor recess and physical activity should be identified and shared with all schools and early childhood programs.



## **PHYSICAL ACTIVITY STRATEGIES**

Expand additional physical activity opportunities for all students before, during, and after school by implementing a comprehensive school physical activity program that includes classroom activity breaks, safe and adequate playgrounds, intramural and physical activity clubs, interscholastic sports, "safe routes to school" programs, and joint-use agreements of school facilities with community organizations.

## **EQUITY IN PHYSICAL ACTIVITY**

State, district, and local education administrators and educators should increase equity in physical activity by ensuring that all children and adolescents have equal access to appropriate and well-maintained facilities and recreational spaces, as well as opportunities for physical activity and quality physical education.

## **SCHOOL POLICIES**

Local school district Health and Wellness Subcommittees should regularly update and communicate their policies relating to school physical activity, PE, and recess and should use assessment tools to regularly monitor and review progress and compliance. The Rhode Island Department of Education should provide districts and early childhood programs with professional development and support with efforts to align physical activity programs and policies with national standards.



## **DATA COLLECTION & REPORTING**

State-, district-, and individual school-level data relating to physical activity and physical education related policies and behavior should be improved and regularly reported by Rhode Island Department of Education, Rhode Island Department of Health, and/or local school districts so that quality, implementation, and enrichment of children's fitness and overall physical activity can be monitored and improved more systemically.



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- <sup>23</sup> Rhode Island KIDS COUNT analysis of Rhode Island school district wellness policies. Retrieved December 2015 from [www.rihsc.org](http://www.rihsc.org)
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