

Child Overweight and Obesity

DEFINITION

Child overweight and obesity is the percentage of children whose body mass index (BMI) meets the definition for overweight or obese. Children with a BMI at or above the 95th percentile for gender and age are considered to be obese, and children with a BMI between the 85th and 95th percentiles are considered to be overweight or at risk for obesity.¹

SIGNIFICANCE

Children and adolescents who are overweight or obese are at immediate and/or long-term risk of many health problems, including type 2 diabetes, cardiovascular disease, asthma, joint problems, sleep apnea, and other acute and chronic health problems. Over time, these conditions may contribute to a shorter lifespan. They may also experience social and psychological problems, including depression, bullying, and social marginalization. Obese children and youth are also more likely to repeat a grade, be absent from school, and have reduced academic performance than their peers.^{2,3,4}

Nationally, there is a continued upward trend in obesity.⁵ In 2017-2018 in the U.S., the prevalence of obesity in children ages two to 19 was 19% with a significant increase in severe obesity for children ages six to eleven years.^{6,7}

Prior to 2018, Rhode Island did not have adequate clinical childhood BMI

data. A recent study of data collected in 2020 found that 15% of Rhode Island children ages two to 17 are overweight and 20% are obese.⁸

The increased prevalence of childhood obesity is the result of complex interactions among many factors, including calorie consumption, genes, metabolism, behavior, environment, and physical activity.⁹ Low consumption of healthy foods, high consumption of sugar-sweetened beverages and energy dense foods, low levels of physical activity, and high levels of screen time are all associated with obesity.¹⁰

The COVID-19 pandemic has impacted childhood overweight and obesity, with one study reporting that the prevalence of overweight and obesity for children ages 5 to 11 in the U.S. increased from 36% to 46% during the pandemic.¹¹ Reducing overweight and obesity will require a comprehensive, multi-system approach.

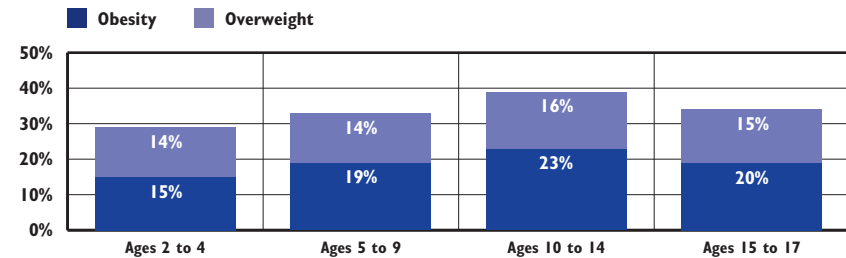
Overweight and Obesity Among Children Age 10-17 (Combined Overweight and Obesity)	
2019-2020	
RI	34%
US	32%
National Rank*	35th
New England Rank**	6th

*1st is best; 50th is worst

**1st is best; 6th is worst

Source: Data Resource Center for Child and Adolescent Health, 2019-2020 National Survey of Children's Health, childhealthdata.org

Rhode Island Childhood Overweight and Obesity by Age, 2020



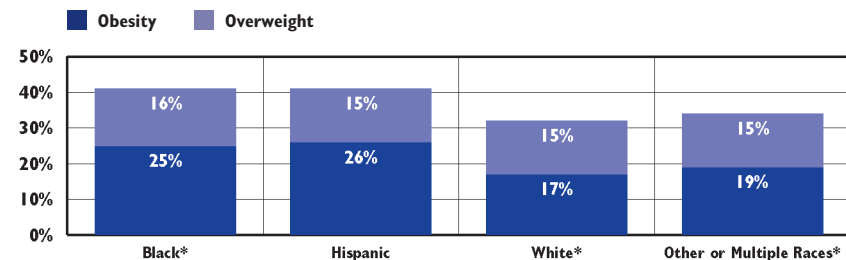
Source: Brown University School of Public Health analysis of BMI clinical and billing records of children ages two to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, United Healthcare, and Tufts Health Plan collected by the Department of Health, 2021.

◆ Fifteen percent of Rhode Island children ages two to 17 are overweight and 20% are obese.¹²

◆ Older children are more likely to be overweight or obese. Twenty-three percent of children ages 10 to 14 and 20% of children ages 15 to 17 are obese.¹³

◆ Twenty-five percent of children covered by RItE Care are obese compared to 15% of children with private health insurance.¹⁴

Rhode Island Childhood Overweight and Obesity by Race/Ethnicity, 2019



Source: Brown University School of Public Health analysis of BMI clinical and billing records of children ages two to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, United Healthcare, and Tufts Health Plan collected by the Department of Health, 2021. *Non-Hispanic.

◆ Hispanic children (15% overweight and 26% obese) and non-Hispanic Black children (16% overweight and 25% obese) have the highest rates of overweight and obesity.¹⁵

Table 26. Prevalence of Overweight and Obesity in Rhode Island Children Ages 2 to 17, 2020

CITY/TOWN	% OVERWEIGHT	% OBESE	% OVERWEIGHT AND OBESE COMBINED
Barrington	14.2%	8.2%	22%
Bristol	16.0%	17.4%	33%
Burrillville	18.1%	18.0%	36%
Central Falls	18.7%	33.6%	52%
Charlestown	16.1%	12.6%	29%
Coventry	12.1%	16.2%	28%
Cranston	15.7%	19.6%	35%
Cumberland	15.9%	19.5%	35%
East Greenwich	12.2%	9.1%	21%
East Providence	17.0%	21.3%	38%
Exeter	11.4%	11.8%	23%
Foster	16.7%	13.1%	30%
Glocester	16.9%	14.3%	31%
Hopkinton	13.4%	18.9%	32%
Jamestown	11.6%	9.7%	21%
Johnston	15.7%	22.7%	39%
Lincoln	16.7%	18.1%	35%
Little Compton	*	*	24%
Middletown	11.6%	14.3%	26%
Narragansett	15.3%	11.7%	27%
New Shoreham	*	*	39%
Newport	12.5%	21.3%	34%
North Kingstown	11.3%	12.5%	24%
North Providence	20.3%	23.0%	43%
North Smithfield	17.5%	14.6%	32%
Pawtucket	16.9%	25.6%	43%
Portsmouth	9.3%	10.2%	19%
Providence	13.6%	22.4%	36%
Richmond	14.2%	12.0%	26%
Scituate	15.0%	13.7%	29%
Smithfield	15.3%	13.8%	29%
South Kingstown	14.1%	12.4%	27%
Tiverton	13.5%	19.4%	33%
Warren	17.1%	19.7%	37%
Warwick	15.8%	17.9%	34%
West Greenwich	13.5%	12.7%	26%
West Warwick	13.9%	21.7%	36%
Westerly	13.7%	18.0%	32%
Woonsocket	17.4%	30.8%	48%
Four Core Cities	15%	25%	40%
Remainder of State	15%	17%	32%
Rhode Island	15%	20%	35%

Nutrition and Physical Activity

◆ Nutrition is a key component of supporting a healthy weight. Many children and adolescents consume diets with too many calories and not enough nutrients.^{16,17} In 2019, 86% of Rhode Island high school students reported eating less than three servings of vegetables a day, the recommended amount, and 18% reported drinking a sugar sweetened beverage at least once a day.¹⁸

◆ Regular physical activity, including school-based physical education and recess, has been shown to have physical, social, emotional, cognitive, academic, and health benefits.^{19,20} In 2019, 55% of Rhode Island middle school students and 59% of high school students reported less than five days of physical activity in a week.²¹

◆ The COVID-19 pandemic limited children’s access to nutritious food and physical activity. Early data shows that the rate of BMI increase for children ages two to 19 nearly doubled during the pandemic.²² Policy strategies to reduce obesity include improving access to nutritious and affordable foods and beverages, ensuring healthy food in schools, increasing options for physical activity before, during, and after school as well as in early learning programs, and improving access to safe and walkable neighborhoods and recreational areas.^{23,24}

Source of Data for Table/Methodology

Brown University School of Public Health analysis of BMI clinical and billing records of children ages 2 – 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, United Healthcare, and Tufts Health Plan collected by the Department of Health, 2021.

* The data are statistically unreliable; rates are not reported and should not be calculated.

Core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

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- ^{8,12,13,14,15} Brown University School of Public Health analysis of BMI clinical and billing records of children ages two to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, United Healthcare, and Tufts Health Plan collected by the Department of Health, 2021.

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