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 risk of health problems, including type 2 diabetes, cardiovascular disease, asthma, joint problems, sleep apnea, and other acute and chronic health problems. They may also experience social and psychological problems, including depression, bullying, and social marginalization more than their peers due to weight-based stigma which can impact their school attendance and academic performance.^{2,3,4}

Nationally, there is a continued upward trend in obesity. During 2017-2020 in the U.S., the prevalence of obesity in children ages two to 19 was 20% with children and adolescents ages 12 to 19 having the highest rates. Prior to 2018, Rhode Island did not have adequate clinical childhood BMI data. A recent study of data collected in 2021 found that 16% of Rhode Island

children ages two to 17 are overweight and 23% are obese.⁷

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. Most of these factors are out of the individuals' control and are related to a child's socioeconomic status and the availability of healthy food and safe play areas in their community.^{8,9} Low consumption of healthy foods, low levels of physical activity, and high levels of screen time are all associated with obesity.¹⁰

The COVID-19 pandemic limited children's access to nutritious food and physical activity among other impacts. The rate of BMI increase for children ages 2 to 19 nearly doubled during the pandemic. Reducing overweight and obesity will require a comprehensive, multi-system approach.

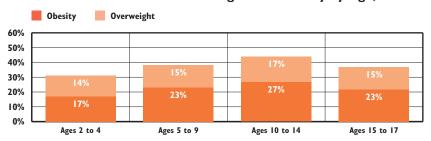
Overweight and Obesity Among Children Age 10-17 (Combined Overweight and Obesity)		
	2020-2021	
RI	32%	
US	33%	
National Rank*	26th	
New England Rank**	5th	

*1st is best; 50th is worst
**1st is best: 6th is worst

Source: Data Resource Center for Child and Adolescent Health, 2020-2021 National Survey of Children's Health, childhealthdata.org

LULLER STEEL

Rhode Island Childhood Overweight and Obesity by Age, 2021

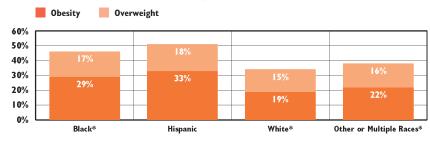


Source: Brown School of Public Health analysis of BMI clinical and billing records of children ages two to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, United Healthcare, and Tufts Health Plan collected by the Department of Health, 2022.

- ♦ Sixteen percent of Rhode Island children ages two to 17 are overweight and 23% are obese. Older children are more likely to be overweight or obese. Twenty-seven percent of children ages 10 to 14 and 23% of children ages 15 to 17 are obese.¹²
- ♦ Thirty percent of children covered by RIte Care are obese compared to 16% of children with private health insurance.¹³

LULLER STEELS

Rhode Island Childhood Overweight and Obesity by Race/Ethnicity, 2021



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, 2022. *Non-Hispanic.

♦ Hispanic children (18% overweight and 33% obese) and non-Hispanic Black children (17% overweight and 29% obese) have the highest rates of overweight and obesity. Cultural differences and disparities in the community/environmental and socioeconomic status of Children of Color contribute to these disparities.^{14,15}

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Table 25. Prevalence of Overweight and Obesity in Rhode Island Children Ages 2 to 17, 2021



Food Access, Nutrition, and Physical Activity

- ♦ Many children and adolescents do not have access to enough food for a healthy and active lifestyle (food insecurity) or consume diets with too many calories and not enough nutrients. ^{16,17} In 2022, 41% of households with children in Rhode Island reported being food insecure. ¹⁸
- ◆ In 2021, 21% of Rhode Island high school students reported not eating breakfast, 88% reported eating less than three servings of vegetables a day, the recommended amount, and 62% reported drinking soda at least once in the prior week.¹9
- ◆ Regular physical activity has physical, social, emotional, cognitive, and health benefits.²⁰ In 2021, 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
- ◆ A community's streets, sidewalks, parks, and housing influence physical activity choices for youth.²² Policy strategies to address obesity include improving access to nutritious and affordable foods and beverages, ensuring access to healthy food in schools, increasing options for physical activity, and improving access to safe and walkable neighborhoods and recreational areas.^{23,24}

CITY/TOWN	% OVERWEIGHT	% OBESE	% OVERWEIGHT AND OBESE COMBINED
Barrington	15%	9%	24%
Bristol	14%	19%	33%
Burrillville	17%	22%	39%
Central Falls	16%	37%	53%
Charlestown	15%	15%	30%
Coventry	14%	17%	31%
Cranston	16%	22%	38%
Cumberland	17%	21%	37%
East Greenwich	11%	11%	21%
East Providence	16%	25%	42%
Exeter	13%	16%	29%
Foster	14%	17%	31%
Glocester	15%	15%	30%
Hopkinton	16%	19%	36%
Jamestown	9%	12%	21%
Johnston	17%	24%	41%
Lincoln	17%	21%	37%
Little Compton	15% ^	10% ^	25%
Middletown	11%	14%	25%
Narragansett	13%	17%	30%
New Shoreham	*	*	27% ^
Newport	12%	21%	34%
North Kingstown	13%	13%	26%
North Providence	19%	24%	43%
North Smithfield	19%	18%	37%
Pawtucket	17%	30%	47%
Portsmouth	8%	10%	18%
Providence	18%	32%	50%
Richmond	13%	14%	27%
Scituate	14%	15%	29%
Smithfield	17%	15%	31%
South Kingstown	13%	15%	28%
Tiverton	14%	20%	33%
Warren	14%	23%	37%
Warwick	16%	21%	37%
West Greenwich	13%	15%	28%
West Warwick	14%	25%	39%
Westerly	17%	23%	40%
Woonsocket	17%	34%	50%
Four Core Cities	17%	32%	49%
Remainder of State	15%	19%	34%
Rhode Island	16%	23%	39%

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, 2022.
- * The data are statistically unreliable; rates are not reported and should not be calculated.
- ^ Data are statistically unstable and rates or percentages should be interpreted with caution
- Core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

References

- ¹ Centers for Disease Control and Prevention. (2023). Defining child BMI categories. Retrieved March 28, 2023, from www.cdc.gov
- ² Centers for Disease Control and Prevention. (2022). Consequences of obesity. Retrieved March 28, 2023, from www.cdc.gov
- ³ Glickman, D., Parker, L., Sim, L., Del Valle Cook, H., & Miller, E. A. (2012). Accelerating progress in obesity prevention: Solving the weight of the nation. Washington, DC: Institute of Medicine of the National Academies.
- 4.8.16.22.23 Warren, M., Beck, S., & West, M. (2022). The state of obesity 2022: Better policies for a healthier America. Washington, DC: Trust for America's Health
- ⁵ Quickstats: Prevalence of obesity and severe obesity among persons aged 2–19 years — national health and nutrition examination survey, 1999–2000 through 2017–2018. (2020). MMWR Morb Mortal Wkly Rep 69(13) 390.
- 6 Stierman B, Afful J, Carroll MD, Chen TC, Davy O, Fink S, et al. (2021). National health and nutrition examination survey 2017–March 2020 prepandemic data files—development of files and prevalence estimates for selected health outcomes. National Health Statistics Reports; no 158. Hyattsville, MD: National Center for Health Statistics.

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