CHILDHOOD OVERWEIGHT AND OBESITY:
## Updated Data for Rhode Island

Childhood obesity is a serious problem in the U.S. with one in five children considered obese, putting children at risk for poor health. 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.[1,2,3]

Despite the persistence and severity of childhood overweight and obesity, clinical data is difficult to obtain for policy planning, population health, or programmatic purposes. While height, weight, and calculated BMI are some of the most frequently collected information at pediatric visits, there are very few national or state-level data sets that capture this clinical data. Most national and state-level data on childhood obesity come from self-reported survey data which can differ from clinical data.

From 2016-2020 Rhode Island KIDS COUNT, the Rhode Island Department of Health's Center for Health Data and Analysis, the Hassenfeld Child Health Innovation Institute, the State Innovation Model, and four health insurance plans collaborated on a project to collect accurate childhood overweight and obesity data at the state and city/town level that could also be analyzed by race/ethnicity, age, gender, and health insurance status. The result of this unique collaboration was the first clinical/claims-based statewide data set of childhood overweight and obesity in Rhode Island. This Policy Brief presents updated data from 2019 collected and analyzed from 2019 to 2021.

RHODE ISLAND CHILDREN BY WEIGHT STATUS, AGES 2 TO 17, 2019
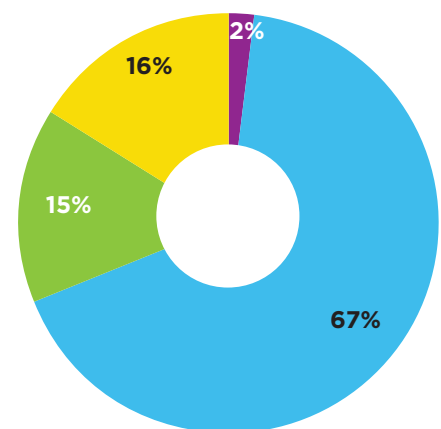
2%	● Underweight
67%	● Healthy weight
15%	● Overweight
16%	● Obese

Children whose body mass index (BMI) is in 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.

Source: Centers for Disease Control and Prevention. (2021). *Healthy weight*. www.cdc.gov
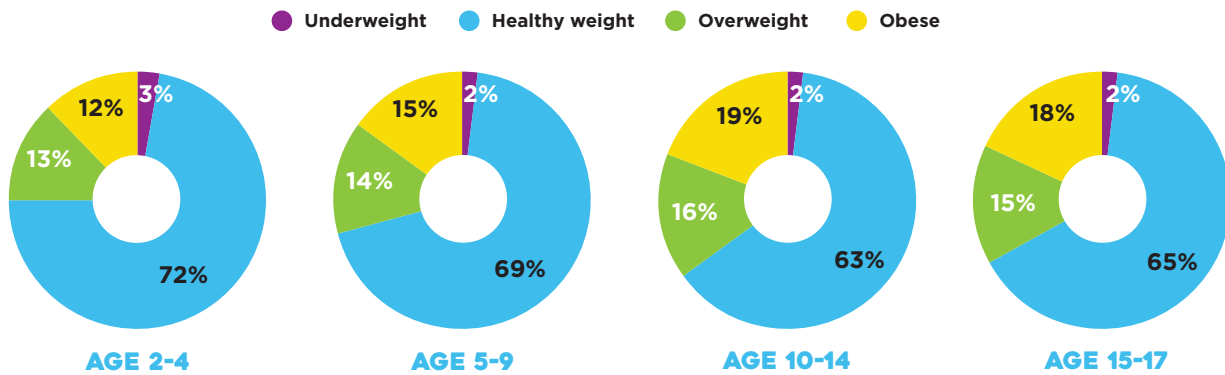
GENDER

Rhode Island boys have higher rates of obesity than girls among all races and ethnicities except for non-Hispanic Black girls who have slightly higher rates of obesity than non-Hispanic Black boys.[4]

Overweight **Obese**

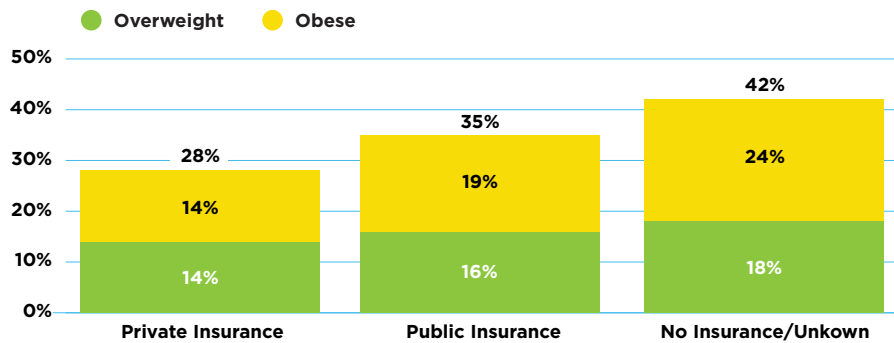|	Male	Female
Total	31%	31%
Obese	17%	15%
Overweight	14%	16%

AGE

Overweight and obesity start as early as age two. Twenty-five percent of Rhode Island children ages two to four are overweight or obese. 33% of children ages five to 17 are either overweight or obese.[5]

Underweight **Healthy weight** **Overweight** **Obese**

AGE 2-4: Underweight 3%, Obese 12%, Overweight 13%, Healthy weight 72%

AGE 5-9: Underweight 2%, Obese 15%, Overweight 14%, Healthy weight 69%

AGE 10-14: Underweight 2%, Obese 19%, Overweight 16%, Healthy weight 63%

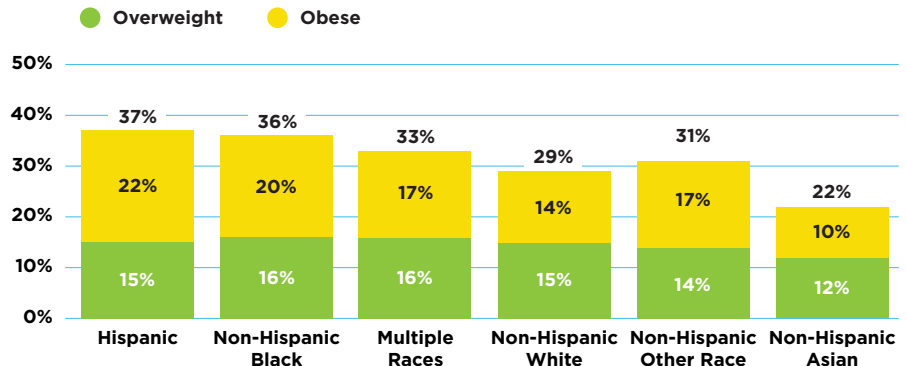AGE 15-17: Underweight 2%, Obese 18%, Overweight 15%, Healthy weight 65%

INSURANCE STATUS

Nineteen percent of Rhode Island children covered by public insurance are obese compared to 14% of children with private health insurance.[6]

Overweight **Obese**

	Private Insurance	Public Insurance	No Insurance/Unkown
Total	28%	35%	42%
Obese	14%	19%	24%
Overweight	14%	16%	18%

RACE AND ETHNICITY

There are notable racial and ethnic disparities: over a third of Hispanic (37%) and non-Hispanic Black (36%) children in Rhode Island are overweight or obese. Non-Hispanic Black girls and Hispanic boys have the highest rates of obesity at 26% and 24% respectively.

Overweight **Obese**

	Hispanic	Non-Hispanic Black	Multiple Races	Non-Hispanic White	Non-Hispanic Other Race	Non-Hispanic Asian
Total	37%	36%	33%	29%	31%	22%
Obese	22%	20%	17%	14%	17%	10%
Overweight	15%	16%	16%	15%	14%	12%

Source for all data: Hassenfeld Child Health Innovation Institute 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, 2020. Some percentages may not add to 100% due to rounding.

PREVALENCE OF OVERWEIGHT AND OBESITY IN RHODE ISLAND CHILDREN AGES 2 TO 17, 2019

Core Cities

OVERWEIGHT

15%

OBESE

21%

COMBINED

36%

Remainder of State

OVERWEIGHT

15%

OBESE

13%

COMBINED

28%

Rhode Island

OVERWEIGHT

15%

OBESE

16%

COMBINED

31%

Notes: The overweight, and obesity percentages for Jamestown, Little Compton, and New Shoreham are statistically unstable and should be interpreted with caution. Core cities are Central Falls, Pawtucket, Providence, and Woonsocket.

Source: Hassenfeld Child Health Innovation Institute 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, 2020.

Map labels

Woonsocket, Burrillville, North Smithfield, Cumberland, Glocester, Smithfield, Lincoln, Central Falls, Pawtucket, North Providence, Providence, Johnston, East Providence, Foster, Scituate, Cranston, Barrington, Warren, Warwick, Bristol, Coventry, West Warwick, West Greenwich, East Greenwich, Portsmouth, Tiverton, Exeter, North Kingstown, Jamestown, Middletown, Little Compton*, Hopkinton, Richmond, Newport, South Kingstown, Narragansett, Charlestown, Westerly, New Shoreham*

Legend

PERCENT OVERWEIGHT AND OBESE COMBINED

- 15%-20%
- 21%-25%
- 26%-30%
- 31%-35%
- 36%+
- ○ Core City

	OVERWEIGHT	OBESE		OVERWEIGHT	OBESE		OVERWEIGHT	OBESE
Barrington	14%	8%	Hopkinton	18%	10%	Portsmouth	8%	8%
Bristol	14%	15%	Jamestown	9%^	9%^	Providence	14%	19%
Burrillville	19%	14%	Johnston	16%	17%	Richmond	17%	10%
Central Falls	20%	30%	Lincoln	17%	15%	Scituate	15%	10%
Charlestown	12%	11%	Little Compton	15%^	10%^	Smithfield	15%	10%
Coventry	13%	12%	Middletown	9%	12%	South Kingstown	13%	9%
Cranston	14%	15%	Narragansett	17%	13%	Tiverton	12%	15%
Cumberland	16%	15%	New Shoreham	*	*	Warren	15%	15%
East Greenwich	12%	8%	Newport	12%	14%	Warwick	16%	14%
East Providence	17%	18%	North Kingstown	11%	9%	West Greenwich	11%	12%
Exeter	12%	8%	North Providence	20%	16%	West Warwick	16%	16%
Foster	16%	12%	North Smithfield	16%	14%	Westerly	14%	12%
Glocester	16%	10%	Pawtucket	17%	22%	Woonsocket	17%	24%

Source: Hassenfeld Child Health Innovation Institute 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, 2020.

Note: ^ The data are statistically unstable and rates or percentages should be interpreted with caution.

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

RECOMMENDATIONS

- The BMI data collection project should continue on an annual basis to collect, analyze, and distribute the data from KIDSNET, Current Care, and contributing health plans in place of a more permanent solution to track BMI data by state, city, town, race, ethnicity, age, gender, and insurance status.

- The General Assembly should consider legislative options that would provide an opt-out rather than an opt-in consent model for collecting children's health data to be used on a de-identified, population-based scale in CurrentCare.

- Health care providers and insurers should continue to regularly collect children's height, weight, and BMI data and provide guidance and referrals at annual well-child visits.

- The State should provide the authority and capacity for the Department of Health to work with providers, insurers, and electronic health record vendors on a solution to systematically report BMI data to KIDSNET and/or CurrentCare.

- The Rhode Island Department of Health should continue to ask questions about nutrition and physical activity in youth surveys, including the *Youth Risk Behavior Survey* and the Department of Education should reinstate these questions in *SurveyWorks!*

- The impact of the COVID-19 pandemic is expected to result in an increase in child overweight and obesity. State agencies, health care providers, hospitals, insurers, schools, and community agencies should monitor trends in clinical, claims, and self-reported data on overweight and obesity among children to identify opportunities for intervention and programs to support children's healthy weight.

REFERENCES

[1] Centers for Disease Control and Prevention. (2021). *Childhood overweight and obesity.* Retrieved June 15, 2021, from www.cdc.gov

[2] Centers for Disease Control and Prevention. (2021). *Childhood obesity causes and consequences.* Retrieved June 15, 2021, 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.

[4,5,6,7,8] Hassenfeld Child Health Innovation Institute 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, 2020.

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