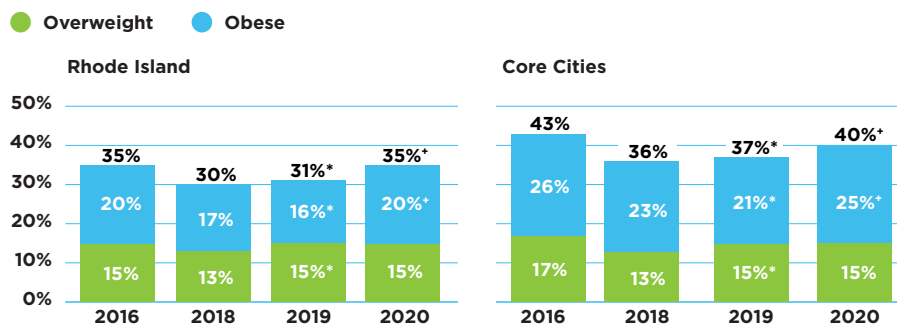


CHILDHOOD OVERWEIGHT AND OBESITY: Trends in Rhode Island

From 2016-2022 Rhode Island KIDS COUNT, the Rhode Island Department of Health’s Center for Health Data and Analysis, the Brown University School of Public Health, 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 dataset of childhood overweight and obesity in Rhode Island. This Policy Brief presents data from 2016-2020 and examines trends including the impact of the COVID-19 pandemic.



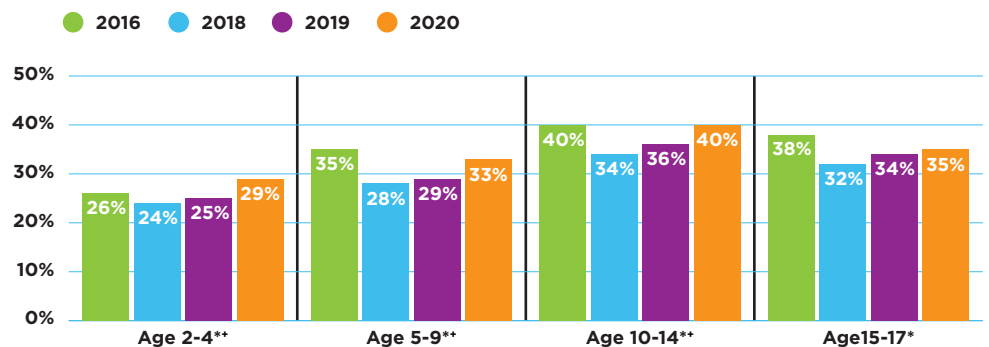
Children whose body mass index (BMI) is in the 95th percentile for gender and age are considered to be obese, and children with a BMI between the 85th and 95th percentiles are considered to be overweight or at risk for obesity.

Source: Centers for Disease Control and Prevention. (2021). *About child & teen BMI*. Retrieved August 16, 2022, from www.cdc.gov

*Statistically significant trend (2016-2019), p<.05
 *Statistically significant trend (2019-2020), p<.05

AGE

For all age groups except 15 to 17-year olds, there was a decrease in overweight and obesity rates from 2016-2019, followed by an increase from 2019-2020, after the onset of the COVID-19 pandemic. For the oldest age group, youth ages 15 to 17, there was a decrease in overweight and obesity from 2016-2019, but there was no increase from 2019-2020.¹

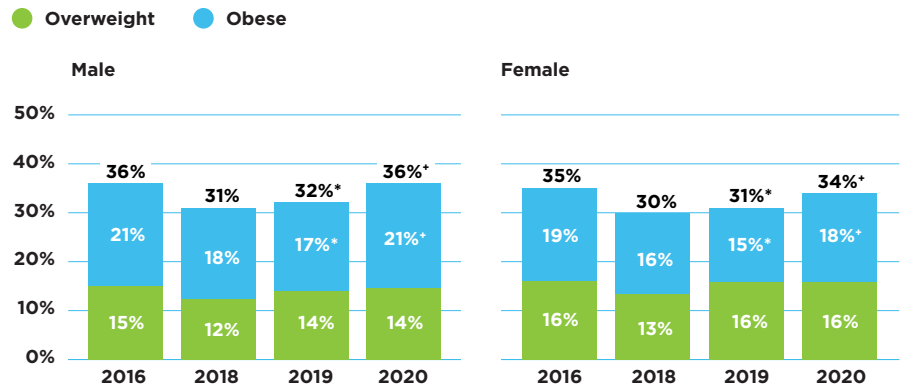


*Statistically significant trend (2016-2019), p<.05
 *Statistically significant trend (2019-2020), p<.05

GENDER

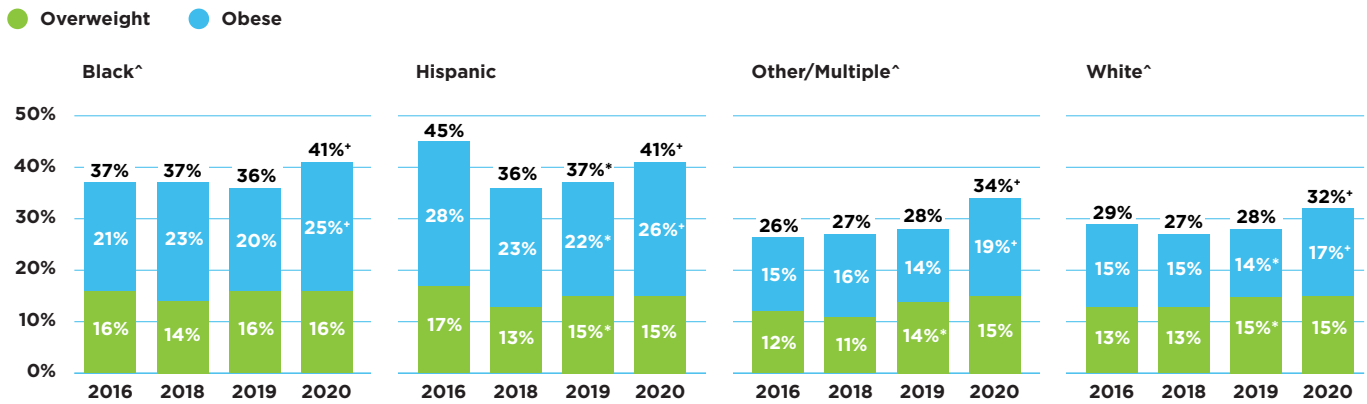
For both boys and girls, there was a decrease in obesity rates from 2016-2019, followed by an increase in obesity rates from 2019-2020. There was no significant change in the percent overweight for girls or boys.²

*Statistically significant trend (2016-2019), p<.05
 *Statistically significant trend (2019-2020), p<.05



RACE & ETHNICITY

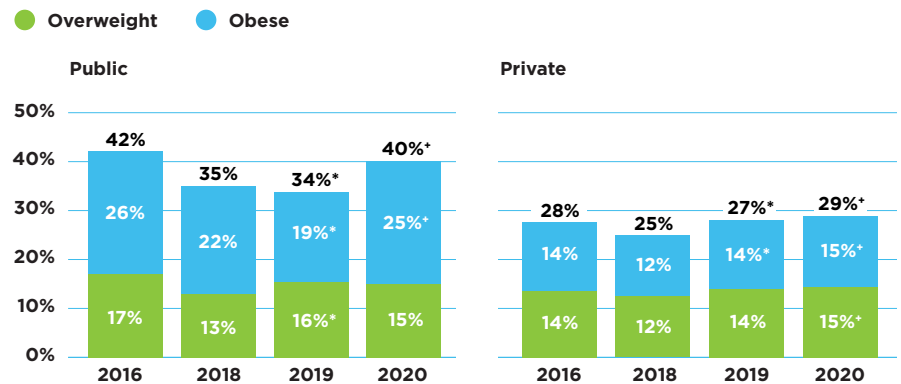
From 2016-2019, there was a decrease in the percentage of Hispanic children who were overweight or obese, but from 2019-2020 there was an increase from 37% to 41%. Since the onset of the COVID-19 pandemic, obesity rates for Black, other/multiple race, and white children all increased. Additionally, there are notable differences in overweight and obesity rates by race and ethnicity, with Black and Hispanic children continuing to have higher rates of overweight and obesity.³



*Statistically significant trend (2016-2019), p<.05
 *Statistically significant trend (2019-2020), p<.05
 ^ Race categories are non-Hispanic.

INSURANCE STATUS

Rates of overweight, obesity, and overweight and obesity combined decreased for children with public insurance prior to the pandemic (2016-2019). However, there was a large increase in the obesity rate for these children from 2019 to 2020. Rates of obesity for children with private insurance also increased from 2019 to 2020.⁴



*Statistically significant trend (2016-2019), p<.05
 *Statistically significant trend (2019-2020), p<.05

Data Sources: 2016 and 2018 data: Brown University School of Public Health analysis of BMI clinical and billing records of children ages 2 to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, and United Healthcare collected by the Department of Health. 2019 and 2020 data: Brown University School of Public Health analysis of BMI clinical and billing records of children ages 2 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. Some percentages may not total or add to 100% due to rounding.

PREVALENCE OF COMBINED OVERWEIGHT AND OBESITY IN RHODE ISLAND CHILDREN AGES 2-17, 2016-2020

CITY/TOWN	2016	2018	2019	2020	TRENDS FROM 2016-2019	CHANGE FROM 2019-2020
Barrington	20%	20%	22%	22%		
Bristol	33%	23%	29%	33%	▼	▲
Burrillville	32%	32%	33%	36%		
Central Falls	48%	51%	50%	52%		
Charlestown	36%	24%	23%	29%	▼	▲
Coventry	27%	25%	25%	28%		▲
Cranston	33%	28%	30%	35%	▼	▲
Cumberland	30%	31%	31%	35%		▲
East Greenwich	22%	18%	20%	21%		
East Providence	36%	34%	34%	38%		▲
Exeter	22%	20%	20%	23%		
Foster	28%	23%	28%	30%		
Glocester	25%	23%	25%	31%		▲
Hopkinton	29%	22%	28%	32%		
Jamestown	25%	16%	18%	21%		
Johnston	35%	31%	33%	39%		▲
Lincoln	32%	30%	32%	35%		
Little Compton	57%	19%^	24%	24%	▼	
Middletown	37%	24%	21%	26%	▼	▲
Narragansett	35%	28%	29%	27%		
New Shoreham	40%	20%^	26%^	39%		
Newport	36%	27%	25%	34%	▼	▲
North Kingstown	21%	20%	20%	24%		▲
North Providence	35%	36%	36%	43%		▲
North Smithfield	29%	30%	31%	32%		
Pawtucket	42%	42%	39%	43%	▼	▲
Portsmouth	33%	18%	16%	19%	▼	
Providence	43%	32%	33%	36%	▼	▲
Richmond	30%	22%	26%	26%		
Scituate	25%	22%	24%	29%		▲
Smithfield	24%	24%	25%	29%		▲
South Kingstown	34%	27%	23%	27%	▼	▲
Tiverton	34%	24%	26%	33%	▼	▲
Warren	35%	32%	30%	37%		▲
Warwick	30%	29%	30%	34%		▲
West Greenwich	28%	24%	22%	26%		
West Warwick	34%	30%	32%	36%		▲
Westerly	28%	29%	27%	32%		▲
Woonsocket	39%	41%	41%	48%		▲

Sources of Data for Table/Methodology: 2016 and 2018 data: Brown University School of Public Health analysis of BMI clinical and billing records of children ages 2 to 17 in Rhode Island from KIDSNET, Current Care, Blue Cross & Blue Shield of Rhode Island, Neighborhood Health Plan of Rhode Island, and United Healthcare collected by the Department of Health.

2019 and 2020 data: Brown University School of Public Health analysis of BMI clinical and billing records of children ages 2 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.

^The data are statistically unstable and the rates or percentages should be interpreted with caution

▼ Statistically significant trend, p<.05

IMPACT OF COVID-19 PANDEMIC ON CHILDHOOD OBESITY

As expected, national data shows that there has been an increase in childhood overweight and obesity since the onset of the COVID-19 pandemic. Rhode Island children also saw an increase in overweight and obesity, halting the progress Rhode Island has made on decreasing childhood overweight and obesity pre-pandemic.

- Some reasons the COVID-19 pandemic may have impacted childhood overweight and obesity are school closures, remote and hybrid learning, and limited access to school and recreational sports.
- The pandemic also highlighted the importance of addressing the systemic factors that contribute to childhood obesity, like access to healthy foods, safe environments, and chronic stress. Reducing overweight and obesity will require a comprehensive, multisystem approach.

Source: Centers for Disease Control and Prevention (2022). *Children, Obesity, and COVID-19*. from www.cdc.gov

RECOMMENDATIONS FOR REDUCING CHILDHOOD OVERWEIGHT AND OBESITY

- The BMI data collection project should continue on an annual basis to collect, analyze, and distribute the data to track BMI data by state, city/town, race, ethnicity, age, gender, and insurance status. 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.
- Improve access to nutritious and affordable foods, especially for women and children participating in WIC.
- Ensure access to healthy meals and foods through schools.
- Increase options for physical activity in school and in the community and improve the access to safe and inclusive recreational areas for children and families.
- Promote culturally appropriate and respectful approaches to address and reduce racial and ethnic disparities that exist.

REFERENCES

^{1,2,3,4} Brown University School of Public Health analysis of 2016, 2018, 2019, and 2020 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.

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