

The New Jersey Childhood Obesity Study

Trenton

School BMI Data

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About the Study

The New Jersey Childhood Obesity Study, funded by the Robert Wood Johnson Foundation, aims to provide vital information for planning, implementing and evaluating interventions aimed at preventing childhood obesity in five New Jersey municipalities: Camden, Newark, New Brunswick, Trenton, and Vineland. These five communities are being supported by RWJF's New Jersey Partnership for Healthy Kids program to plan and implement policy and environmental change strategies to prevent childhood obesity.

Effective interventions for addressing childhood obesity require community-specific information on who is most at risk and on contributing factors that can be addressed through tailored interventions that meet the needs of the community.

Using a comprehensive research study, the Center for State Health Policy at Rutgers University is working collaboratively with the State Program Office for New Jersey Partnership for Healthy Kids and the five communities to address these information needs. The main components of the study include:

- A household survey of 1700 families with 3 -18 year old children
- De-identified heights and weights data from public school districts
- Assessment of the food and physical activity environments using objective data

Data books and maps based on the results of the study are being shared with the community coalitions in the five communities to help them plan their interventions.

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In This Chartbook...

The tables and graphs in this chartbook were created using data collected by Trenton Public Schools for the school year 2008-2009. Rutgers Center for State Health Policy obtained de-identified data from the schools and computed a BMI score and a BMI percentile (BMIPCT) for each child. Weight status is defined using the following BMIPCT categories.

<u>BMIPCT</u>	<u>Weight Status</u>
BMIPCT < 85	Not Overweight or Obese
BMIPCT ≥ 85	Overweight and Obese
BMIPCT ≥ 95	Obese
BMIPCT ≥ 97	Very Obese

BMIPCT categories are presented at the city level and in sub-group analysis by age, gender, and race. Aggregate data are also presented at the school level, with notation, where representativeness of the data was a concern.

Tables and graphs on pages 5, 7, 9, and 11 show comparisons with national estimates (National Health and Nutrition Examination Survey, 2007-2008). The national data are representative of all 2-19 year old children in the US.

Each graph and table is accompanied by brief summary statements. Readers are encouraged to review the actual data presented in tables and graphs as there is much more detail.

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

Prevalence of Childhood Overweight and Obesity In Five New Jersey Cities

		Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
City (Ages 3-19)	Camden	39.8%	23.3%	17.3%
	Newark	44.2%	25.2%	18.3%
	New Brunswick	46.4%	26.7%	19.9%
	Trenton	47.3%	28.0%	21.0%
	Vineland	43.6%	25.3%	18.5%
NHANES (Ages 2-19)	All	31.7%	16.9%	11.9%
	Non-Hisp Black	35.9%	20.0%	14.9%
	Mexican Am	38.9%	20.8%	14.9%
	Hispanic	38.2%	20.9%	15.2%
	Non-Hisp White	29.3%	15.3%	10.5%

Sources:
CSHP 2010, BMI data from public schools in 5 NJ cities, 2008-2009
NHANES 2007-2008 data

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- Overall, rates of childhood overweight and obesity are higher in the five NJ cities compared to the national data.
- Among the five cities, children in Trenton have the highest rates of overweight and obesity.

Trenton

Prevalence of Childhood Overweight & Obesity

By Age Group

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
3-5 yrs	(n=455)	51.4%	48.6%	26.2%	19.3%
6-11 yrs	(n=4,682)	52.3%	47.7%	28.5%	21.7%
12-19 yrs	(n=2,956)	53.6%	46.4%	27.4%	20.1%
Total	(n=8,093)	52.7%	47.3%	28.0%	21.0%

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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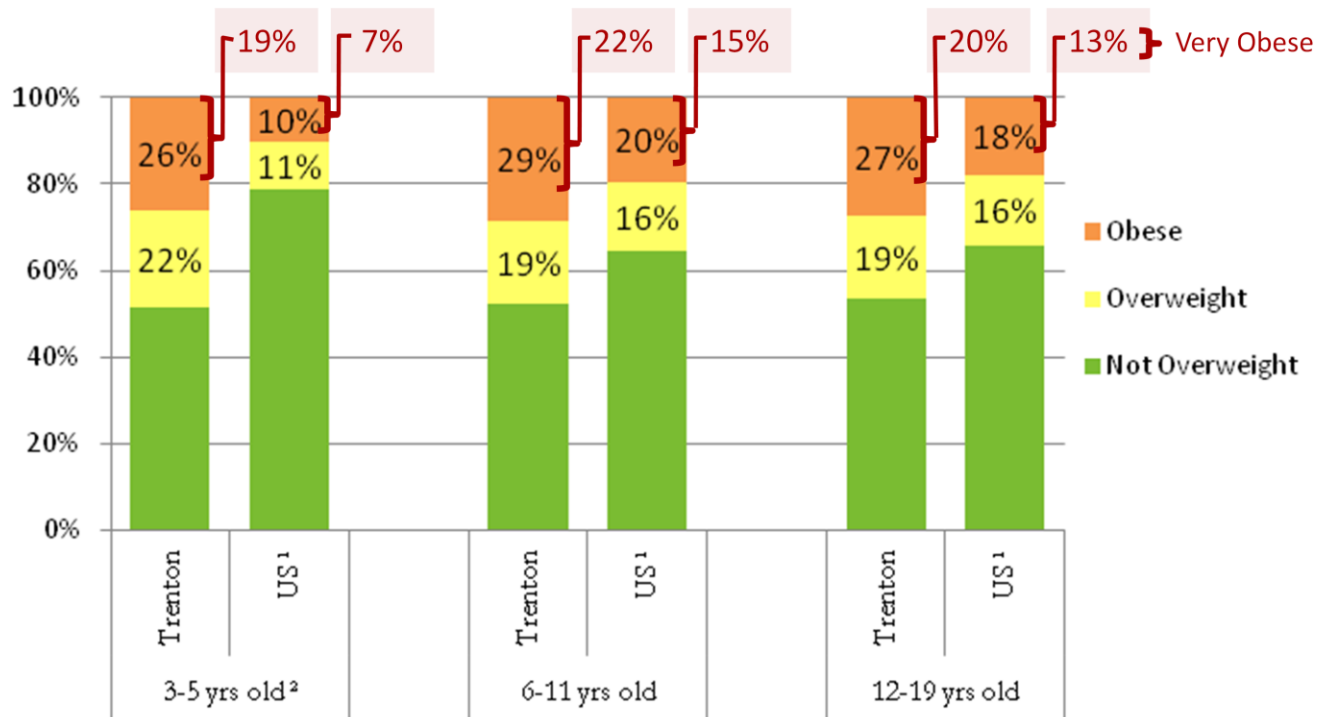
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- Approximately 1 in 2 children in every age category is overweight or obese.
- More than 1 in 4 children in each age category are obese, that is, the BMI falls at or above the 95th percentile.

Trenton

Prevalence of Childhood Overweight & Obesity

By Age Group



¹ US estimates are based on NHANES 2007-2008 data

² US estimates are for ages 2-5

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- Compared to the national NHANES data, a higher percentage of children in Trenton across all ages are overweight, obese, or very obese.
- The largest differences between Trenton and national estimates are seen among the youngest children. It is important to remember that the national data for this age group are based on 2-5 year-olds, and Camden data are based on 3-5 year-olds.

Trenton

Prevalence of Childhood Overweight & Obesity

By Gender

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
Male	(n=3,824)	52.0%	48.0%	28.7%	21.9%
Female	(n=4,269)	53.3%	46.7%	27.3%	20.2%
Total	(n=8,093)	52.7%	47.3%	28.0%	21.0%

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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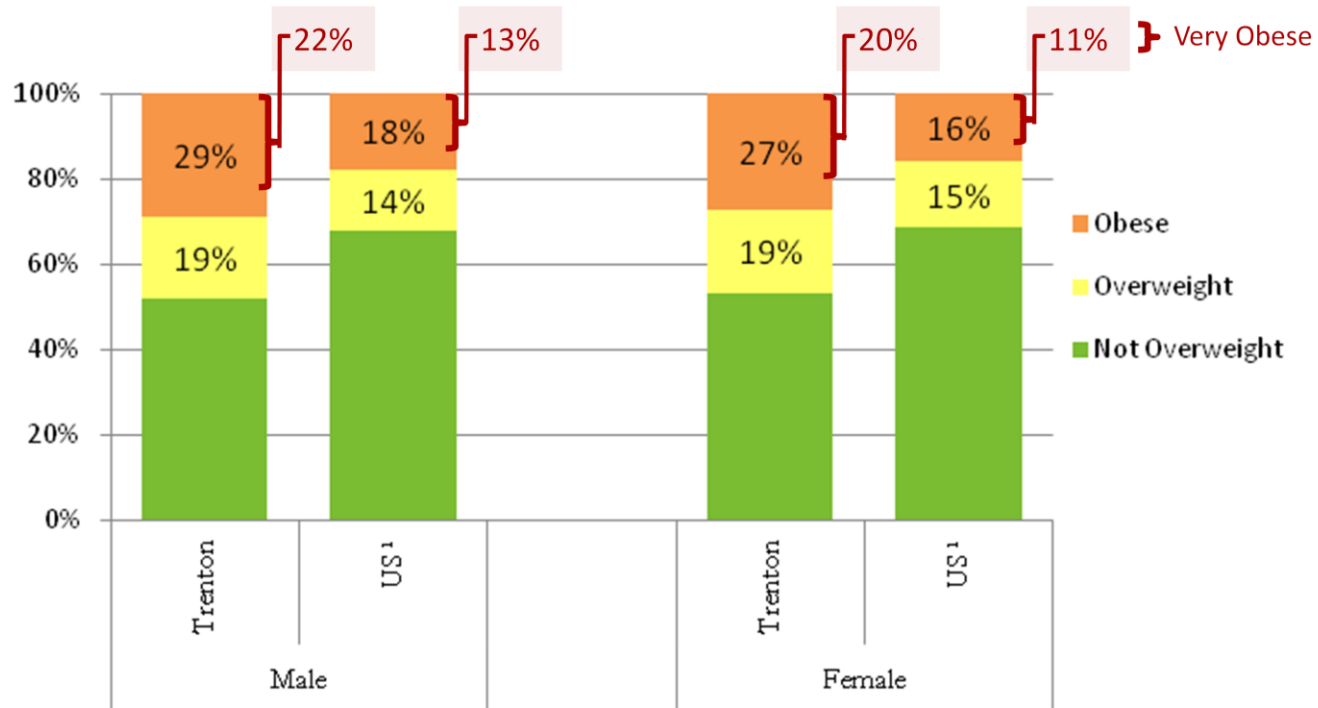
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- About 1 in 2 Trenton boys and girls are overweight or obese.
- More than 1 in 5 boys and girls are very obese, that is, their BMI falls at or above the 97th percentile.

Trenton

Prevalence of Childhood Overweight & Obesity By Gender



¹ US estimates are based on NHANES 2007-2008 data

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- Almost half of the boys in Trenton are overweight or obese compared to one-third of the boys nationally.
- Almost twice as many girls in Trenton are very obese as the national average for girls.

Trenton

Prevalence of Childhood Overweight & Obesity by Race/Ethnicity

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
Non-Hispanic Black	(n=4,600)	54.8%	45.2%	26.1%	19.8%
Hispanic	(n=3,178)	48.6%	51.4%	31.2%	23.1%
Non-Hispanic White	(n=204)	63.2%	36.8%	24.0%	19.1%
Other	(n=107)	65.4%	34.6%	19.6%	15.0%
Total *	(n=8,093)	52.7%	47.3%	28.0%	21.0%

* Note: Total includes individuals whose race/ethnicity information is unknown

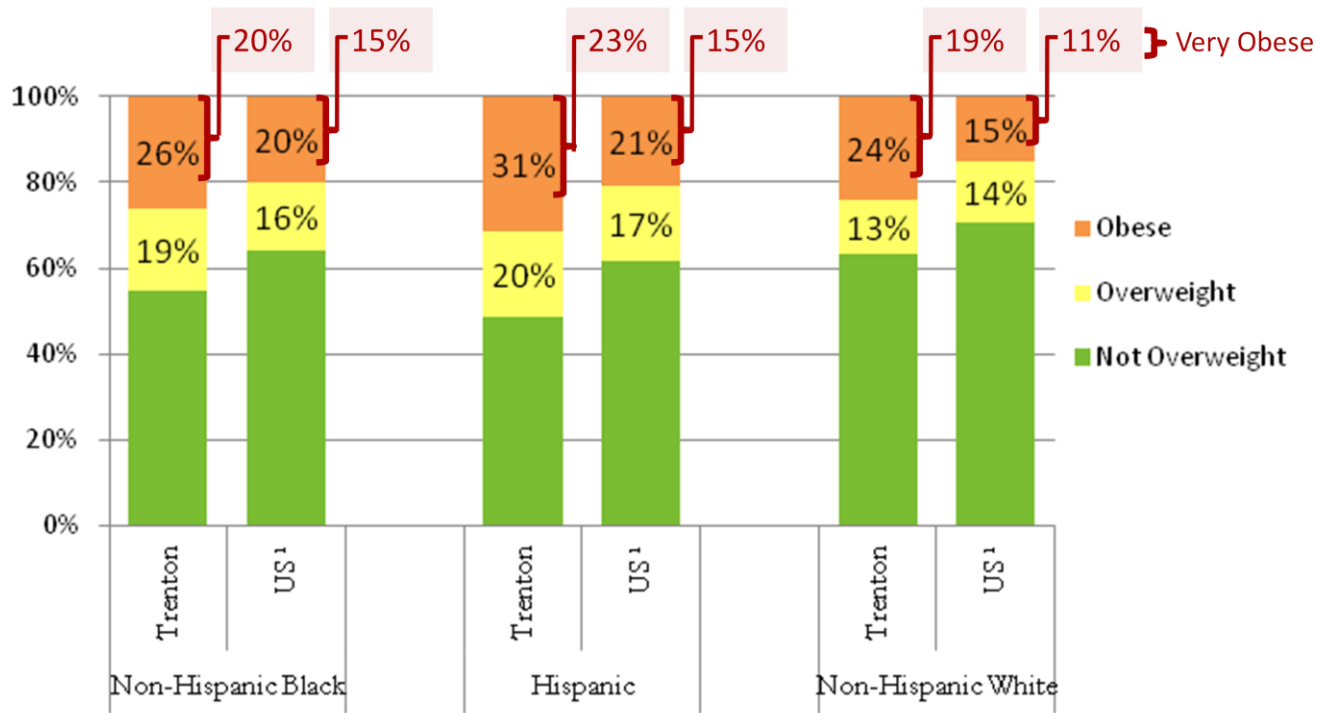
Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- More than half of the Hispanic children in Trenton are overweight or obese -- the highest of all subgroups in the study.
- Nearly a third of the Hispanic children and a quarter of non-Hispanic blacks and non-Hispanic white children are obese.

Trenton

Prevalence of Childhood Overweight & Obesity by Race/Ethnicity



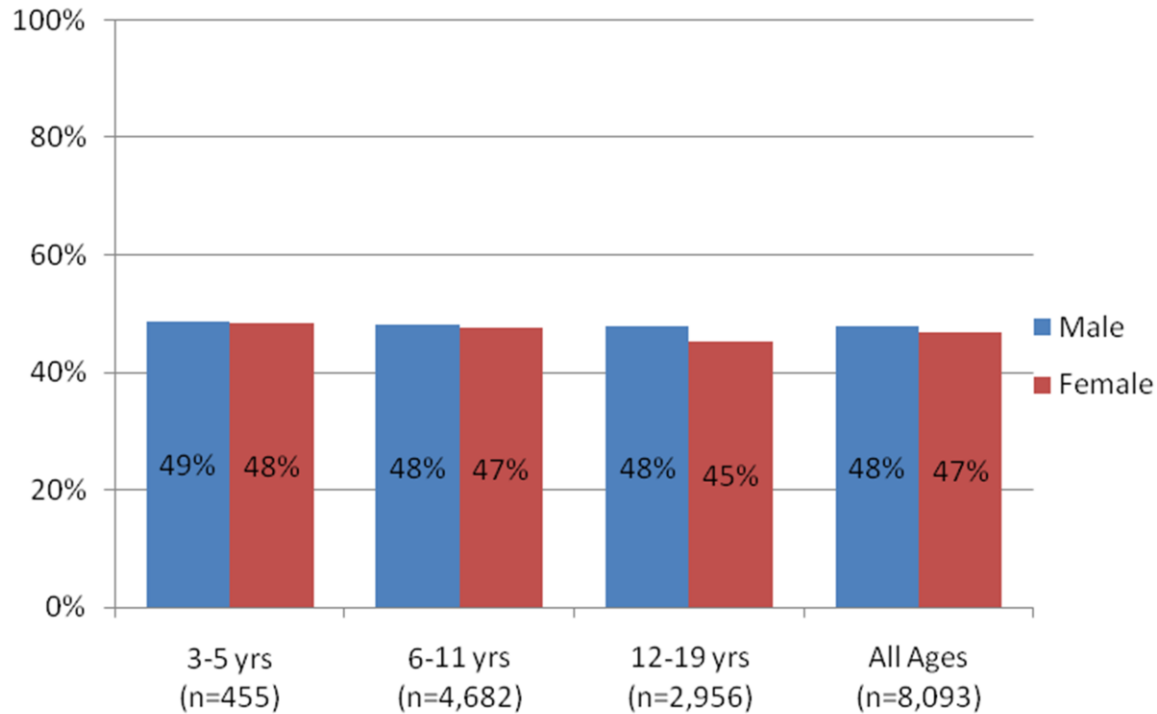
¹ US estimates are based on NHANES 2007-2008 data

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- In Trenton, 45% of the non-Hispanic black children are overweight or obese compared to 36% nationally.
- Over half (51%) of the Hispanic children in Trenton are overweight or obese compared to 38% nationally.
- 37% of the non-Hispanic white children in Trenton are overweight or obese compared to 29% nationally.

Trenton, All Racial/Ethnic Groups Prevalence of Childhood Overweight & Obesity By Age & Gender

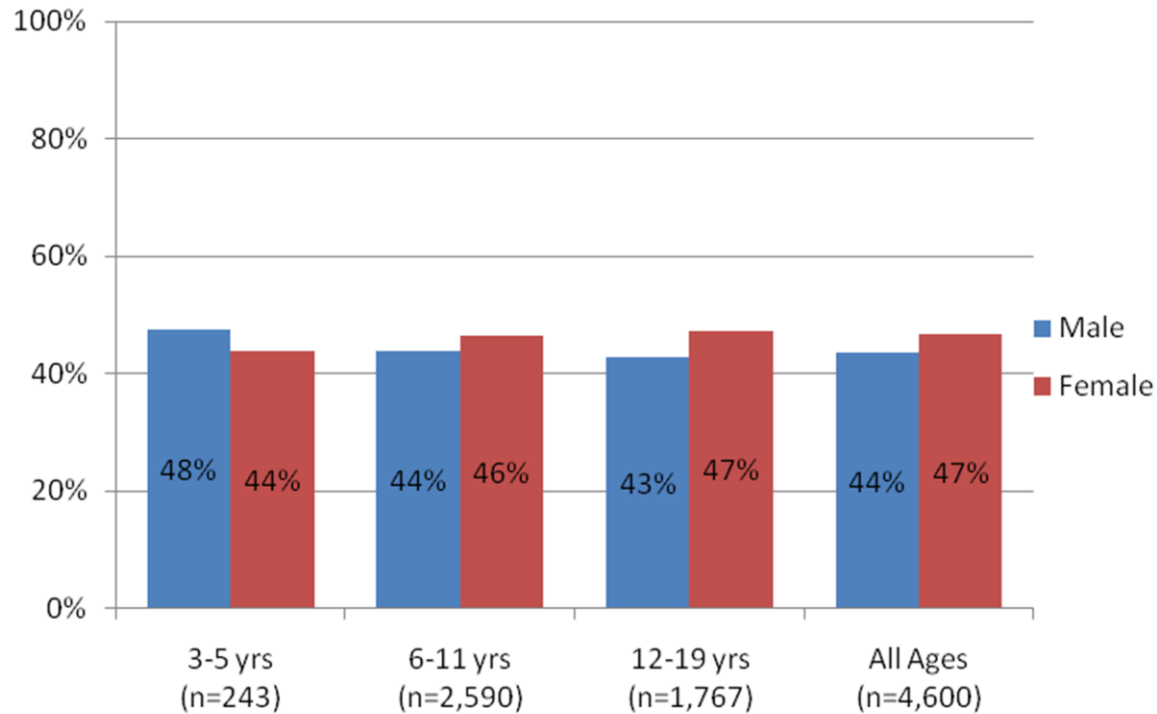


Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- In Trenton, nearly half of children in all age and gender categories are overweight or obese.

Trenton, Non-Hispanic Black Prevalence of Childhood Overweight & Obesity By Age & Gender



Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

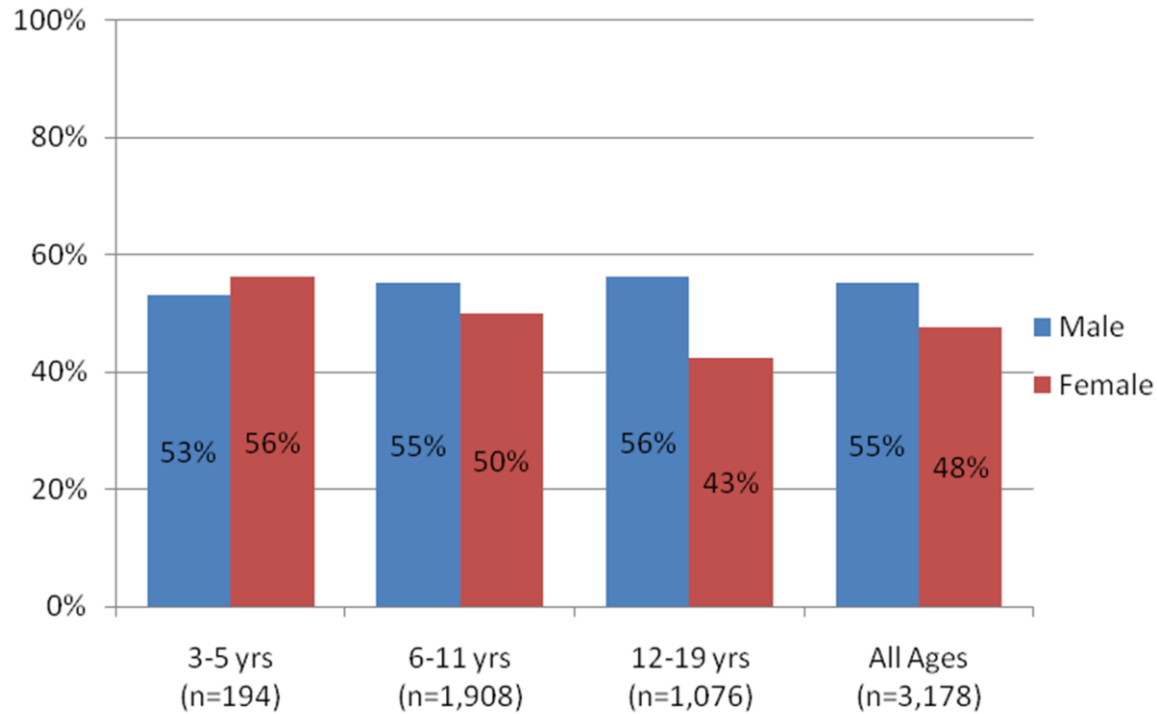
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- Among non-Hispanic black children, girls 6-19 years of age have higher rates of overweight and obesity compared to boys, and the pattern is reversed among younger (3-5 year-old) children.

Trenton, Hispanic

Prevalence of Childhood Overweight & Obesity

By Age & Gender

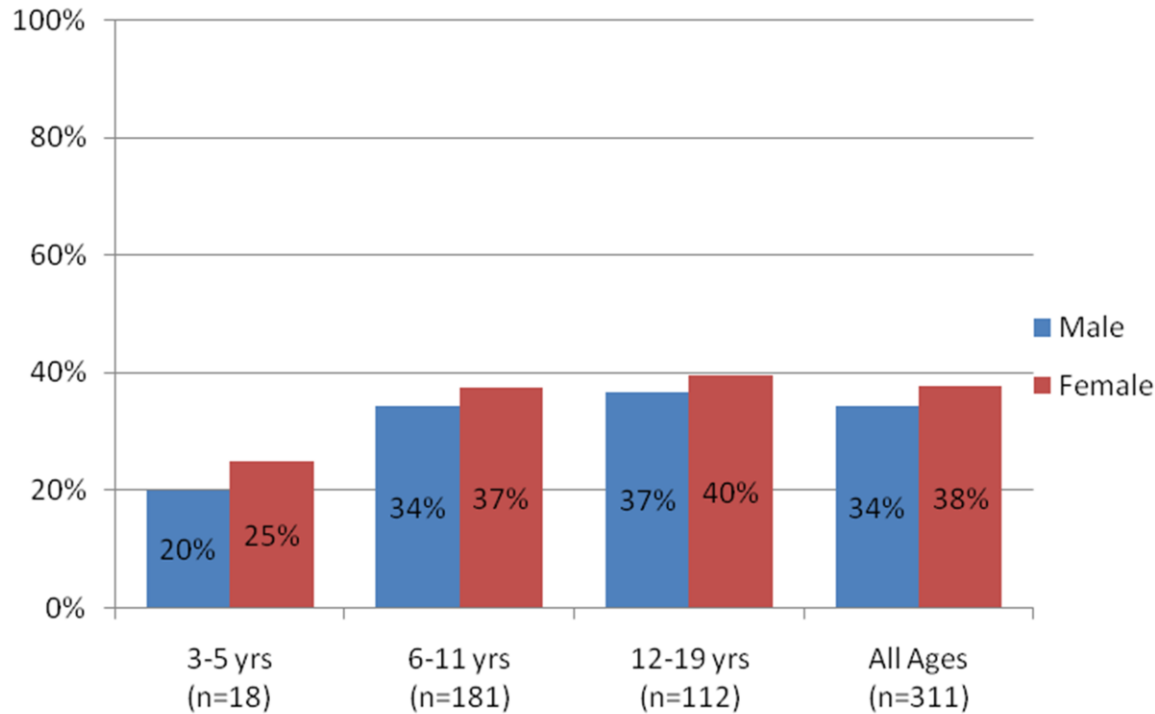


Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- Among Hispanic children, boys have higher rates of overweight and obesity than girls except in the youngest (3-5 years) age category.

Trenton, “Other” and Non-Hispanic White Prevalence of Childhood Overweight & Obesity By Age & Gender



Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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- Given the small numbers, non-Hispanic white and “other” racial/ethnic groups are combined in the analysis, with the majority of children in the “other” race and ethnicity category.
- In this combined racial/ethnic group, more girls than boys are overweight or obese.
- Please note that the estimates for 3-5 year olds in this combined racial/ethnic group may not be representative due to the small size.

Trenton City Public Schools

School	% Students Overweight/Obese
CADWALADER ^{a, c}	40.0%
MOTT	41.7%
MONUMENT	42.5%
TRENTON ^{a, c, d *}	42.9%
CENTRAL HIGH	42.9%
PARKER	44.4%
WILSON	46.4%
GRANT	46.6%
HEDGEPEETH-WILLIAMS SCH	47.3%
P.J. HILL ^{b, d}	47.4%
LUIS MUNOZ ^{a, c}	47.5%
RIVERA ELEM	47.5%
GRACE A DUNN ^a MIDDLE SCH	47.8%

School	% Students Overweight/Obese
HARRISON	47.8%
COLUMBUS	48%
GREGORY ^{a, c}	49%
FRANKLIN	49.2%
WASHINGTON	50.3%
STOKES	50.9%
JOYCE KILMER ^e	51.1%
ROBBINS	54.6%
JEFFERSON	61.9%

^a Only 50-80% of the students were measured
^b Less than 50% of the students were measured
^c Female students over-represented
^d Data not representative by grade
^e Pre-K data not available or under-represented
* Combined data for all High Schools, see next page for individual High School data

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Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

- Estimates are provided at the school level for Trenton schools.
- It is important to note that for some schools insufficient numbers of students were measured so that the percentages above may not be representative (see superscript flags). Of particular concern are schools where less than 50% of the students were measured (flag b).

Trenton City Public High Schools

School	% Students Overweight & Obese
TRENTON HIGH MAIN & NORTH ^{a, f}	42.2%
TRENTON HS @ WEST STATE ST ^{a, f}	44.9%

^a Only 50-80% of the students were measured

^f Inadequate information available to assess representativeness of data by gender, race, and grade level.

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

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