

# The New Jersey Childhood Obesity Study

---

## Vineland

### School BMI Data

Punam Ohri-Vachaspati, PhD  
Kristen Lloyd, MPH  
Jolene Chou, MPH  
Nirvana Petlick, BA  
Susan Brownlee, PhD  
Michael Yedidia, PhD

**For more information contact**  
Email: [pohri@ifh.rutgers.edu](mailto:pohri@ifh.rutgers.edu)



*Funding provided by the Robert Wood Johnson Foundation*

# Table of Contents

About the Study.....	3
In this Chartbook... ..	4
Overweight & Obesity in Five New Jersey Cities .....	5
Overweight & Obesity by Age Group .....	6
Overweight & Obesity by Gender.....	8
Overweight & Obesity by Race/Ethnicity .....	10
Overweight & Obesity by Age & Gender .....	12
Overweight & Obesity by School.....	16

**RUTGERS**

Center for State Health Policy

*Funding provided by the Robert Wood Johnson Foundation*

# 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.

**RUTGERS**

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

## In This Chartbook...

The tables and graphs in this chartbook were created using data collected by Vineland 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, Vineland public schools 2008-2009 BMI data

**RUTGERS**  
Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

## Prevalence of Childhood Overweight and Obesity In Five New Jersey Cities

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

*Sources:*

*CSHP 2010, BMI data from public schools in 5 NJ cities, 2008-2009*

*NHANES 2007-2008 data*

**RUTGERS**

Center for State Health Policy

*Funding provided by the Robert Wood Johnson Foundation*

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

# Vineland

## Prevalence of Childhood Overweight & Obesity

### By Age Group

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
<b>3-5 yrs</b>	(n=945)	<b>59.9%</b>	<b>40.1%</b>	<b>21.6%</b>	<b>16.4%</b>
<b>6-11 yrs</b>	(n=3,715)	<b>54.6%</b>	<b>45.4%</b>	<b>26.5%</b>	<b>19.4%</b>
<b>12-19 yrs</b>	(n=3,460)	<b>57.3%</b>	<b>42.7%</b>	<b>25.1%</b>	<b>18.2%</b>
<b>Total</b>	(n=8,120)	<b>56.4%</b>	<b>43.6%</b>	<b>25.3%</b>	<b>18.5%</b>

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

**RUTGERS**

Center for State Health Policy

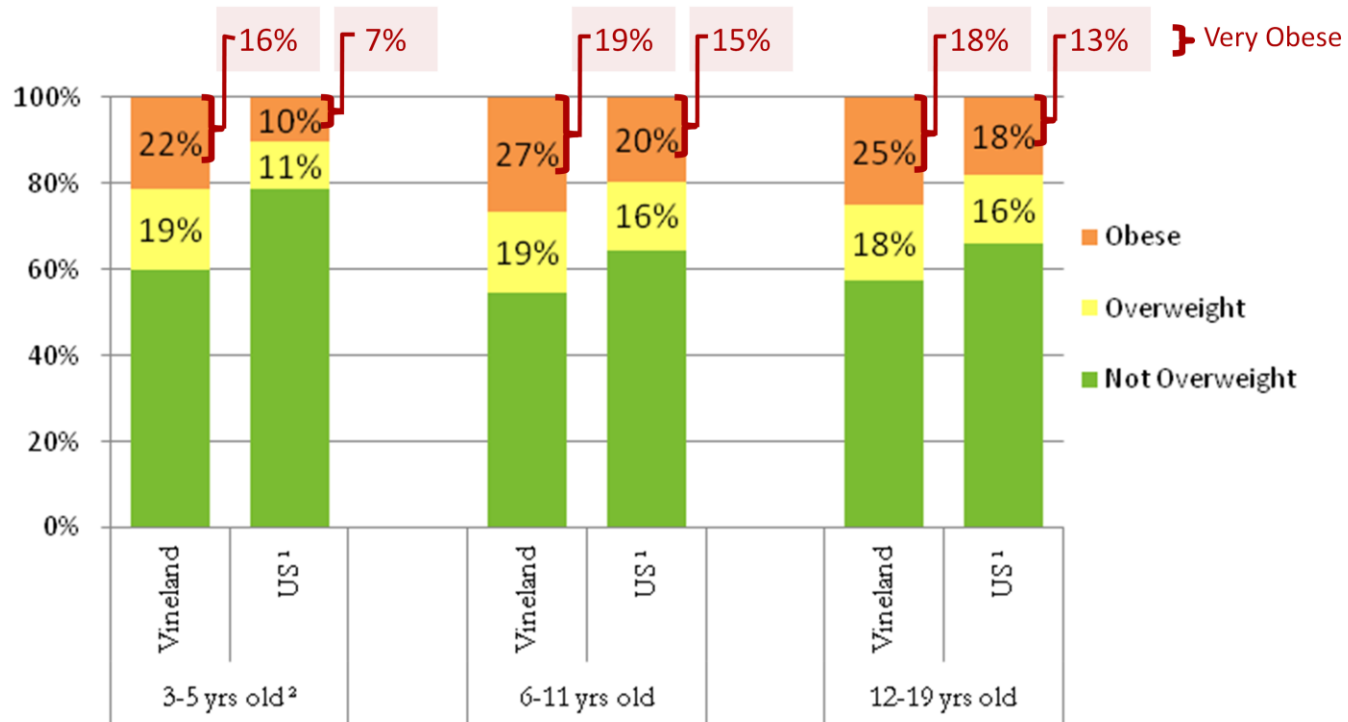
Funding provided by the Robert Wood Johnson Foundation

- In Vineland, over a quarter of the children age 6-19 years are obese, as are one-fifth of the children age 3-5 years.
- Nearly one-fifth of the children age 6-19 are very obese, that is, the BMI falls at or above the 97th percentile.

# Vineland

## Prevalence of Childhood Overweight & Obesity

### By Age Group



<sup>1</sup> US estimates are based on NHANES 2007-2008 data

<sup>2</sup> US estimates are for ages 2-5

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

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- Compared to the national NHANES data, a higher percentage of Vineland children in all age categories are overweight, obese, or very obese.
- The largest differences between Vineland 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.

# Vineland

## Prevalence of Childhood Overweight & Obesity

### By Gender

		Not Overweight (BMIPCT $\geq$ 85)	Overweight & Obese (BMIPCT $\geq$ 85)	Obese (BMIPCT $\geq$ 95)	Very Obese (BMIPCT $\geq$ 97)
<b>Male</b>	(n=4,173)	<b>55.7%</b>	<b>44.3%</b>	<b>26.9%</b>	<b>20.0%</b>
<b>Female</b>	(n=3,947)	<b>57.1%</b>	<b>42.9%</b>	<b>23.7%</b>	<b>17.0%</b>
<b>Total</b>	(n=8,120)	<b>56.4%</b>	<b>43.6%</b>	<b>25.3%</b>	<b>18.5%</b>

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

**RUTGERS**

Center for State Health Policy

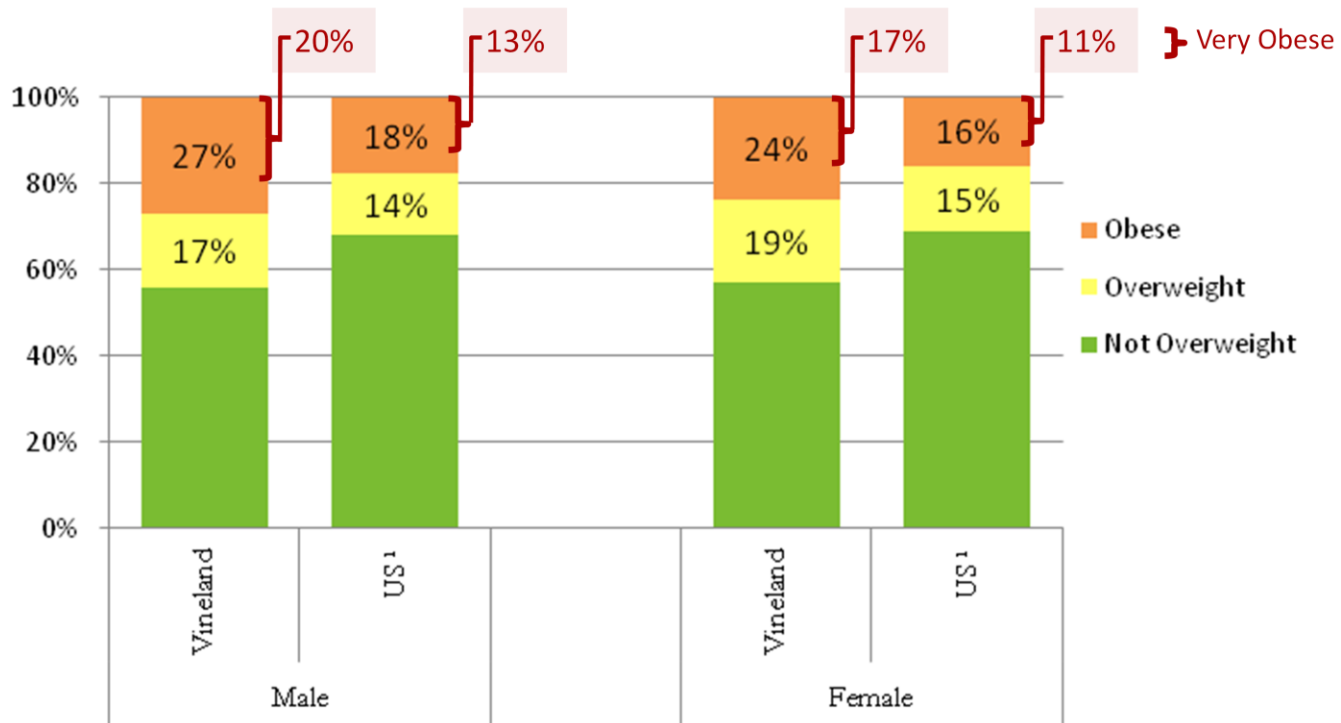
Funding provided by the Robert Wood Johnson Foundation

- Overall, slightly more boys (27%) than girls (24%) in Vineland are obese, that is, BMI falls at or above the 95th percentile.



# Vineland

## Prevalence of Childhood Overweight & Obesity By Gender



<sup>1</sup> US estimates are based on NHANES 2007-2008 data

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

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- Both boys and girls in Vineland exhibit higher rates of overweight and obesity compared to the US averages.
- The differences between Vineland and US estimates are most pronounced in the obese and very obese categories.

# Vineland

## Prevalence of Childhood Overweight & Obesity by Race/Ethnicity

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
<b>Non-Hispanic Black</b>	(n=1,619)	<b>55.2%</b>	<b>44.8%</b>	<b>27.3%</b>	<b>20.9%</b>
<b>Hispanic</b>	(n=3,952)	<b>53.6%</b>	<b>46.4%</b>	<b>26.4%</b>	<b>19.6%</b>
<b>Non-Hispanic White</b>	(n=2,259)	<b>61.1%</b>	<b>38.9%</b>	<b>22.6%</b>	<b>15.7%</b>
<b>Other</b>	(n=290)	<b>63.4%</b>	<b>36.6%</b>	<b>21.0%</b>	<b>12.8%</b>
<b>Total</b>	(n=8,120)	<b>56.4%</b>	<b>43.6%</b>	<b>25.3%</b>	<b>18.5%</b>

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

**RUTGERS**

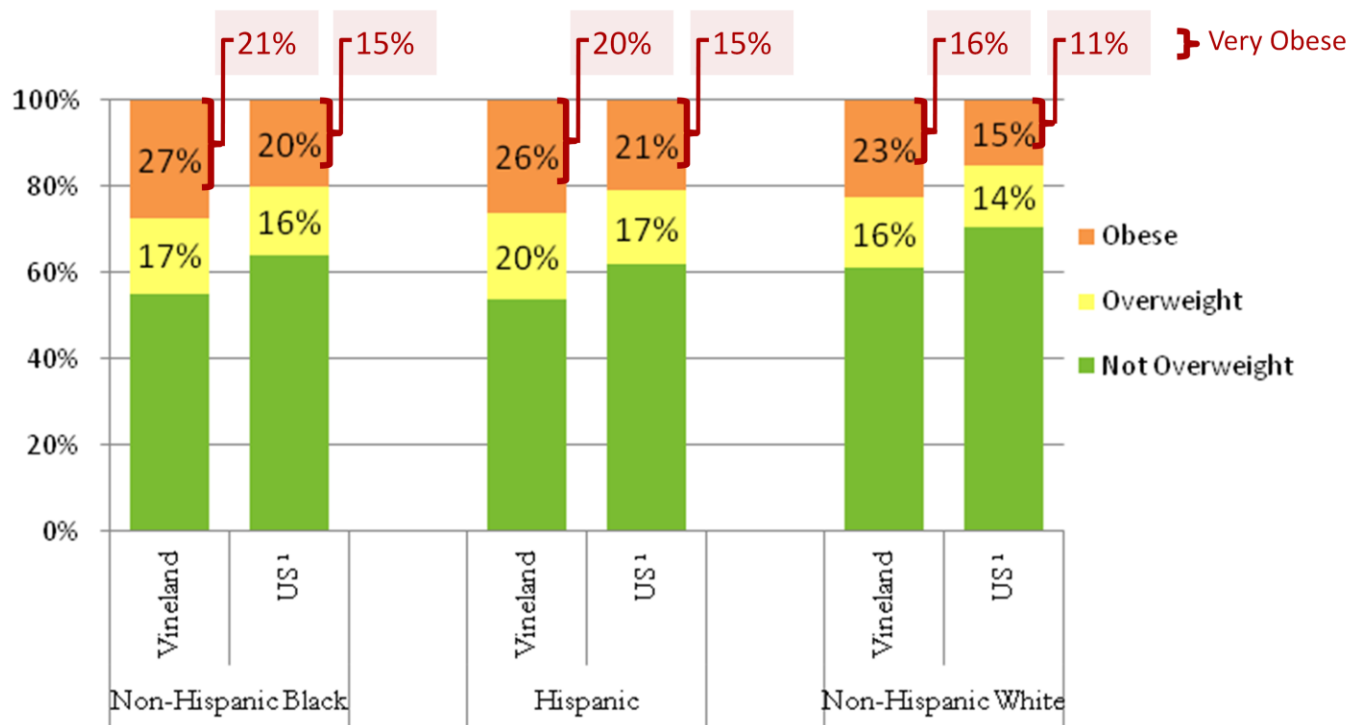
Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

- Rates of overweight and obesity are highest among Hispanic and non-Hispanic black children.
- More than 1 in 4 Hispanic and non-Hispanic black children are obese, and about 1 in 5 are very obese.

# Vineland

## Prevalence of Childhood Overweight & Obesity by Race/Ethnicity



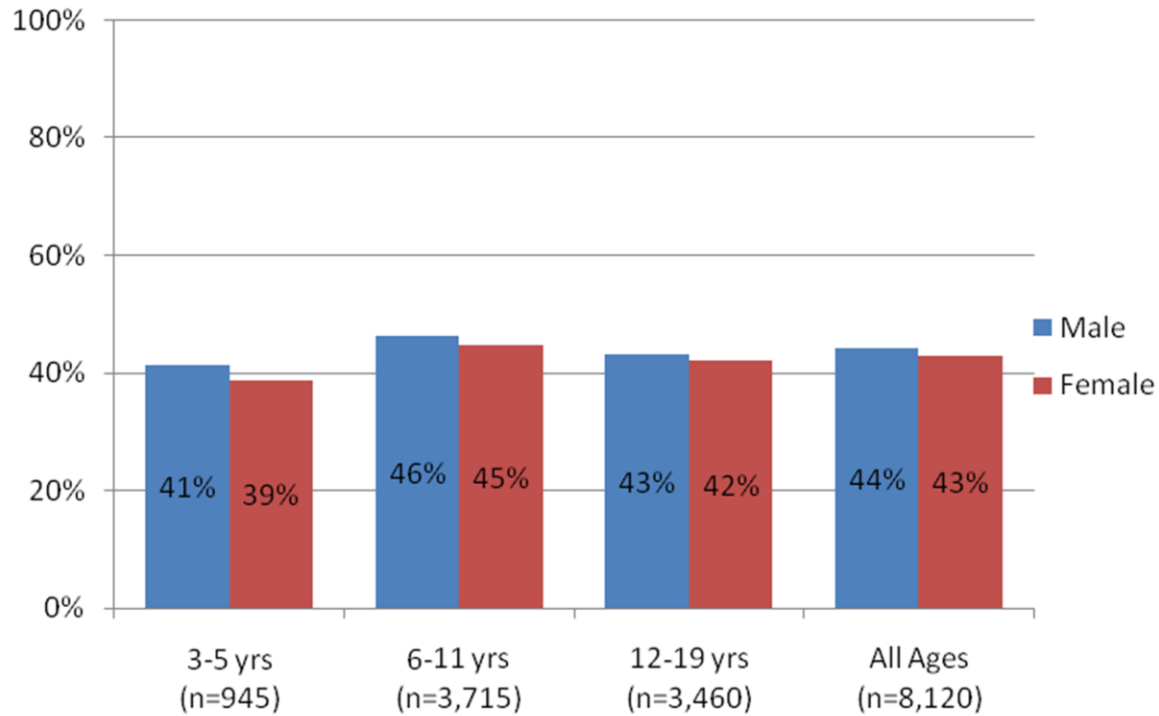
<sup>1</sup> US estimates are based on NHANES 2007-2008 data

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

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- Children in all racial and ethnic groups in Vineland have higher rates of overweight and obesity compared to children of the same groups nationally.

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

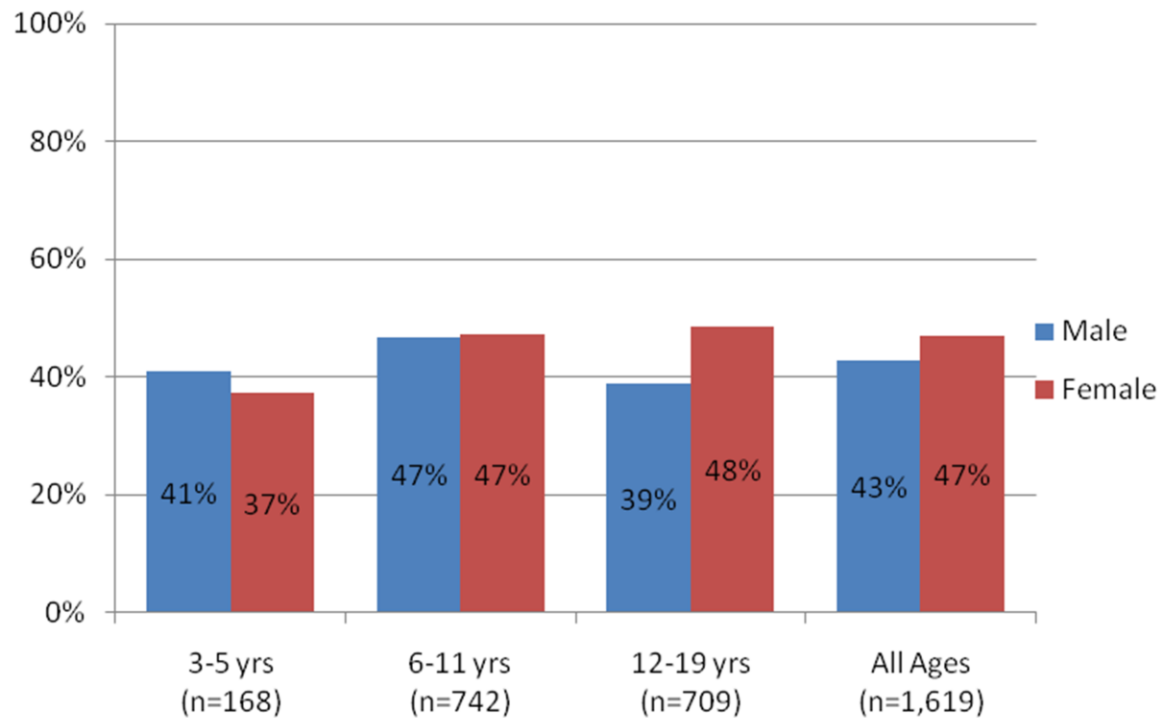


Source: CSHP 2010, Vineland public schools 2008-2009 BMI data

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- In Vineland, boys and girls appear to have comparable rates of overweight and obesity.

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



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

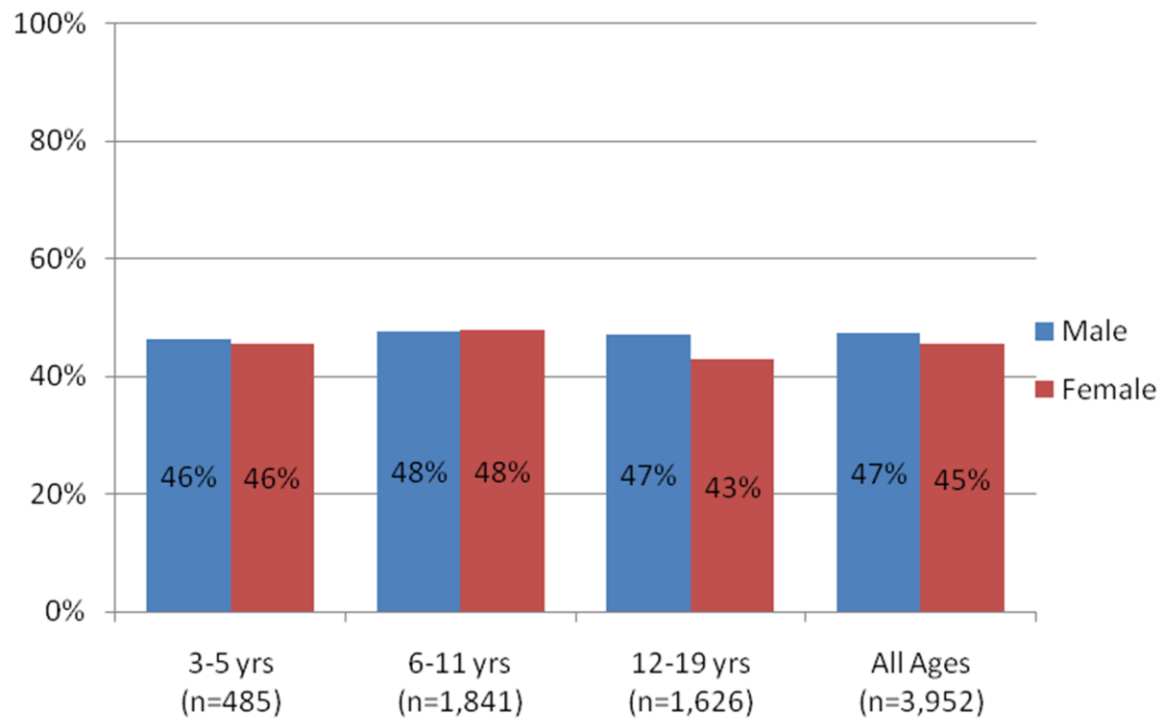
**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- Among non-Hispanic blacks, boys appear more likely than girls to be overweight or obese in the youngest (3-5 year-old) age group, while girls are more likely in the older (12-19 year-old) age group.

# Vineland, Hispanic

## Prevalence of Childhood Overweight & Obesity

### By Age & Gender

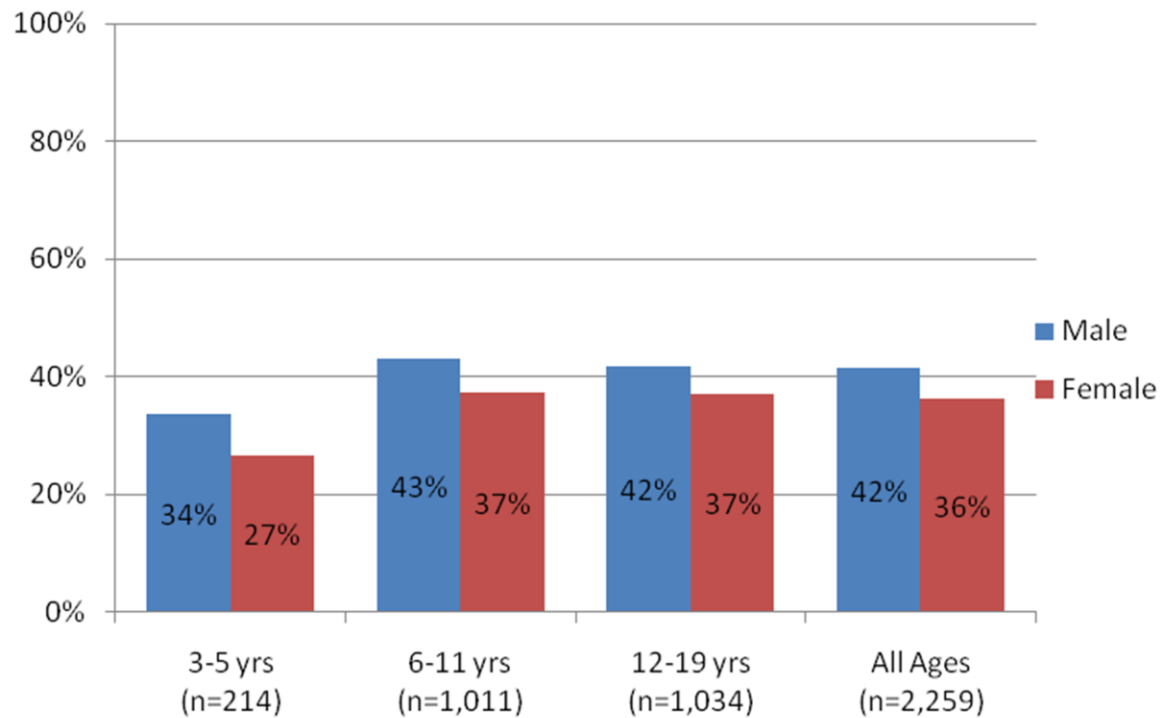


Source: CSHP 2010, Vineland public schools 2008-2009 BMI data

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- In Vineland, Hispanic boys have slightly higher rates of overweight and obesity than girls.

# Vineland, Non-Hispanic White Prevalence of Childhood Overweight & Obesity By Age & Gender



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

**RUTGERS**  
Center for State Health Policy  
Funding provided by the Robert Wood Johnson Foundation

- Among non-Hispanic whites in Vineland, boys have higher rates of overweight and obesity than girls across all age categories.

# Vineland City Public Schools

School	% Students Overweight / Obese
Dallego Preschool Center <sup>a</sup>	26.5 %
Dr. William Mennies	34.2 %
Johnstone	37.0 %
Cunningham <sup>a</sup>	38.2 %
Vineland High School <sup>a</sup>	39.1 %
Pauline J. Petway	41.3 %
Sabater	41.8 %
Anthony Rossi Middle School	42.9 %
Veterans Memorial Middle	46.6 %
D'Ippolito	47.4 %
Marie Durand	47.6 %
T. W. Wallace Middle School	50.5 %
Dane Barse	51.5 %
Landis Middle School	53.4 %
Max Leuchter	58.7 %
John H. Winslow <sup>b, c</sup>	67.4 %

<sup>a</sup> Only 50-80% of the students were measured

<sup>b</sup> Less than 50% of the students were measured

<sup>c</sup> Data not representative by grade

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

**RUTGERS**

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

- Estimates are provided at the school level for Vineland 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**).