

25% of children in Washtenaw County, ages 2-17 years, are overweight or obese ^{i,ii}.

Obesity is a significant health issue in the United States. Being overweight or obese in childhood puts individuals at risk of obesity and other chronic diseases in adulthood.

Rate of overweight and obesity in Washtenaw County Children, ages 2-17 yrs		
	2013	2015
Total Number of Children ⁱⁱⁱ	18,595	31,965
Demographic Group	% overweight or obese	
Sex		
Female	25%	25%
Male	26%	26%
Age group		
2 to 4 yrs	19%	19%
5 to 7 yrs	22%	22%
8 to 10 yrs	27%	27%
11 to 13 yrs	31%	28%
14 to 17 yrs	30%	29%
Race and Ethnicity		
White or Caucasian (non-Hispanic) ⁱⁱ	23%	23%
Black or African American (non-Hispanic) ⁱⁱ	37%	36%
Asian (non-Hispanic) ⁱⁱ	16%	17%
Other ⁱⁱ	26%	27%
Hispanic or Latino (all races) ⁱⁱ	31%	34%
Health Insurance		
Commercial	23%	23%
Medicaid	35%	36%
Washtenaw County Overall	26%	25%
Data source: Washtenaw Child BMI Dataset (2013, 2015) ⁱⁱⁱ		

This report describes the weight status of children living in Washtenaw County.

Analysis focused on the children who are currently overweight or obese. Factors known to affect the risk of childhood obesity were examined, including poverty, minority racial or ethnic status, and age group. In addition, differences in communities across the County are explored, since where children live, play and learn matters.

Highlights from 2015:

- Compared to 2013, the overweight and obesity rate in Washtenaw County children decreased in 2015.
- Good news:** The overweight and obesity rates for children in Ypsilanti and Milan decreased between 2013 and 2015.
- The overweight and obesity rate in adolescents aged 11 to 13 years has decreased significantly between 2013 and 2015 (31% in 2013 and 28% in 2015).
- Compared to 2013, the overweight and obesity rate in African American teens has improved in 2015.
- Opportunity to improve:** The rate in Hispanic or Latino children increased from 31% in 2013 to 34% in 2015.

ⁱ **Body Mass Index (BMI)** is a measure of body fat based on height and weight. BMI in children is interpreted using age and sex, and a percentile is assigned using standardized CDC growth curves. In children, overweight is defined by having a BMI greater than 85th percentile. Obesity is defined as a BMI greater than 95th percentile.

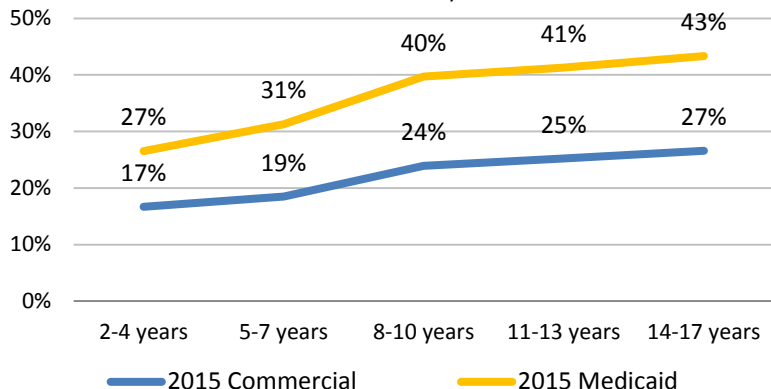
ⁱⁱ In order to account for differences in proportions of different age groups in each population, these data have been age-adjusted by taking the average of rates of five age groups indicated in the table.

ⁱⁱⁱ **St. Joseph Mercy Health System** and the **University of Michigan Health System** contributed electronic health records of Washtenaw County children who had their height and weight measured in 2013, 2014 and 2015. Washtenaw County Public Health created the Washtenaw Child BMI Dataset and performed the analysis for this report.

Children who grow up in poverty are more likely to be overweight

Overweight and Obesity by Medicaid Health Insurance

Washtenaw County 2015



Data Source: Washtenaw Child BMI Dataset (2015) ⁱⁱⁱ

Medicaid coverage is an indicator of poverty, and poverty is a known cause of obesity disparities. As children get older, their risk of overweight and obesity increases. This effect is compounded by poverty.

- 20% of children in the dataset are covered by Medicaid.
- Children who are covered by Medicaid continue to experience higher risk of obesity at each age, compared to children who are covered by commercial health insurance. The difference in overweight risk is significant for each age group in Washtenaw County ($p < 0.001$).

Poverty does not affect all children equally

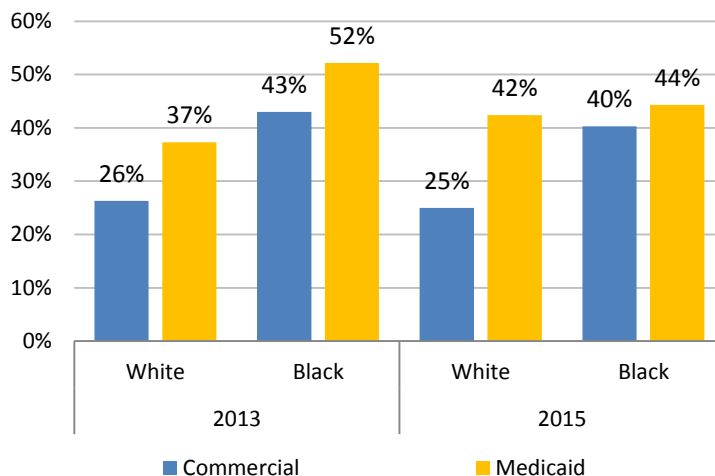
Though poverty is a known cause of obesity disparities, poverty's effect is experienced differently across racial and ethnic groups*.

- Unlike for Washtenaw County overall, commercial insurance coverage in African American children does not significantly improve the overweight rate.
- Good news:** Compared to 2013, overweight and obesity has decreased in African American teens in 2015, especially those with Medicaid health insurance coverage.
- Opportunity to improve:** The rate of overweight and obesity in Caucasian teens covered by Medicaid health insurance increased from 37% in 2013 to 42% in 2015.

Overweight and Obesity by Insurance and Race

Ages 14-17 yrs

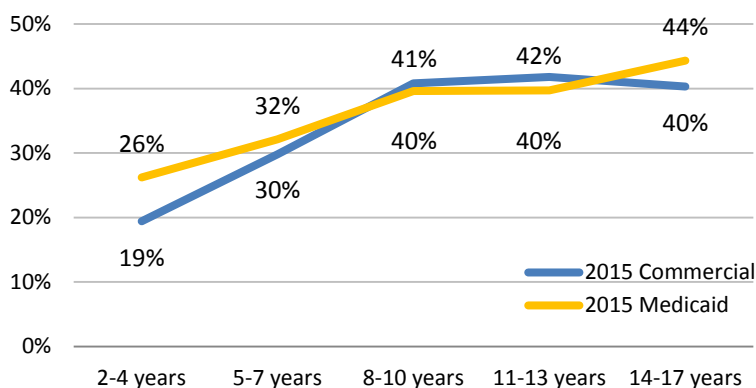
Washtenaw County 2013 & 2015



Overweight or Obesity by Health Insurance

Black or African American Children

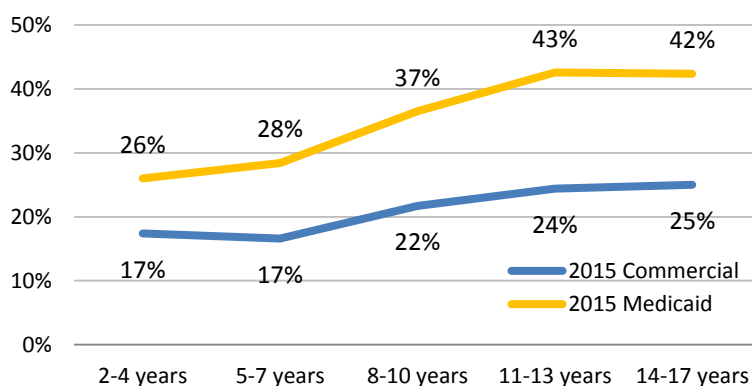
Washtenaw County 2015



Overweight or Obesity by Health Insurance

White or Caucasian Children

Washtenaw County 2015



*In the Washtenaw County Child BMI dataset, only African American and Caucasian children had sample sizes large enough to compare between insurance types.

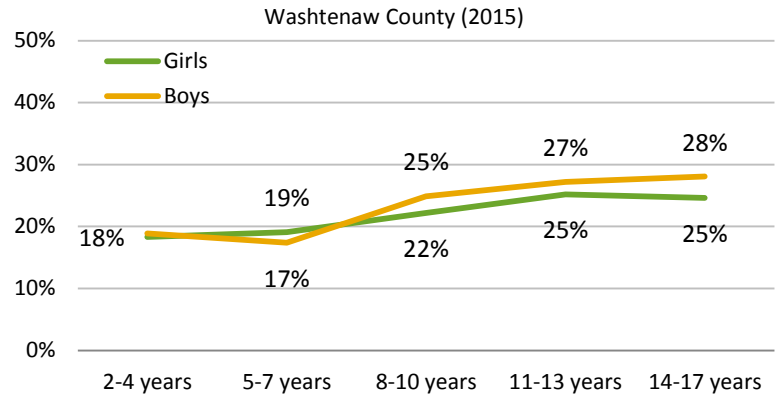
Data Sources: Washtenaw Child BMI Dataset (2013, 2015) ⁱⁱⁱ

Risk patterns differ by race and ethnicity as children grow

White or Caucasian

- The overall overweight and obesity rate was 23% in Caucasian children in Washtenaw County in 2015.
- Caucasian teenage boys have a higher risk than girls of being overweight. This risk difference increases during adolescence.
- Compared to 2013, Caucasian middle school and high school boys and girls are less likely to be overweight or obese in 2015.

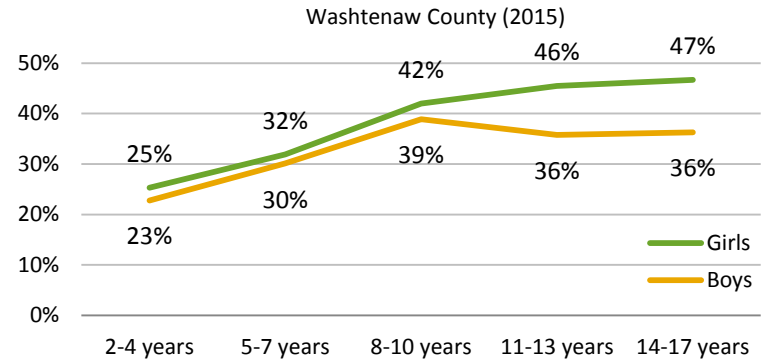
Overweight and Obesity by Age in White or Caucasian Children



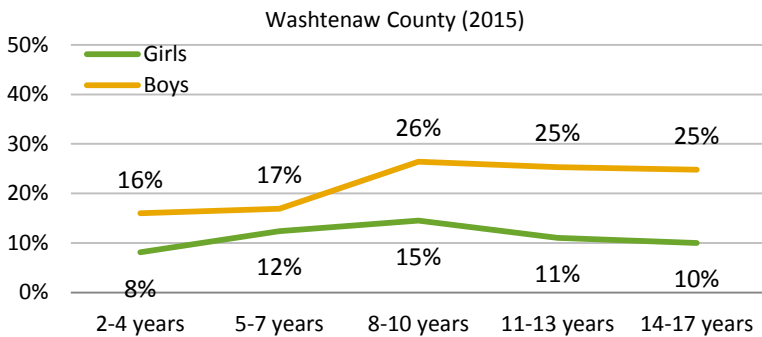
Black or African American

- The overall overweight and obesity rate was 36% in African American children in Washtenaw County in 2015.
- African American girls experience higher rates of overweight and obesity in all age groups compared to boys. This difference is significant above 11 years.
- **Good news:** Compared to 2013, overweight and obesity rates have decreased in African American middle and high school boys and girls.

Overweight and Obesity by Age in Black or African American Children



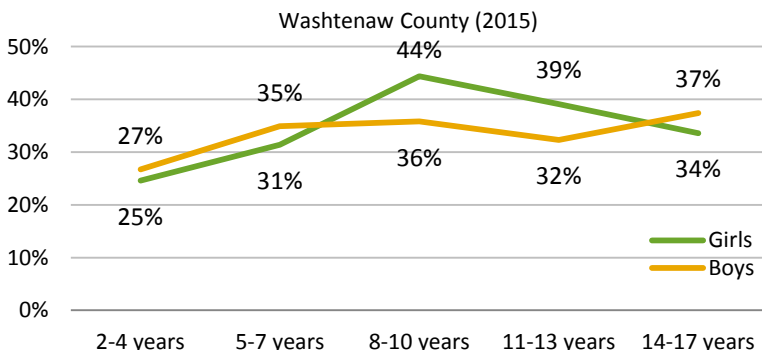
Overweight and Obesity by Age in Asian Children



Asian

- The overall overweight and obesity rate was 17% in Asian children in 2015. This continues to be the lowest rate of all racial groups in Washtenaw County.
- In 2015, Asian girls had lower rates of overweight and obesity at all ages, compared to Asian boys, making them the group with the lowest overweight and obesity rates in Washtenaw County.

Overweight and Obesity by Age in Latino Children



Hispanic or Latino (all races)

- The overall overweight and obesity rate was 34% in these Hispanic or Latino children in Washtenaw County. This is an increase from 31% in 2013.

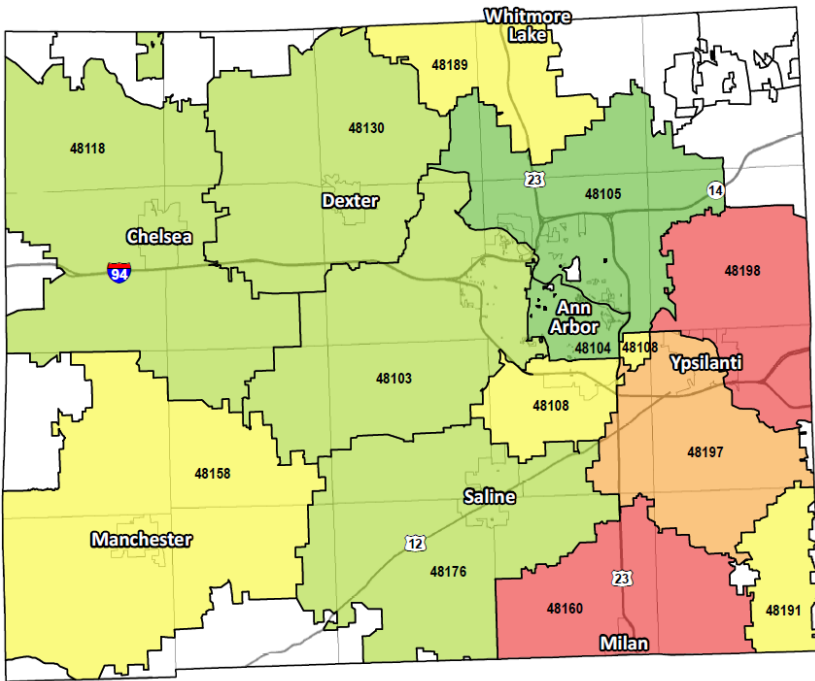
Data Source: Washtenaw Child BMI Dataset (2015)ⁱⁱⁱ

Where a child lives can affect risk of being overweight

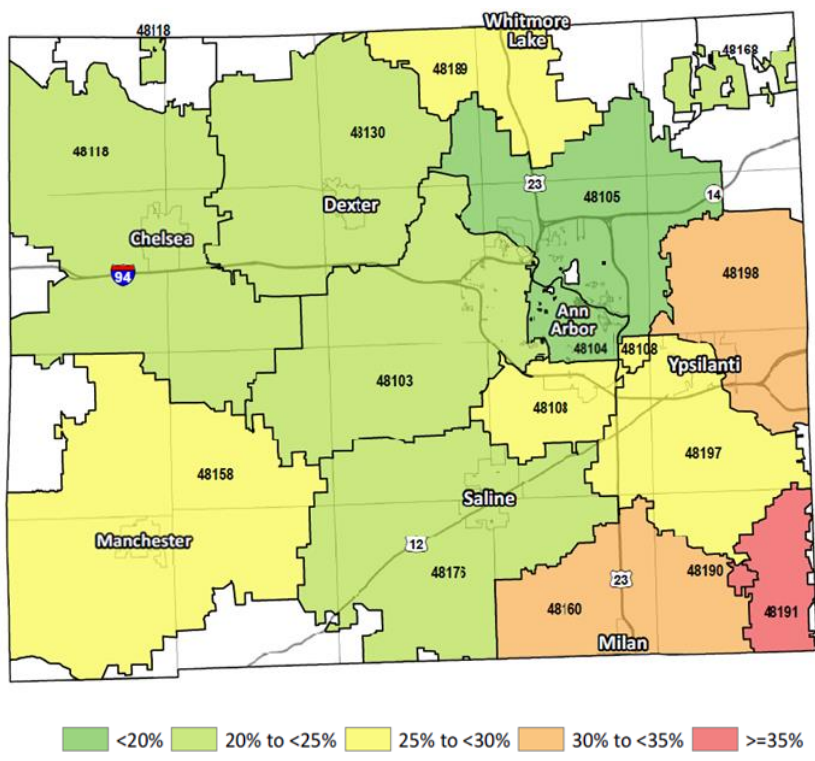
Overweight or Obesity by Zip Code

Children ages 2-17 yrs, Washtenaw County 2013 & 2015

Washtenaw County 2013



Washtenaw County 2015

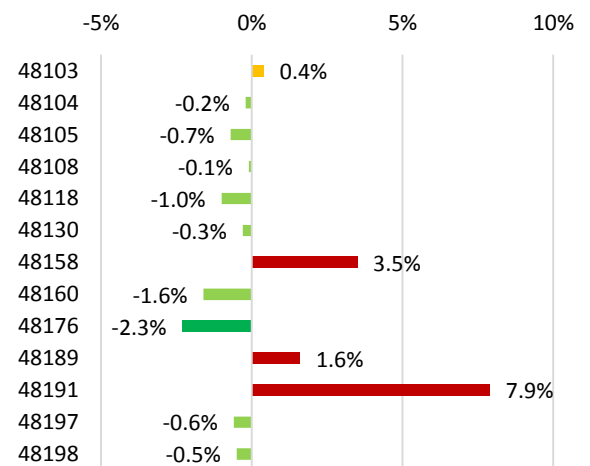


Differences in rates of overweight and obesity exist across Washtenaw County.

- ❑ Factors of the community such as walkability and access to grocery stores, safe parks, and recreational areas can affect risk of being overweight.
- ❑ Ann Arbor zip codes show lower rates of overweight compared to the southeast region of Washtenaw County.
- ❑ In 2013, Ypsilanti (48197 and 48198), Milan (48160), Whittaker (48190) and Willis (48191) had the highest rates of overweight and obesity.
- ❑ Children in Ypsilanti and Milan areas made progress between 2013 and 2015.
- ❑ Children in zip codes 48190 and 48191 increased in their rates of overweight and obesity between 2013 and 2015.
- ❑ Overweight and obesity rates in children in Manchester (zip 48158) increased from 26% in 2013 to nearly 30% in 2015. The rate of overweight and obesity also increased in Whitmore Lake (zip 48189) between 2013 and 2015 (not reflected in map).

Change in Childhood Overweight and Obesity Rates by Zip Code

Change from 2013 to 2015



Data Source: Washtenaw Child BMI Dataset (2013, 2015)ⁱⁱⁱ