

21% of children in Ann Arbor, aged 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 or obesity in Ann Arbor Children, aged 2-17 yrs (2013).	
Demographic Group	% overweight or obese
Sex	
Female	20%
Male	22%
Age group	
2 to 4 yrs	15%
5 to 7 yrs	19%
8 to 10 yrs	21%
11 to 13 yrs	25%
14 to 17 yrs	26%
Race and Ethnicity	
White or Caucasian (non-Hispanic)	20%
Black or African American (non-Hispanic)	35%
Asian (non-Hispanic)	17%
Other	26%
Hispanic (all races)	30%
Health Insurance	
Commercial	19%
Medicaid	33%
Ann Arbor Overall	21%
7,577 children from Ann Arbor were analyzed with this data set.	
Data Source: Washtenaw Child BMI Dataset (2013) ⁱⁱⁱ	

This report describes the weight status of children living in Ann Arbor (zip codes: 48103, 48104, 48105, 48108). Ann Arbor children have a lower rate of overweight and obesity than Washtenaw County overall (26%).

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.

Community leaders, clinicians, schools and many other organizations and individuals are working to improve the health of children. By highlighting the groups of children who are most at risk of being overweight, local interventions can be focused on those who need them to help all achieve the healthiest weight possible. Future data will allow us to track our progress and further focus our efforts.

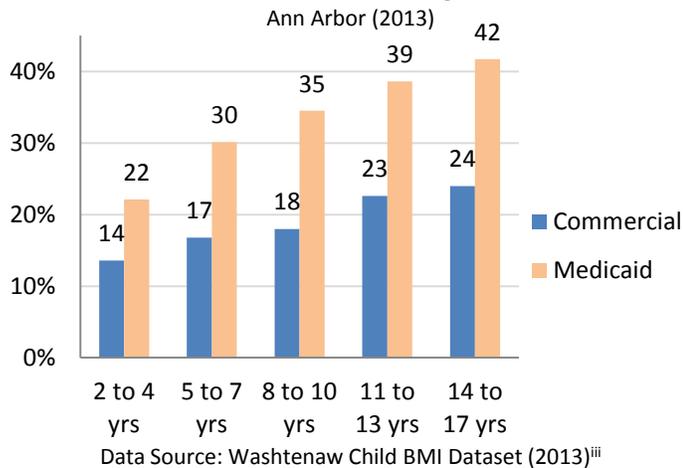
ⁱ **Body Mass Index (BMI)** is a measure of body fat based on height and weight. BMI in children is interpreted using age and sex, and a percentile is assigned using standardized CDC growth curves. In children, overweight is defined by having a BMI greater than 85th percentile. Obesity is defined as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

ⁱⁱ In order to account for differences in proportions of different age groups in each community, 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. 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 Rates by Age and Insurance Coverage



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.

- 15% of Ann Arbor children in the dataset are covered by Medicaid.
- Children who are covered by Medicaid experience higher risk of obesity at each age, compared to children who are covered by commercial insurance. The difference in overweight risk is significant for each age group in Ann Arbor ($p=0.01$).

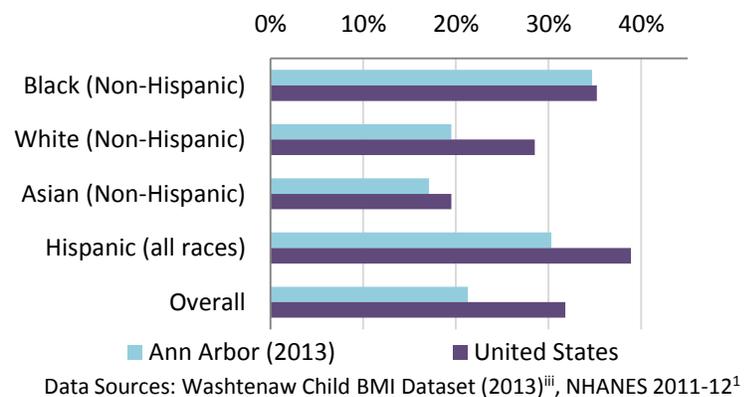
Some minorities experience higher risk

In the United States, race and ethnicity can play a role in increased risk of overweight and obesity in children¹

- Children of African American descent, and those who belong to Hispanic or Latino ethnic groups, have the highest risk of being overweight or obese. These national trends are also reflected in Ann Arbor (ages 2-17 yrs).
- Children of all races in Ann Arbor have a lower rate of overweight compared to their national counterparts. However, children of African American descent approach national rates.

Overweight and Obesity by Race

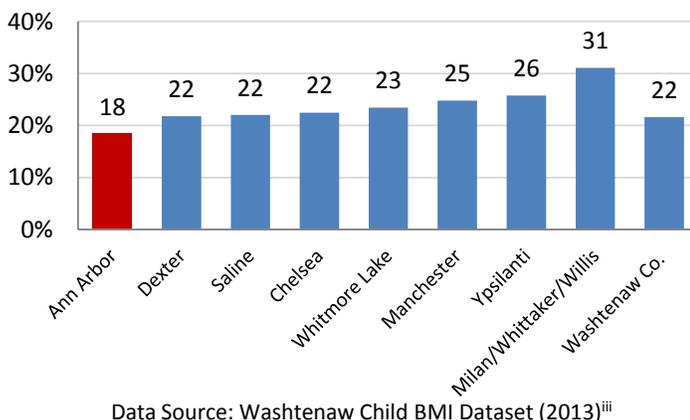
Ann Arbor, MI and the United States (age 2-19 yrs)



Where a child lives can affect risk of being overweight

Overweight and Obesity by Community

White children with Commercial Insurance (2013)



Growing up in poverty and belonging to a minority racial group are factors that increase risk of being overweight. Even if those factors are removed in order to look at the children who should have the lowest risk, the area where a child lives can increase or decrease the risk of being overweight or obeseⁱⁱ.

- Factors of the community such as walkability and access to grocery stores and safe parks and recreational areas can affect risk of being overweight.

References

1. Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*, 311(8), 806-814. doi: 10.1001/jama.2014.732