

HEALTHY CHICAGO DATA BRIEF:

OVERWEIGHT OR OBESITY IN CHICAGO PUBLIC SCHOOLS, 2010-2018



Overweight or obesity increase children's future risk of developing chronic disease as adults, and inequities in chronic disease can be traced to complex root causes. This brief highlights the trends and prevalence of overweight or obesity in kindergarten, sixth, and ninth grade Chicago Public Schools (CPS) students. Overweight or obesity is defined as body mass index, or BMI, $\geq 85^{\text{th}}$ percentile for age and gender.¹ On average, overweight or obesity rates declined in CPS students over the course of nine years. However, kindergarteners had greater improvement than sixth and ninth graders, and Non-Hispanic (NH) White children had greater improvement than children of color. In 2018, notable disparities persisted in all age groups across race/ethnicity and across levels of childhood opportunity and economic hardship.

Key Findings by Demographics

Age

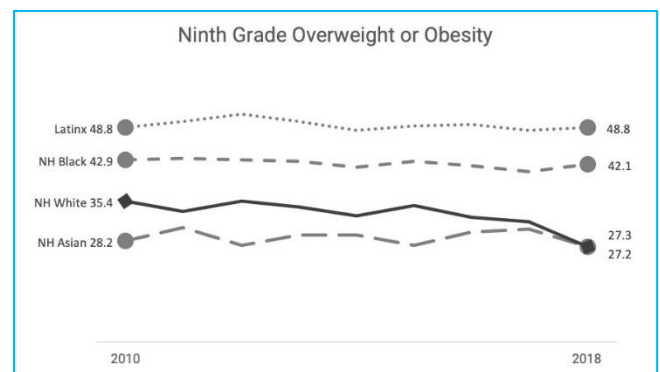
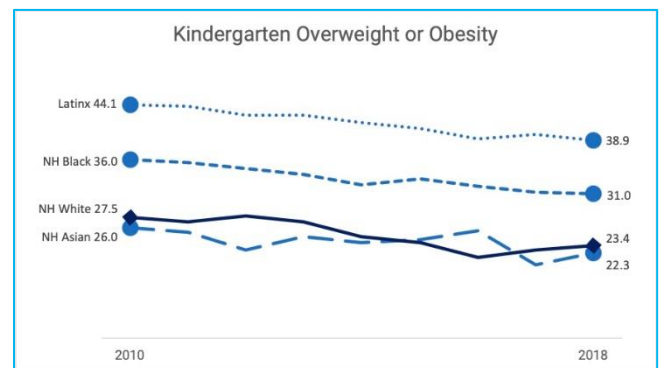
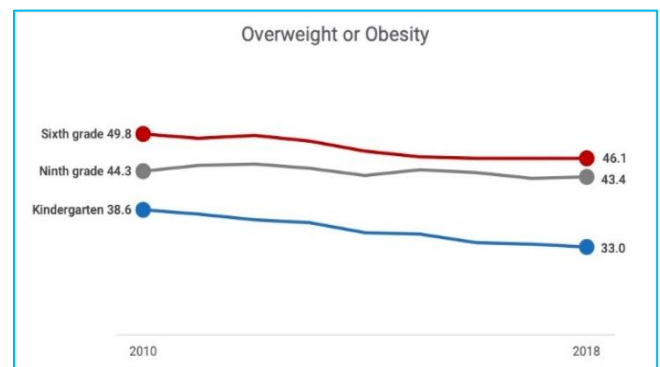
Between 2010-2018, kindergarteners had the most improvement in overweight or obesity rates, improving by 14.5%.² Kindergarten prevalence in 2018 was 33.0%.

Rates of overweight or obesity had less improvement in older children. Overall, sixth grade students had only 7.4% reduction in overweight or obesity rates, and ninth grade students had only 2.0% reduction. Additionally, as children aged, overweight or obesity rates increased. In three classes of kindergarteners,³ the percent of students with overweight or obesity went up by 19-25% by the time these students were in sixth grade.

Race

In general, NH White students had the most notable improvements in overweight or obesity, with an average 18.6% improvement, compared to 5.4% reduction for all other students combined. This trend is consistent in each grade; for example, in ninth graders, NH White students had a 23.2% improvement in overweight or obesity, whereas NH Black students had 1.9% improvement and Latinx ninth graders had 0.0% change.

2018 rates of overweight or obesity were highest in Latinx and second highest in NH Black students. Latinx students had an average rate of 47.1% overweight or obesity and NH Black students had 38.9% overweight or obesity. The highest prevalence was seen in Latino sixth grade boys –



¹ Deidentified data from CPS kindergarten, sixth grade, and ninth grade classes from 2009-2010 to 2017-2018 were analyzed. Prevalence rate estimates ("rates") of Body Mass Index (BMI) in each age group were calculated from weight and height entered on school physical forms. Full Report to follow will also include data on obesity rates; a BMI $\geq 95^{\text{th}}$ percentile for age and gender is considered obesity.

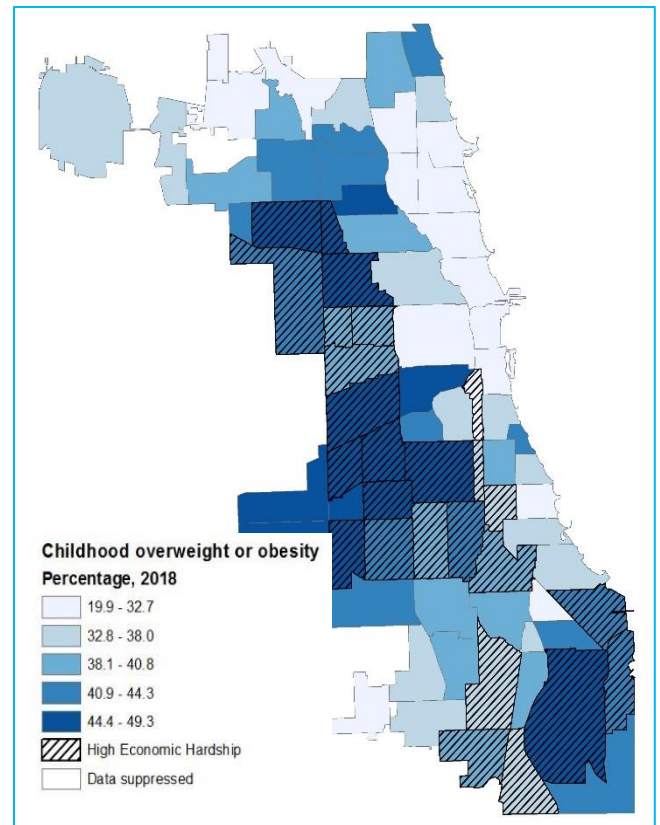
² Percentage changes in rates over time are relative changes compared to 2010 data.

³ Kindergarten classes of 2009-10, 2010-11, and 2011-12 were compared to sixth grade classes of 2015-16, 2016-17, and 2017-18.

57.5% were overweight or obese in 2018. Throughout all years of data, NH White and NH Asian/Pacific Islander students had overall lower rates of overweight or obesity than Latinx and NH Black students.

Economic Hardship

Indices of childhood opportunity and economic hardship reflect the environments in which families thrive and the degree of health, education, and financial resources at their disposal. Across all grades, students who live in community areas of high childhood opportunity and greater resources have the lowest rates of overweight or obesity. Students who live in areas of high economic hardship with fewer financial resources have higher rates. Areas of low opportunity and high hardship are dispersed predominantly over Chicago's south, southwest, and west side neighborhoods. There is a 28.0% overweight or obesity rate in communities with very high opportunity, compared to 42.7% in areas of very low opportunity. There is a 33.4% overweight or obesity rate in areas of low hardship, versus 43.8% in areas of high hardship.



Reducing Inequities in Overweight or Obesity

Children with overweight or obesity are more likely to have obesity as adults. Obesity and obesity-related chronic disease are important contributors to Chicago's life expectancy gap by race/ethnicity. A child's environment has profound influence on his or her ability to maintain a healthy weight. In order to achieve equity in health outcomes amongst Chicagoans, we must work to create equity and sustained health amongst youth.

Through its Healthy Chicago movement, CDPH and partners have taken important steps by advancing policy, system, and environmental changes. Policies have advanced food access, physical activity, and systems of care. For example, CDPH partnered with the Consortium to Lower Obesity in Chicago Children (CLOCC) to increase access to healthy food, develop complete streets and improve neighborhood walkability, and develop *A Recipe for Healthy Places*, the City's food plan. Within the school system, CPS established "Healthy CPS" initiatives, thus developing and adopting some of the strongest K-12 food policies in the nation and enhancing physical education. CDPH also created physical activity and nutrition standards for childcare facilities. The downward trend in overweight or obesity rates suggests that policies and programs have made an impact.

However, two important themes emerge in our overweight or obesity trends. First, stark disparities continue in CPS students, with less improvement in overweight or obesity rates amongst children of color over time. Children of color continue to have higher rates than NH White peers in 2018, and rates trend with economic hardship. Second, kindergarteners have greater improvements in prevalence than sixth and ninth grade students, highlighting the need for more work to sustain healthy weight as children get older.

CDPH's Healthy Chicago 2025 plan focuses on closing the racial life expectancy gap by addressing the root causes of health. It emphasizes improving social and economic resources, building community capacity, and transforming policies and processes to foster anti-racist, multi-cultural systems. While we continue to support healthy food access, physical activity, and opportunities to improve systems of care, our newest action agenda includes a new focus on upstream root causes and social influencers of childhood overweight and obesity. In order to make a lasting and significant public health impact on childhood overweight and obesity, we must address the structural determinants that shape the environments where children live, learn, grow, and play.