

2018

The Weight of Our Children

New Mexico Childhood Obesity 2018 Update



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Childhood Obesity in Context

Childhood obesity is a serious health issue in New Mexico and across the United States. It can affect children of all ages, ethnicities, and socioeconomic backgrounds. Obese children are more likely to become obese adults and develop chronic conditions such as diabetes and heart disease. Over one-in-four New Mexico adults 45 years and older have been diagnosed with two or more chronic diseases.

Many external factors influence childhood obesity, such as socioeconomic status, parental education level, community infrastructure, and food insecurity. In 2016, 26.2% of New Mexico school-aged children were living in poverty, compared to 18.3% nationally. Research has shown low-income children and children living in low-income neighborhoods are more likely to be obese. Additionally, 1 in 4 New Mexico residents (461,000) receive Supplemental Nutrition Assistance Program (SNAP) benefits and 70% of SNAP recipients are families with children.

Half of New Mexico is considered a food desert. In New Mexico, 25.6% of children under age 18 are food insecure, compared to 17.5% nationally, and 69.7% of New Mexican students receive free or reduced lunch at school. Additionally, many New Mexican schools struggle to provide adequate physical education (PE); just 25.7% of New Mexican students attend daily PE classes. Studies indicate children living without adequate nutrition and physical activity have poorer academic and health outcomes.



The New Mexico Department of Health (NMDOH) established its Statewide Childhood Obesity Surveillance System in 2010 to understand the extent of obesity among the elementary school-age population in New Mexico. The system uses Body Mass Index (BMI) percentile and a standardized measurement protocol to monitor childhood obesity over time, identify at-risk groups, guide state and local prevention efforts, and inform appropriate resource allocation. NMDOH collects and reports childhood obesity prevalence data on kindergarten and third grade students annually with support from numerous schools, nursing programs, and volunteers across the state. In the Fall of 2018, BMI data was collected on 6,604 students in 56 randomly-selected public elementary schools across New Mexico.

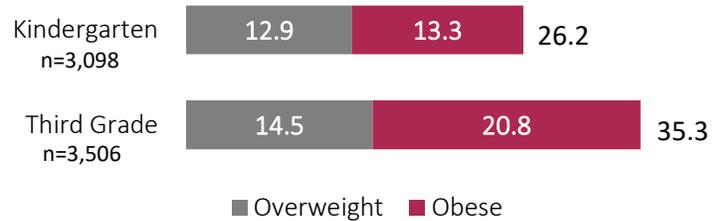
Summary of Key Findings

- Obesity prevalence continues to increase substantially in the three years between kindergarten and third grade, while overweight prevalence is roughly unchanged between kindergarten and third grade.
- Kindergarten and third grade boys consistently have a higher prevalence of obesity than kindergarten and third grade girls.
- Despite decreases in American Indian obesity prevalence in 2018 compared to 2017, American Indian students continue to have higher prevalence of obesity than Hispanic and White students.
- Obesity among Hispanic third grade students has remained relatively level over time and obesity among Hispanic kindergarten students has fluctuated without a consistent upward or downward trend. Hispanic students comprise the majority of elementary school-age children in New Mexico.
- Prevalence of overweight and obesity continues to remain high across grades, genders, and race/ethnicities in New Mexico, highlighting the continuing need for: 1) collaboration across state and local agencies to implement sustainable obesity prevention initiatives; and 2) increased opportunities for healthy eating and physical activity among pre-school and elementary school-age children and their families.

Overweight & Obesity by Grade

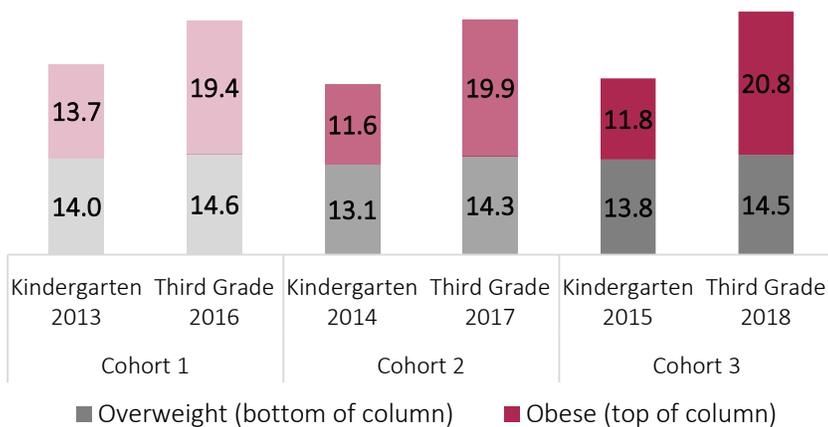
In 2018, more than one-in-four (26.2%) kindergarten students and one-in-three (36.3%) third grade students were overweight or obese (Fig. 1; note: 'n' indicates number of students measured). As a comparison, only 15% of children were overweight or obese in the 1970s. Kindergarten obesity decreased from 13.9% in 2017 to 13.3% 2018 and third grade obesity increased slightly from 19.9% in 2017 to 20.8% in 2018. As with previous years, the number of overweight and obese kindergarteners were approximately equal, however, there were more obese third graders than overweight third graders.

Fig. 1: Percent of Students Overweight and Obese by Grade, New Mexico, 2018



Note: For all analyses, BMI percentiles were converted into weight categories classifying students as underweight (<5th percentile), healthy weight (5th to less than the 85th percentile), overweight (85th to less than the 95th percentile), or obese (95th percentile and above).

Fig. 2: Percent of Students Overweight and Obese in Three Birth Cohorts, New Mexico, 2013-2018



Each year, the measured third grade students are sampled from the same general birth group as the kindergarten sample three years prior. The three birth cohorts sampled from 2013-2018 demonstrate a substantial increase in obesity, not overweight, between kindergarten and third grade (Fig. 2). In the 2015-2018 cohort, obesity increased by 76% from kindergarten (11.8%, 2015) to third grade (20.8%, 2018). This significant upward shift in obesity prevalence in the three years between kindergarten and third grade highlights the continued need to address and prevent excessive weight gain and support healthy eating and active living behaviors at an early age.

Overweight & Obesity by Gender

In 2018, the combined group of kindergarten and third grade boys had a higher obesity prevalence than the combined group of girls in those grade levels (18.3% compared to 15.8%) (Fig. 3). The same is true within each grade; obesity prevalence was higher for boys than girls (Fig. 4). In 2018, as in other years, boys entered kindergarten more obese than girls, however, increases in obesity occurred at approximately the same rate for boys and girls between kindergarten and third grade. For both genders, kindergarten prevalence of obesity and overweight decreased in 2018 compared to 2017, while third grade prevalence of obesity and overweight increased for both genders in 2018 compared to 2017.

Fig. 3: Percent of Kindergarten and Third Grade Students Overweight and Obese by Gender, New Mexico, 2018

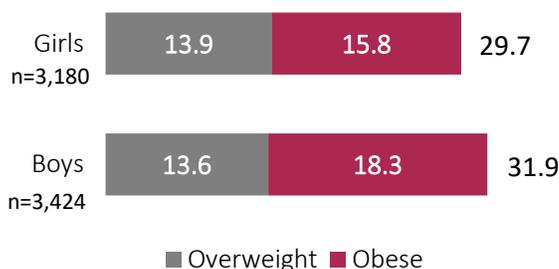
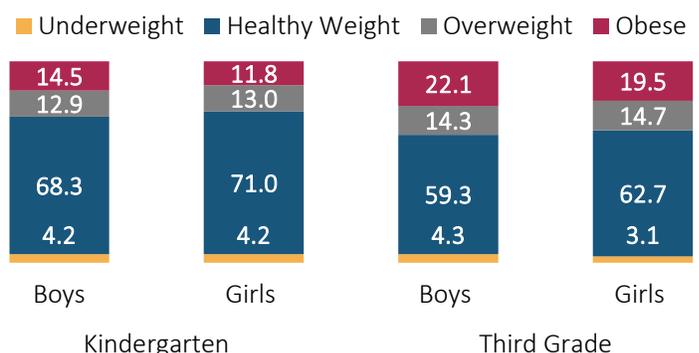


Fig. 4: Percent of Students in Weight Categories by Grade and Gender, New Mexico, 2018



Overweight & Obesity by Race/Ethnicity

American Indian students continue to have the highest obesity prevalence compared to their Hispanic and White counterparts (Fig. 5 & 6). Third grade American Indian obesity decreased by 25% between 2017 and 2018 (Fig. 7); kindergarten obesity decreased minimally. Kindergarten and third grade (Fig. 7) Hispanic obesity did not substantially change in 2018 compared to 2017. Kindergarten White obesity remained roughly the same in 2018 as 2017, though third grade White obesity (Fig. 7) increased by 43% in 2018 compared to 2017.

*Data collected through annual surveillance do not provide enough precision for the systematic comparison of disparities faced by African Americans and Asians, who comprise 2.2% and 1.7% of New Mexico's population and 2.7% and 2.1% of the 2018 sample, respectively. Due to small sample sizes, 2017 and 2018 data have been aggregated. Aggregated data suggest obesity prevalence is higher among African American than White kindergarteners and third graders, but lower among Asian third graders than other groups.

Fig. 5: Percent of **Kindergarten** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2018

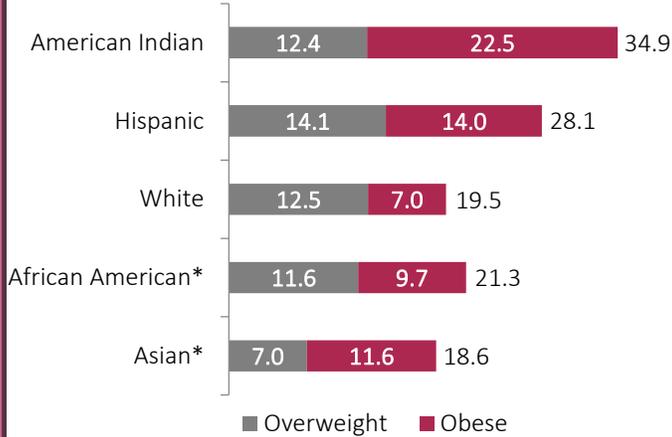


Fig. 6: Percent of **Third Grade** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2018

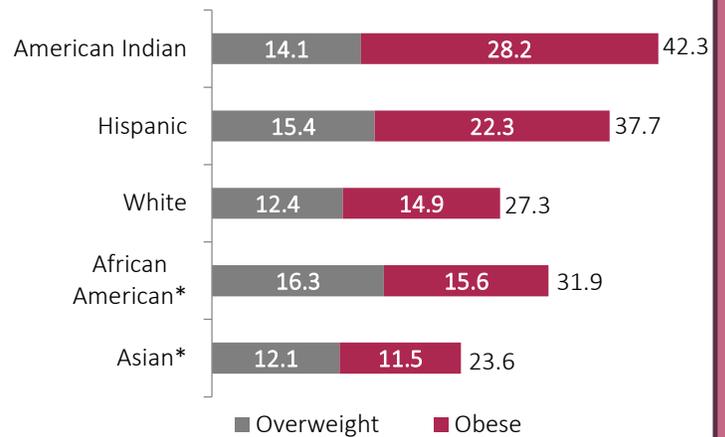
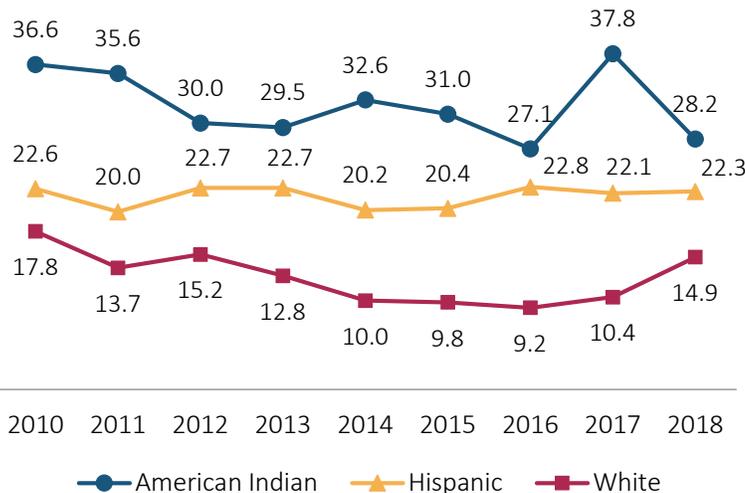
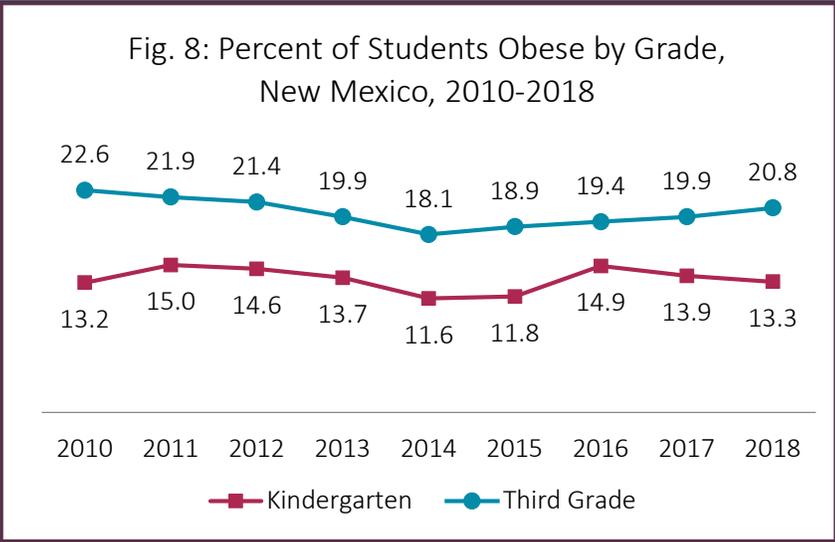


Fig. 7: Percent of **Third Grade** Students Obese by Race/Ethnicity, New Mexico, 2010-2018



American Indian obesity prevalence has decreased each year since 2010 except for 2014 and 2017. In 2017, American Indian third grade obesity prevalence increased by 39% to 37.8% (Fig. 7). Data from 2018 suggest the 2017 increase was an outlier; American Indian third grade obesity decreased by 25% to 28.2% in 2018. Since 2010, obesity prevalence among Hispanic third grade students has experienced little change. After four years of relatively stable obesity prevalence among White third grade students, the prevalence of obesity increased by 43% to 14.9% in the past year. Data gathered in coming years will help determine whether this increase is an outlier or the start of a new trend among this population.

Prevalence of childhood obesity among the elementary school-age population remains high. Data collected from 2010 to 2018 demonstrate fluctuations in kindergarten and third grade obesity with no evident trend (Fig. 8). These data highlight the continuing need to raise awareness of and invest in childhood obesity prevention efforts at the state, local, and community levels.

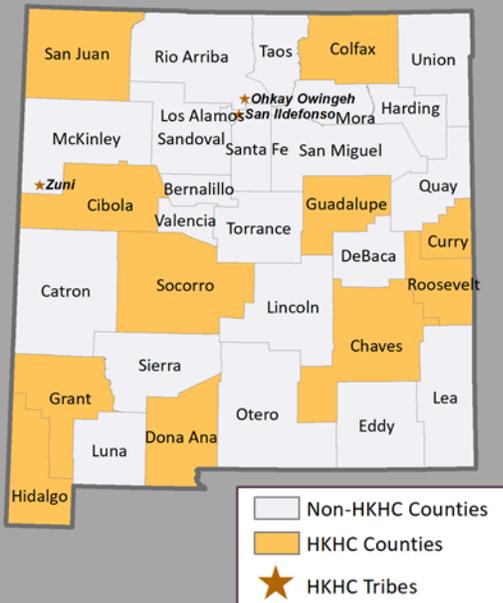


What the State is Doing to Address Childhood Obesity in New Mexico

The New Mexico Department of Health’s Obesity Nutrition and Physical Activity Program (ONAPA) partners with state and local organizations and community coalitions in 11 counties and 3 tribal communities across New Mexico to expand healthy eating and physical activity opportunities where children and low-income adults live, learn, play, work, eat, and shop. For more information please contact Rita Condon, ONAPA Program Manager, at rita.condon@state.nm.us.

Healthy Kids Healthy Communities (HKHC):

ONAPA is working with 11 counties {Chaves, Cibola, Colfax, Curry, Dona Ana, Grant, Guadalupe, Hidalgo, Roosevelt, San Juan, Socorro} and 3 tribal communities {San Ildefonso Pueblo, Zuni Pueblo, Ohkay Owingeh Pueblo} across the state to implement long-term and sustainable policy, systems, and environmental change strategies based on the Centers for Disease Control & Prevention’s (CDC) best practices for preventing obesity.



Key Obesity Prevention Strategies

School & Preschool Environment

- Strengthen and implement school district and preschool wellness policies to include language on healthy eating and physical activity
- Establish and expand the Healthy Kids 5.2.1.O Challenge
- Integrate locally grown produce into school meals
- Implement healthy fundraising
- Establish salad bars and pre-made salads
- Expand healthy options and nutrition education (fruit & vegetable and salad bar tastings, gardening lessons)
- Implement food service staff training on how to prepare healthier meals
- Establish walk & roll to school and mileage programs
- Create active, welcoming schoolyards for community use

Built Environment

- Create and enhance active outdoor space for community use (neighborhood playgrounds/parks)
- Increase number of safe walking and biking routes that connect neighborhoods to schools and community sites
- Support Complete Streets initiatives

Food Environment

- Create community and school edible gardens
- Establish farmers’ markets and food buying clubs
- Increase and market healthy options in corner stores
- Expand healthy options and nutrition education (tasting, cooking, gardening lessons) in food distribution sites, WIC offices, senior centers, and farmers’ markets