

The Weight of Our Children

New Mexico Childhood Obesity 2022 Update

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2022

Introduction: Childhood Obesity in Context

Childhood obesity is a serious health issue in New Mexico and across the nation. Children with obesity are more likely to have obesity as adults and develop chronic conditions such as diabetes and heart disease. Nearly one-in-three (31.4%) adults 45 years and older in New Mexico have been diagnosed with two or more chronic diseases (2020).¹ Children with obesity may also suffer more severe COVID-19 illness than other children and are more likely to be hospitalized.² Many external factors influence childhood obesity, such as socioeconomic status, food insecurity, and community infrastructure. Nearly one-in-four (24.1%) school-aged children in New Mexico live in poverty, compared to 16.9% nationally (2020),³ making New Mexican children more at risk for obesity than children in other states.

During the COVID-19 pandemic, the number of elementary school-aged children with obesity increased nationally.⁴ Families experienced additional economic hardship and increased food insecurity and stress, which are contributing factors of obesity. School closures and virtual learning increased screen time and limited children's access to healthy school meals, recess, and physical education. Altogether, environments like this promote weight gain.^{5,6} During the late pandemic, the nation's childhood obesity prevalence had not changed substantially compared to the early pandemic despite the return to in-person learning and reduced pandemic shutdowns.⁷



Summary

This report provides the prevalence of childhood obesity and overweight in New Mexico in Fall 2022. Reduced participation in the metro area is a limitation of this data.

Key findings:

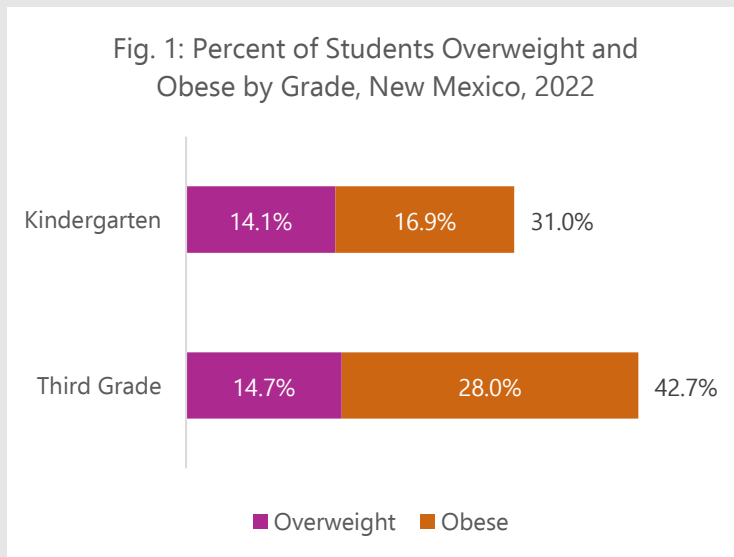
- Rates of overweight and obesity continue to remain high across grades, genders, and racial and ethnic groups and are likely exacerbated by challenges related to the COVID-19 pandemic. This highlights the continuing need for: 1) increased resources and collaboration across state and local agencies to implement sustainable obesity prevention initiatives that reach at-risk populations; and 2) increased opportunities for healthy eating and physical activity among preschool and elementary school-aged children and their families.
- As in previous years, obesity prevalence increases significantly in the years between kindergarten and third grade, suggesting a time-sensitive window for preventing excessive weight gain at an early age.
- Boys are more likely to have obesity than girls in both kindergarten and third grade.
- American Indian students continue to have the highest obesity prevalence compared to their Hispanic, White, Asian, and African American counterparts. In 2022, nearly 1 in 2 (46.8%) of American Indian third graders had obesity.



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 data on kindergarten and third grade students annually with

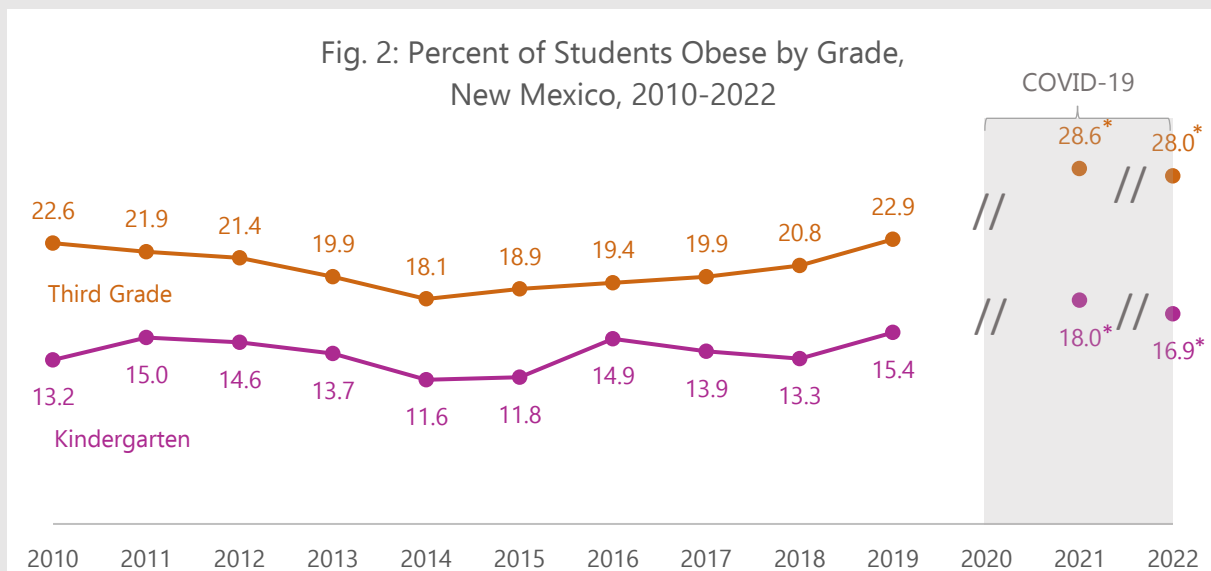
support from schools, nursing programs, and volunteers across the state. Public elementary schools are selected randomly for data collection. The COVID-19 pandemic has reduced school participation in data collection, and although participation rates were higher in 2022 than in 2021 or 2020, not all school districts in the metro area (consisting of Bernalillo, Sandoval, Valencia, and Torrance counties) participated. This limits how representative 2022 data is of the whole state. This report includes data from 4,483 students measured at 47 schools in Fall 2022.

Childhood Overweight and Obesity Prevalence



By Grade

In 2022, 31% of kindergarten students and 42.7% of third grade students had overweight or obesity (Fig. 1). In comparison, 32% of kindergarten students and 45.1% of third grade students in non-metro New Mexico had overweight or obesity in 2021. The prevalence of obesity in 2022 was higher among third graders than kindergarteners, which was statistically significant, indicating that participating third graders were actually more obese than participating kindergarteners. This upward shift suggests a time-sensitive window for preventing excessive weight gain at an early age, particularly among children who are already overweight in kindergarten.



*Due to the pandemic and school closures, data was not collected in 2020 and participation rates in the metro area were greatly reduced in 2021 (2021 estimates only represent non-metro areas). In 2022, participation rates in the metro region were still reduced (2022 estimates do include all participating metro schools). Survey weights were not used in 2021 and 2022 to avoid distortion. Estimates from 2021 and 2022 should not be compared to previous years' estimates.

Fig. 3: Percent of Students Overweight and Obese by Gender, New Mexico, 2022

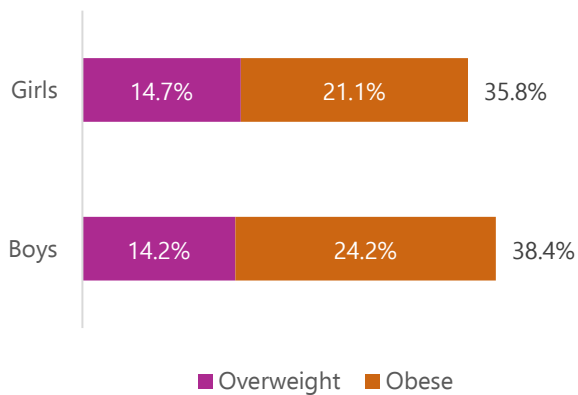
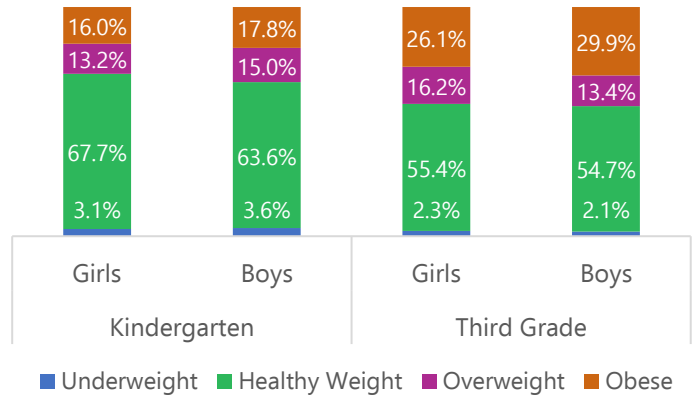


Fig. 4: Percent of Students in Weight Categories by Grade and Gender, New Mexico, 2022



By Gender

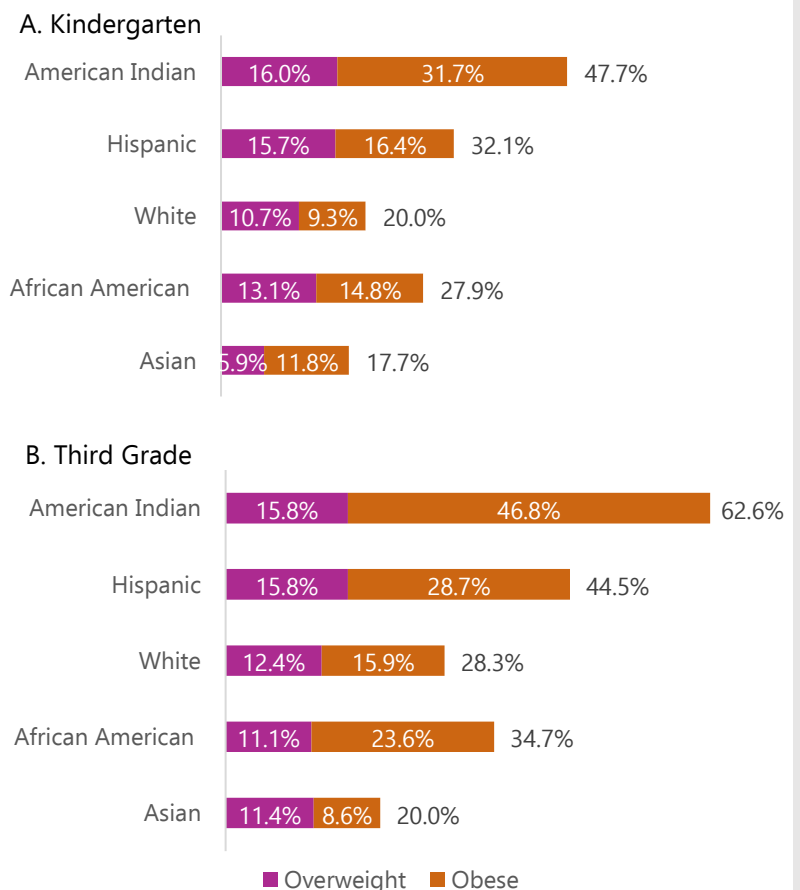
The combined group of kindergarten and third grade boys had a higher obesity prevalence than the combined group of girls in those grade levels in 2022 (Fig. 3). The obesity prevalence was 24.2% among boys and 21.1% among girls. The same is true within each grade: 17.8% of kindergarten boys had obesity compared to 16% of girls and 29.9% of third grade boys had obesity compared to 26.1% of girls (Fig. 4). Differences in weight status across gender were not statistically significant.

By Race/Ethnicity

Obesity among American Indian and Hispanic students was higher than among White, Asian, or African American students for both grades in 2022 (Fig. 5) as in previous years.⁸ In analyzing disparities across racial and ethnic groups by grade, American Indian students continue to have the highest obesity prevalence compared to their counterparts. In 2022, 47.7% of American Indian kindergarten students and 62.6% of American Indian third grade students had overweight or obesity, which is significantly more than any other group in either grade.

In previous years, two years of data were combined to yield statistically stable estimates of weight status for Asian and African American populations. In 2022, the number of participants in these subpopulations were large enough to yield stable one-year estimates. African American students in both grades had higher obesity rates than Asian or White students; 27.9% of African American kindergarten students and 34.7% of third grade students had overweight or obesity.

Fig. 5: Percent of Students Overweight and Obese by Race/Ethnicity, New Mexico, 2022



What the State is Doing to Address Childhood Obesity

NMDOH's Obesity, Nutrition, and Physical Activity Program (ONAPA) partners with state and local organizations and community coalitions in nine counties and two tribal communities across New Mexico to expand healthy eating and physical activity opportunities where children and adults live, learn, play, work, eat, and shop.

ONAPA and its partners implement long-term and sustainable policy, systems, and environmental change based on the Centers for Disease Control and Prevention's (CDC) best practices for preventing obesity. Despite successes and community transformation at the local level, more resources and increased collaboration among state agencies are needed to have a meaningful impact on childhood obesity in New Mexico, particularly during and after the COVID-19 pandemic.

Key Strategies

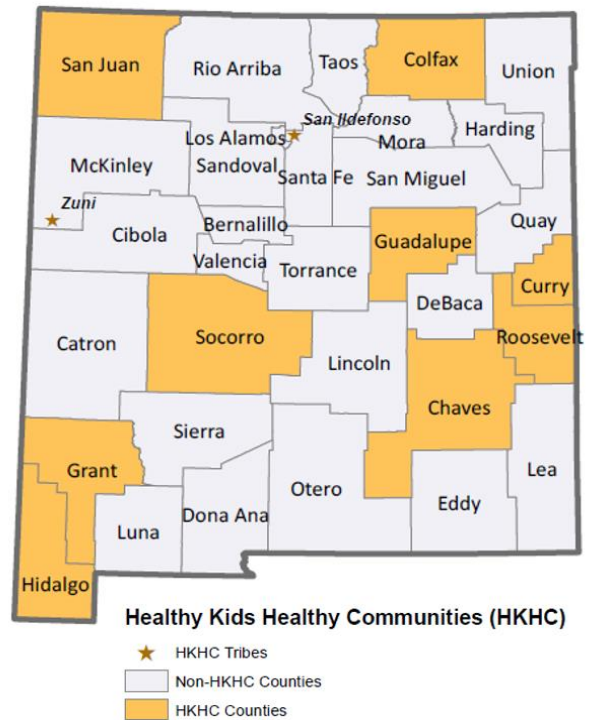
School and Preschool Environment

Increasing opportunities for healthy eating and physical activity before, during, and after school and preschool.

Strategies include establishing salad bars, edible gardens, and walking programs; integrating locally grown produce into snacks and meals; opening school yards for community use during non-school hours; and strengthening wellness policies to include language on healthy eating, physical activity, and staff wellness.

Food and Built Environment

Increasing access to healthy, affordable food and places to be physically active in low-income, rural, and Tribal communities.



Strategies include establishing community gardens and farmers' markets; expanding healthy options and nutrition education in food distribution sites and senior centers; creating active outdoor spaces for community use; and establishing safe walking and biking routes that connect neighborhoods to everyday destinations.

For more information about ONAPA's programs, please contact Rita Condon, ONAPA Program Manager, at rita.condon@doh.nm.gov.



Methods

What We Did and Why

Each year, NMDOH's Statewide Childhood Obesity Surveillance System uses stratified cluster sampling to select 70 public elementary schools from across the state to collect height and weight measurements from kindergarten and third grade students. Measurements are collected from August to November using a standard protocol and trained nursing students and volunteers.

BMI is calculated from height and weight measurements and categorized based on sex-specific CDC BMI-for-age percentiles, which are defined as underweight (<5th percentile), healthy weight (≥5th to <85th percentile), overweight (≥85th to <95th percentile), and obese (≥95th percentile).⁹ In a typical year, survey weights are used to produce estimates of weight status that are representative of all kindergarteners and third graders statewide. Data is analyzed using R (Version 4.0.3) and/or STATA (Version 14.2). Statistical significance is defined as $p < 0.05$.

The COVID-19 pandemic has limited data collection, preventing data collection in 2020 and reducing school participation to 37% in 2021, with particularly low rates in the metro region (consisting of Bernalillo, Sandoval, Tarrant, and Valencia counties). Some schools declined to participate due to limited staff capacity and COVID outbreaks and quarantine periods.

The school participation rate in 2022 (67%) was higher than in the previous two years, but participation in the metro region (32%) still lagged as one large school district declined to participate. The metro region represents 28% of kindergarten and third grade public school students in the state. The low metro participation rate is a limitation of this dataset, making our estimates less representative of the state's true obesity and overweight prevalences. Survey weights appeared to cause distortions in weight status estimates, likely due to low school participation in the metro region, and were not included in the final analysis. Estimates in this report should not be compared to previous years' estimates as analysis methodologies differ.

In previous years, two years of data were combined to yield statistically stable estimates of weight status for Asian and African American populations. According to the NMDOH policy on small numbers, the number of participants in these subpopulations in 2022 were large enough to yield stable one-year estimates.



Tips to Help Kids Eat Healthy & Stay Active



Every day is a new chance to improve your kids' health habits. Try out the Healthy Kids 5-2-1-0 Challenge and live healthier day by day!

- 5 Eat 5 or more fruits and vegetables a day.** Keep cut-up fruits and veggies in the fridge for handy, healthy snacks.
- 2 Trim screen time to 2 hours a day.** Select TV shows or computer games ahead of time so children have a plan for how they will use their screen time.
- 1 Be active at least 1 hour a day.** Where can you go today? Plan a safe walking route to a school, park, or another place in your neighborhood with your child – then walk!
- 0 Drink lots of H₂O every day.** Make water your first drink of choice! Give your child a water bottle to carry with them so it's always handy when they are thirsty.

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