

New Mexico Childhood Obesity Update: 2015

Published March 2016

The New Mexico Department of Health (NMDOH) established its statewide childhood obesity surveillance system in 2010 to understand the extent of childhood obesity in New Mexico, specifically among the elementary school-age population. The system uses Body Mass Index (BMI) percentile as well as 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 an annual basis. In the Fall of 2015, 8,167 kindergarten and third grade students were measured in 63 randomly-selected public elementary schools throughout New Mexico. Data were analyzed by grade, gender, and race/ethnicity and results have been weighted to appropriately represent the kindergarten and third grade New Mexico public school populations.



Summary of Key Findings

- Rates of obesity and overweight remain high; more than one-in-three third grade and one-in-four kindergarten students is overweight or obese. Also, a significant upward shift in weight categories occurs as children move from kindergarten to third grade.
- American Indian students are still significantly more likely to experience obesity than any other racial or ethnic group. By third grade, half (50.4%) of American Indian students are either overweight or obese, followed by Hispanics (36.4%).
- Obesity prevalence has declined among American Indian and White students since 2010, but Hispanic students have experienced little decline over the six years. Hispanic children comprise the majority of the New Mexico elementary school-age population.
- Despite a slight increase in obesity rates from 2014 to 2015, there is an overall downward trend when 2015 rates are compared to 2010. Rates for third graders have gone from 22.6% in 2010 to 18.9% in 2015, corresponding to a 16.4% change. For the second consecutive year, kindergarten obesity prevalence is lower than it was in 2010 (11.8% compared to 13.2% in 2010), corresponding to a 10.6% change over the six years.
- There is a continuing need to create sustainable environmental, policy, and systems changes to support vibrant communities and healthy children, with a particular focus on groups most affected by overweight and obesity.

Obesity and overweight prevalence rates continue to remain high across grades and genders. In 2015, more than one-in-four (25.6%) kindergarten students was overweight or obese. Prevalence rates were significantly higher among third graders; over one-in-three (34.4%) was overweight or obese (Fig. 1). See Table 1 for data on obesity prevalence by grade. As a comparison, only 15% of children were overweight or obese in the 1970s.

Slightly higher proportions of kindergarten and third grade boys were obese than girls, but these are not statistically significant differences. In 2015, 13.4% of kindergarten boys were obese compared to 10.1% of girls. Similarly, 20.5% of third grade boys were obese compared to 17% of girls (Fig. 1). See Table 4 for data on obesity prevalence by gender.

Fig. 1 Percent of Students Overweight and Obese by Grade and Gender, New Mexico, 2015

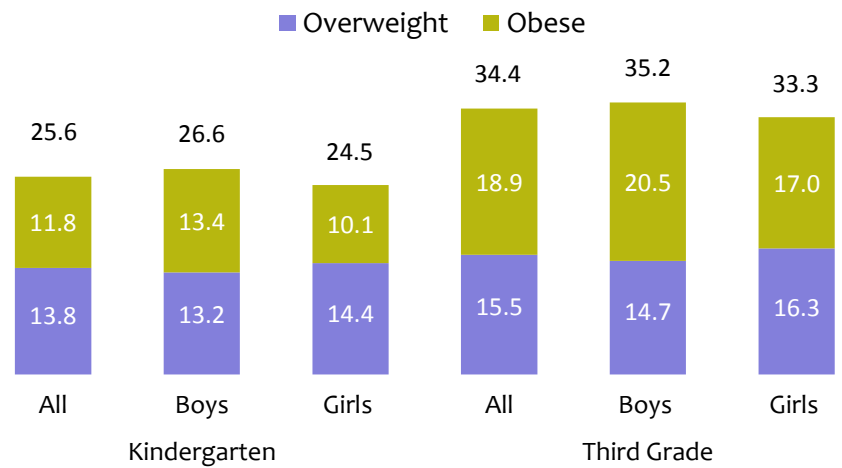
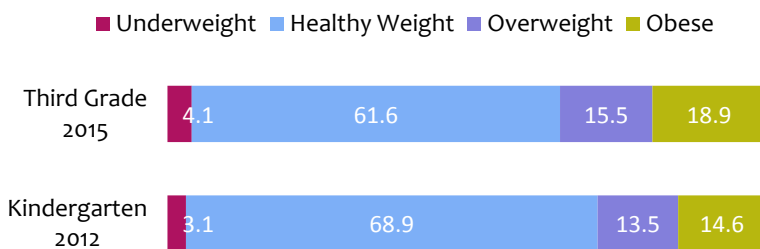


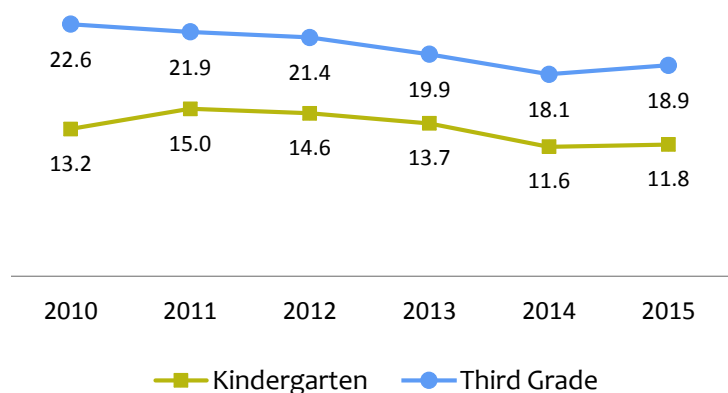
Fig. 2 Percent of Students in Weight Categories by Birth Cohort, New Mexico, 2012 & 2015



Third grade students measured in 2015 were sampled from roughly the same general birth group as the 2012 kindergarten sample. 14.6% of kindergarten students were obese in 2012 and by 2015, 18.9% of students in this birth group (now third graders) were obese (Fig. 2). This significant (29%) upward shift in obesity prevalence 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.

Childhood obesity prevalence appears to be on a gradual downward trajectory since 2010. Rates for third graders have gone from 22.6% in 2010 to 18.9% in 2015, corresponding to a 16.4% change over the six years. For the second consecutive year, kindergarten obesity prevalence is lower than it was in 2010 (11.8% compared to 13.2% in 2010), corresponding to a 10.6% change over the six years. Between 2014 and 2015, there was a slight uptick in obesity prevalence rates for both kindergarten and third grade students, but the increase is not statistically significant for either grade. Despite apparent trends, obesity and overweight prevalence rates are still high among the elementary school-age population.

Fig. 3 Percent of Students Obese by Grade, New Mexico, 2010-2015

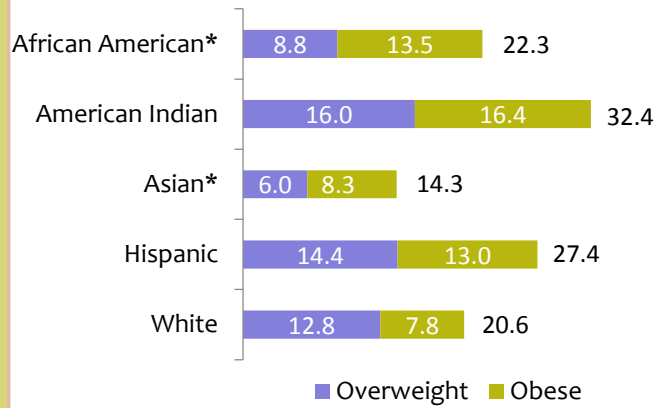


In analyzing disparities across racial and ethnic groups by grade, American Indian students continue to have the highest obesity prevalence compared to their Hispanic and White counterparts. By third grade, these differences are statistically significant. In 2015, nearly one-in-three (31%) of American Indian third graders was obese, compared to 20.4% of Hispanic and 9.8% of White third graders. Further, American Indian third grade students were significantly more likely to be obese than overweight; this was not the case for American Indian kindergartners or Hispanic and White kindergarten and third grade students (Fig. 5). See Tables 2 & 3 for data on obesity prevalence by race/ethnicity.

Data collected through annual childhood obesity surveillance continues to be inadequate for the systematic study of disparities faced by African Americans and Asians, who comprise 2.5% and 1.7% of New Mexico's population, respectively. Due to small sample sizes, 2014 and 2015 data have been aggregated; some estimates may be statistically unstable and comparisons cannot be made across groups. Aggregated data do indicate, consistent with previous years, that obesity rates are relatively high for African American kindergarten and third grade students (13.5% and 18.5%) and relatively low for Asian kindergarten and third grade students (8.3% and 8.5%) (Fig. 4 & 5).

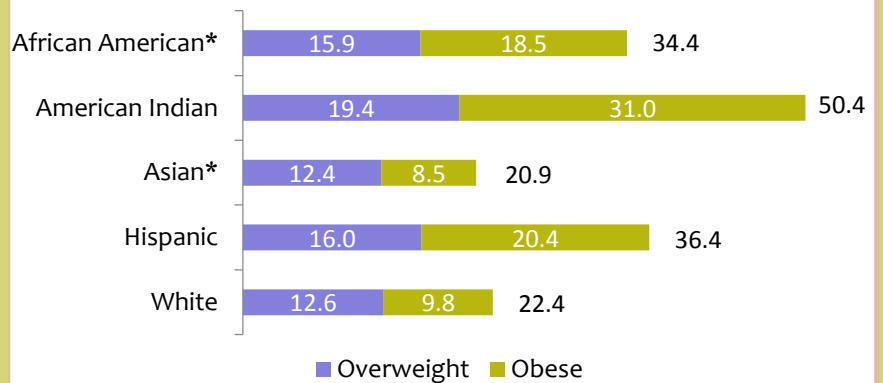
American Indian, Hispanic, and White kindergarten and third grade students have experienced a decline in obesity prevalence when 2015 rates are compared to 2010. This decrease has been most drastic among White third grade students, going from 17.8% in 2010 to 9.8% in 2015, a 44.9% change over the six years (Fig. 6). American Indian kindergarten students have experienced a similar decline, going from 25.5% in 2010 to 16.4% in 2015, a 35.7% change over the six years (Table 2). Hispanic kindergarten and third grade students, however, have experienced little change in either obesity or combined obesity/overweight prevalence between 2010 and 2015. This is especially troubling considering this group comprises the majority of elementary school-age children in New Mexico. See Tables 2 & 3 for data on obesity prevalence by race/ethnicity.

Fig. 4 Percent of **Kindergarten** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2015



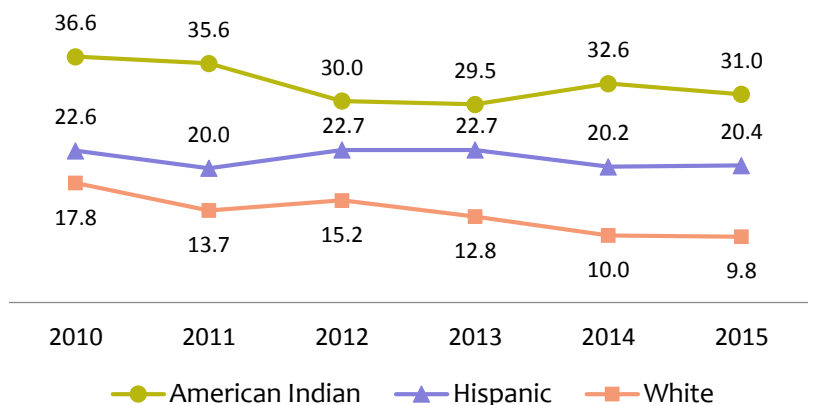
*Due to small sample sizes, African American and Asian data has been aggregated to include 2014 and 2015 BMI results. Some estimates may fluctuate widely across time.
African American n=170 Asian n=133

Fig. 5 Percent of **Third Grade** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2015



*Due to small sample sizes, African American and Asian data has been aggregated to include 2014 and 2015 BMI results. Some estimates may fluctuate widely across time.
African American n=195 Asian n=129

Fig. 6 Percent of **Third Grade** Students Obese by Race/Ethnicity, New Mexico, 2010-2015



Childhood Obesity Prevalence Trends, 2010-2015

Table 1: Percent of Students Obese and Overweight by Grade, 2010-15

	Kindergarten						Third Grade					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Obese	13.2	15.0	14.6	13.7	11.6	11.8	22.6	21.9	21.4	19.9	18.1	18.9
Combined Overweight/Obese	30.3	30.5	28.1	27.7	24.7	25.6	38.7	38.6	36.8	34.7	34.2	34.4
Number in Sample	1,800	1,885	2,116	3,928	3,192	3,863	1,642	1,768	1,833	3,803	3,395	4,304

Table 2: Percent of Kindergarten Students Obese and Overweight by Race/Ethnicity, 2010-15

	American Indian						Hispanic						White					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Obese	25.5	20.6	23.8	21.6	23.5	16.4	12.9	17.7	14.2	14.6	11.8	13.0	8.8	8.7	11.8	9.3	6.7	7.8
Combined Overweight/Obese	41	42.7	36.8	39.6	37.4	32.4	31.8	31.5	29.2	28.6	26.2	27.4	24.8	21.9	22.1	22.2	18.7	20.6
Number in Sample	232	369	222	339	392	475	927	842	1,279	2,417	1,738	2,178	466	532	505	1,018	881	1,052

Table 3: Percent of Third Grade Students Obese and Overweight by Race/Ethnicity, 2010-15

	American Indian						Hispanic						White					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Obese	36.6	35.6	30	29.5	32.6	31.0	22.6	20	22.7	22.7	20.2	20.4	17.8	13.7	15.2	12.8	10	9.8
Combined Overweight/Obese	55.4	49.7	50	47.3	52.8	50.4	39.4	39.7	39.3	38.8	36	36.4	31.7	26.5	26.5	25.1	24.9	22.4
Number in Sample	194	342	201	291	379	580	983	802	1,038	2,262	1,915	2,452	369	460	495	1,086	947	1,059

Table 4: Percent of Students Obese and Overweight by Gender, 2010-15

	Females						Males					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Obese	16.8	17	15.4	15.6	13.1	13.7	19	19.5	20.3	17.7	16.5	17.2
Combined Overweight/Obese	33.6	32.9	29.9	30.1	28.4	29.1	35.4	35.8	34.6	31.9	30.5	31.2
Number in Sample	1,757	1,776	1,977	3,730	3,246	3,948	1,685	1,877	1,972	4,001	3,341	4,219