

New Mexico Childhood Obesity 2014 Update

To better understand and address the problem of childhood obesity, the New Mexico Department of Health (NMDOH) established a surveillance system in 2010 using Body Mass Index (BMI) percentile to measure the prevalence of childhood obesity over time, identify at-risk populations, and assess the progress of prevention efforts across the State. In the Fall of 2014, BMI data were collected on 6,587 kindergarten and third grade students in 54 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.

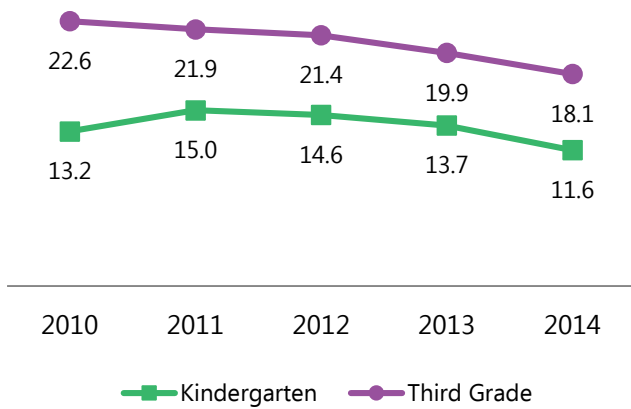


Key Findings

- Obesity prevalence among third grade students continues to decrease (*from 22.6% in 2010 to 18.1% in 2014*), corresponding to a 19.9% change over five years. A similar downward trend occurs when obesity and overweight prevalence are combined (*from 38.7% in 2010 to 34.2% in 2014*), corresponding to an 11.6% change.
- For the first year, kindergarten obesity prevalence is lower than it was in 2010 (*11.6% compared to 13.2% in 2010*), corresponding to a 12.1% change over five years. A similar downward trend occurs when obesity and overweight prevalence are combined (*from 30.3% in 2010 to 24.7% in 2014*), corresponding to an 18.5% change over five years.
- Rates of obesity and overweight remain high; more than one-in-three third graders is either overweight or obese. American Indian students continue to have the highest rates (*52.8% of third graders are either overweight or obese*), followed by Hispanics (*36%*).



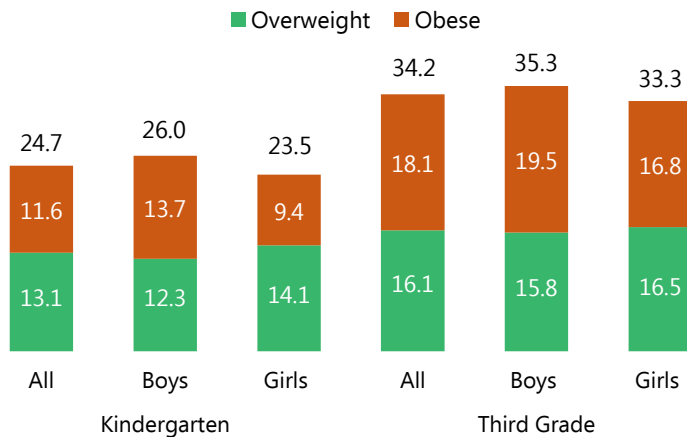
Fig. 1: Percent of Students Obese by Grade, New Mexico, 2010-2014



Obesity prevalence among third grade students decreased for the fifth consecutive year; rates have gone from 22.6% in 2010 to 18.1% in 2014, corresponding to a 19.9% change over the five years. Obesity prevalence among kindergarten students also appears to be on the decline. For the first year, kindergarten obesity prevalence is lower than it was in 2010 (11.6% compared to 13.2% in 2010), corresponding to a 12.1% change over five years (Fig. 1).

Despite this downward trend, obesity and overweight prevalence rates continue to remain high. In 2014, one-in-four kindergarten students was overweight or obese. Prevalence rates were significantly higher among third graders; over one-in-three was overweight or obese (Fig. 2). Please see Table 1 for data on obesity prevalence by grade. Of note, in the 1970s only 15% of children were overweight or obese.

Fig. 2: Percent of Students Overweight and Obese by Grade and Gender, New Mexico, 2014



Third grade students measured in 2014 were sampled from roughly the same general birth group as the 2011 kindergarten student sample, providing a clearer picture of the shift in weight categories between kindergarten and third grade. 15% of kindergartners were obese in 2011 and by 2014, 18.1% of students in this birth group (now third graders) were obese (Fig. 1). This 21% upward shift in obesity prevalence over time highlights the need to address and prevent excessive weight gain and encourage healthy lifestyles at an early age.

Slightly higher proportions of kindergarten and third grade boys were obese than girls. In 2014, 13.7% of kindergarten boys were obese compared to 9.4% of girls. Similarly, 19.5% of third grade boys were obese compared to 16.8% of girls (Fig. 2). Obesity and overweight prevalence rates have decreased in both genders from 2010 to 2014. Please see Table 4 for data on obesity prevalence by gender.



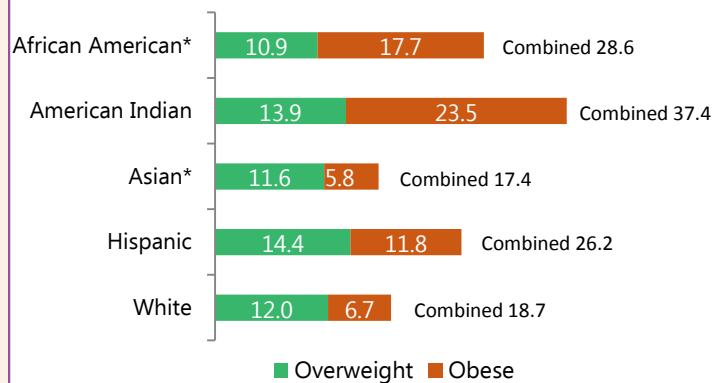
In examining disparities across racial and ethnic groups by grade level, American Indian kindergarten and third grade students continue to have significantly higher obesity prevalence rates (23.5% and 32.6%, respectively) compared to Hispanic (11.8% and 20.2%) and White (6.7% and 10%) students (Fig. 3 and 4). American Indian kindergartners were also significantly more likely to be obese than overweight, which was not the case for Hispanic and White students. In addition, more than half (52.8%) of American Indian third graders were either overweight or obese, compared to 36% of Hispanic and 24.9% of White third grade students (Fig. 4). Please see Tables 2 and 3 for data on obesity prevalence by race/ethnicity.

Data collected through annual childhood obesity surveillance remain inadequate for the systematic study of disparities faced by African Americans and Asians, who comprise 2.5% and 1.6% of New Mexico's population, respectively. Due to small sample sizes, NMDOH has been unable to report on these groups annually. Although 2013 and 2014 data have been aggregated, some estimates may be statistically unstable and comparisons cannot be made between groups. Aggregated data do indicate that obesity rates are high for African American kindergarten and third graders (17.7% and 17.1%, respectively) and relatively low for Asian kindergarten and third grade students (5.8% and 15.4%, respectively) (Fig. 3 and 4).

In Figure 5, obesity trends appear to be more inconsistent among American Indian third graders compared to Hispanic and White students, which is likely due to smaller annual sample sizes. All groups have experienced a slight decrease when 2014 rates are compared to 2010; white students potentially contribute the most to the overall decline.

Although no consistent pattern can be identified at this time, obesity rates do remain high. This points to the continuing need for environmental, systems, and policy changes that support healthy communities and healthy children, with a particular focus on those groups most affected by overweight and obesity.

Fig. 3: Percent of **Kindergarten** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2014

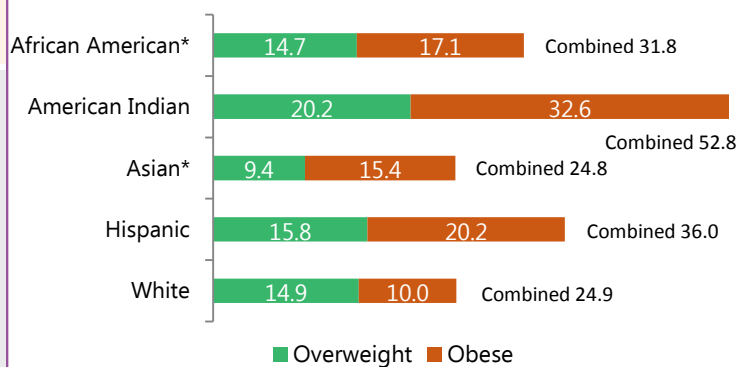


*Due to small sample sizes, African American and Asian data has been aggregated to include 2013 and 2014 BMI results. Some estimates may fluctuate widely across time.

African American n=175

Asian n=121

Fig. 4: Percent of **Third Grade** Students Overweight and Obese by Race/Ethnicity, New Mexico, 2014

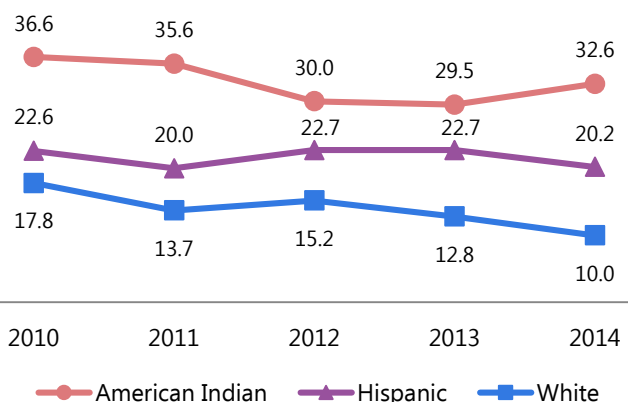


*Due to small sample sizes, African American and Asian data has been aggregated to include 2013 and 2014 BMI results. Some estimates may fluctuate widely across time.

African American n=170

Asian n=117

Fig. 5: Percent of **Third Grade** Students Obese by Race/Ethnicity, New Mexico, 2010-2014



Childhood Obesity Prevalence Trends 2010-14

Table 1: Percent of Students Overweight or Obese by Grade, 2010-14

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

Table 2: Percent of Kindergarten Students Overweight or Obese by Race/Ethnicity, 2010-14

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

Table 3: Percent of Third Grade Students Overweight or Obese by Race/Ethnicity, 2010-14

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

Table 4: Percent of Students Overweight or Obese by Gender, 2010-14

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