

Alaska Physical Activity & Nutrition Unit: Student Weight Status

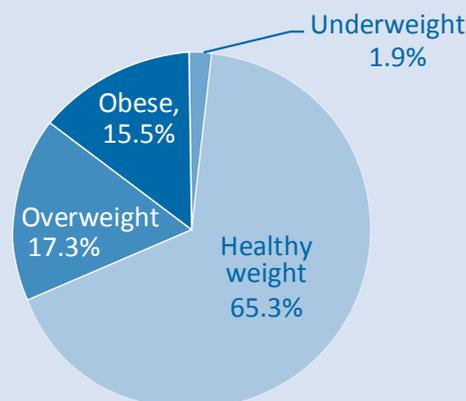
MATANUSKA-SUSITNA BOROUGH SCHOOL DISTRICT

2018-2019 District Summary

Over the 2018-19 school year, Matanuska-Susitna Borough School District staff measured the height and weight of 5,905 students (79% of all enrolled) in grades K, 1, 3, 5, and 7. With measurement results scaled to represent each grade's enrolled population:

- 17.3% of students were overweight (BMI 85th to <95th percentile)
- 15.5% of students were obese (BMI ≥ 95th percentile)
- 4.3% of students were severely obese, with a BMI ≥120% of the 95th percentile
- The prevalence of obesity was significantly higher among male students (16.9%) than among female students (14.1%).

Figure 1: Student Weight Status among MSBSD Students, Grades K, 1, 3, 5 & 7, 2018-2019



Weight Status by Grade

At least 11% of students were obese in all grades sampled, placing them at higher risk for weight related diseases such as type 2 diabetes, heart disease, and several cancers.¹ The percentage of students either overweight or obese was highest amongst 7th-grade students, as was the prevalence of obesity alone. These rates were both lowest among 1st-grade students.

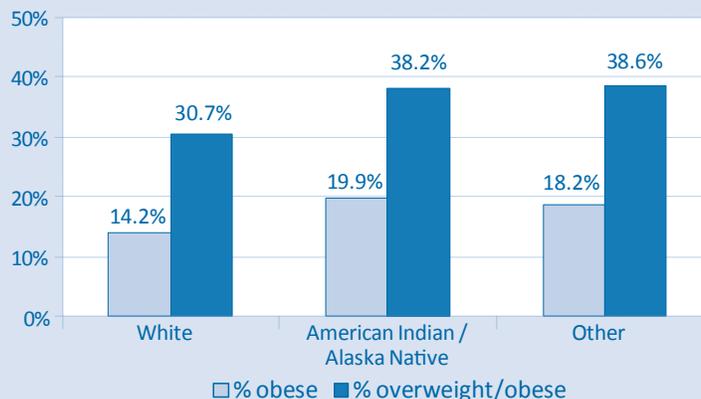
Figure 2: Prevalence of Overweight and Obesity, by Grade, among MSBSD Students, Grades K, 1, 3, 5 & 7, 2018-2019



Disparities in Weight Status

Reporting by race allows us to identify racial disparities in order to address and reduce them. The prevalence of overweight/obesity was significantly higher among American Indian / Alaska Native students (38.2%) and students of other races (38.6%) than among white students (30.7%). Enrollment in school meal programs is a proxy measure of low socioeconomic status (SES). Overweight/obesity prevalence was significantly higher among low-SES students (35.4%) than among higher-SES students (30.4%) (see Table 4).

Figure 3: Prevalence of Overweight and Obesity, by Race/Ethnicity, among MSBSD Students, Grades K, 1, 3, 5 & 7, 2018-2019



Alaska Physical Activity & Nutrition Unit: Student Weight Status

PREVALENCE OF OVERWEIGHT AND OBESITY (WITH 95% CONFIDENCE INTERVALS) MATANUSKA-SUSITNA BOROUGH STUDENTS IN GRADES K, 1, 3, 5, AND 7

Table 1: Weight Status Overall and by Sex, 2018-2019

Sex	% Overweight & Obese	% Overweight	% Obese
Overall	32.8 (30.8-34.8)	17.3 (16.1-18.5)	15.5 (14.2-16.9)
Male	33.3 (31.1-35.5)	16.4 (15.0-17.9)	16.9 (15.1-18.7)
Female	32.2 (29.7-34.9)	18.2 (16.3-20.2)	14.1 (12.7-15.6)

Table 2: Weight Status by Grade, 2018-2019

Grade	% Overweight & Obese	% Overweight	% Obese
Kindergarten	29.3 (26.3-32.4)	16.9 (14.3-19.8)	12.4 (11.0-13.9)
1st	27.0 (24.7-29.4)	15.4 (13.5-17.6)	11.6 (10.1-13.2)
3 rd	31.4 (27.9-35.1)	16.3 (13.8-19.3)	15.0 (12.8-17.6)
5 th	35.9 (33.0-38.9)	17.1 (14.9-19.6)	18.8 (15.6-22.3)
7 th	39.9 (36.6-43.4)	20.4 (17.8-23.2)	19.6 (17.0-22.4)
K-8 combined*	32.8 (30.8-34.8)	17.3 (16.1-18.5)	15.5 (14.2-16.9)

* Overweight and obesity prevalence for grades K-8 are comparable to [Healthy Alaskans 2020 Statewide Leading Health Indicators](#).

Table 3: Weight Status by Race/Ethnicity, 2018-2019[†]

Race/Ethnicity	% Overweight & Obese	% Overweight	% Obese
White	30.7 (28.5-32.9)	16.5 (15.1-18.0)	14.2 (12.9-15.6)
American Indian / Alaska Native	38.2 (34.5-42.1)	18.3 (15.4-21.7)	19.9 (17.4-22.6)
Other	38.6 (35.4-41.9)	20.4 (17.6-23.6)	18.2 (15.1-21.7)

[†] Reporting by race allows us to identify racial disparities in order to address and reduce them.

Table 4: Weight Status by Student Socioeconomic Status (SES), 2018-2019[§]

Student SES	% Overweight & Obese	% Overweight	% Obese
Free/Reduced Lunch Enrolled	35.4 (33.0-37.9)	18.1 (16.2-20.2)	17.3 (15.7-19.1)
Not Enrolled	30.4 (28.2-32.7)	16.5 (15.1-18.1)	13.9 (12.4-15.5)

[§] Enrollment in free- and reduced-price meal programs is a proxy measure of low socioeconomic status.

Table 5: Weight Status by School Year

School Year	% Overweight & Obese	% Overweight	% Obese
2003-04	32.6 (27.3-38.4)	17.1 (14.1-20.6)	15.5 (12.4-19.2)
2004-05	33.4 (29.9-37.1)	18.2 (16.1-20.5)	15.2 (13.1-17.6)
2005-06	31.2 (28.6-34.0)	17.1 (15.0-19.5)	14.1 (12.3-16.2)
2006-07	32.8 (29.8-35.9)	18.7 (16.8-20.8)	14.1 (12.2-16.2)
2007-08	31.5 (28.8-34.3)	16.3 (14.8-17.9)	15.2 (13.7-16.8)
2008-09	32.4 (30.2-34.6)	18.4 (17.0-20.0)	13.9 (12.4-15.6)
2009-10	28.2 (26.1-30.5)	15.0 (13.7-16.3)	13.3 (11.9-14.8)
2010-11	30.6 (28.1-33.2)	16.2 (14.8-17.6)	14.4 (12.7-16.3)
2011-12	30.9 (28.8-33.1)	17.2 (15.8-18.7)	13.7 (12.2-15.4)
2012-13	30.1 (27.0-33.3)	16.4 (15.0-17.9)	13.7 (11.7-15.9)
2013-14	30.7 (28.4-33.0)	16.8 (15.6-18.0)	13.9 (12.3-15.6)
2014-15	31.3 (28.6-34.1)	16.9 (15.5-18.5)	14.4 (12.8-16.1)
2015-16	31.6 (29.3-33.9)	16.5 (15.4-17.7)	15.1 (13.6-16.7)
2016-17	30.5 (28.4-32.7)	16.5 (15.4-17.7)	14.0 (12.7-15.5)
2017-18	33.0 (30.7-35.3)	16.9 (15.6-18.2)	16.1 (14.5-17.7)
2018-19	32.8 (30.8-34.8)	17.3 (16.1-18.5)	15.5 (14.2-16.9)

Reference: ¹Institute of Medicine (2005). Committee on Prevention of Obesity in Children and Youth. Preventing childhood obesity: health in balance. Washington, DC: The National Academies Press.

Percentages may not sum precisely due to rounding.



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