Alaska Obesity Prevention and Control: Student Weight Status

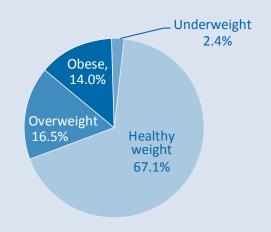
MATANUSKA-SUSITNA BOROUGH SCHOOL DISTRICT

2016-2017 District Summary

Over the 2016-17 school year, Matanuska-Susitna Borough School District staff measured the height and weight of 5,830 students (78% of all enrolled) in grades K, 1, 3, 5, and 7. With measurement results scaled to represent each grade's enrolled population:

- 16.5% of students were overweight (BMI 85th to <95th percentile)
- 14.0% of students were obese (BMI ≥ 95th percentile)
- 3.5% of students were severely obese, with a BMI ≥120% of the 95th percentile
- The prevalence of overweight/obesity was similar between male students (30.7%) and female students (30.3%).

Figure 1: Student Weight Status among MSBSD Students, Grades K, 1, 3, 5 & 7, 2016-2017



Weight Status by Grade

At least 25% of students were either overweight or obese in all grade ranges, placing them at higher risk for weight related diseases such as type 2 diabetes, heart disease, and other chronic diseases¹. The percentage of students either overweight or obese was highest amongst 7th-grade students, while the prevalence of obesity alone was highest for 5th-graders. These rates were lowest among 1st-grade and Kindergarten students, respectively .

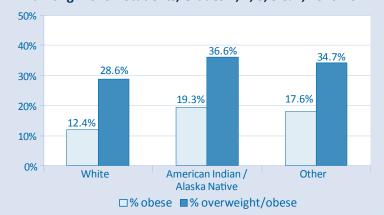
Figure 2: Prevalence of Overweight and Obesity, by Grade, among MSBSD Students, Grades K, 1, 3, 5 & 7, 2016-2017



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 (36.6%) and students of other races (34.7%) than among white students (28.6%). Enrollment in school meal programs is a proxy measure of low socioeconomic status (SES). Overweight/obesity prevalence was significantly higher among low-SES students (33.0%) than among higher-SES students (30.7%) (see Table 4).

Figure 3: Prevalence of Overweight and Obesity, by Race/Ethnicity, among MSBSD Students, Grades K, 1, 3, 5 & 7, 2016-2017



Alaska Obesity Prevention and Control: 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, 2016-2017

| Sex | % Overweight & Obese | % Overweight | % Obese |
|---------|----------------------|------------------|------------------|
| Overall | 30.5 (28.4-32.7) | 16.5 (15.4-17.7) | 14.0 (12.7-15.5) |
| Male | 30.7 (28.4-33.1) | 16.1 (14.6-17.7) | 14.6 (13.1-16.3) |
| Female | 30.3 (27.9-32.8) | 16.9 (15.5-18.4) | 13.4 (11.5-15.5) |

Table 2: Weight Status by Grade, 2016-2017

| Grade | % Overweight & Obese | % Overweight | % Obese |
|-----------------|----------------------|------------------|------------------|
| Kindergarten | 26.9 (23.1-31.0) | 16.1 (13.6-18.9) | 10.8 (8.9-13.0) |
| 1st | 25.5 (22.7-28.4) | 14.6 (12.5-16.9) | 10.9 (9.1-13.1) |
| 3 rd | 29.2 (26.4-32.2) | 16.2 (14.1-18.6) | 13.0 (10.8-15.7) |
| 5 th | 35.1 (31.7-38.6) | 16.7 (14.3-19.4) | 18.4 (16.3-20.7) |
| 7 th | 35.8 (32.4-39.3) | 18.9 (16.7-21.4) | 16.8 (14.5-19.5) |
| K-8 combined* | 30.5 (28.4-32.7) | 16.5 (15.4-17.7) | 14.0 (12.7-15.5) |

^{*} 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, 2016-2017[†]

| Race/Ethnicity | % Overweight & Obese | % Overweight | % Obese |
|---------------------------------|----------------------|------------------|------------------|
| White | 28.6 (26.2-31.0) | 16.2 (14.8-17.7) | 12.4 (10.9-14.0) |
| American Indian / Alaska Native | 36.6 (33.8-39.5) | 17.4 (15.4-19.6) | 19.3 (16.7-22.1) |
| Other | 34.7 (30.8-38.7) | 17.1 (14.5-20.0) | 17.6 (14.1-21.7) |

[†] 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), 2016-2017[§]

| Student SES | % Overweight & Obese | % Overweight | % Obese |
|-----------------------------|----------------------|------------------|------------------|
| Free/Reduced Lunch Enrolled | 33.0 (32.0-34.1) | 17.6 (16.9-18.3) | 15.5 (14.7-16.2) |
| Non-Enrolled Students | 30.7 (29.9-31.5) | 16.8 (16.3-17.4) | 13.9 (13.4-14.4) |

[§] 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) |

Percentages may not sum precisely due to rounding.

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.



