



School Height & Weight Report Summary

South Dakota Students
2016-2017 School Year



SOUTH DAKOTA
DEPARTMENT OF HEALTH

South Dakota
Department of Health

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For the full report, go to doh.sd.gov/statistics
For additional information, visit HealthySD.gov

The Department of Health (DOH), in partnership with the Department of Education (DOE), completed its 18th year of collecting data on the height and weight of students in South Dakota schools. This report summarizes obesity data collected on 33.4 percent (49,727 students) of the state's students from 160 schools during the 2016-2017 school year. The full report can be found on the DOH and DOE websites.

Although slightly different age group categories are used for analysis, South Dakota's school-age obesity prevalence is currently lower than national trends. Approximately 17 percent of children and adolescents aged 2 to 19 years are obese in the United States. In comparison, 16 percent of South Dakota children and adolescents aged 5 to 19 years are obese. Since 1980, however, the obesity prevalence for children and adolescents has nearly tripled. While obesity trends in recent years have leveled off, they remain high for school-age children and are not returning to the lower levels seen in the 1970s and 1980s.

There are significant racial disparities in obesity prevalence. For American Indian children and adolescents in South Dakota, the obese percent is 29.3 compared to 13.7 percent for whites. While American Indian students comprise 15.1 percent of the South Dakota enrollment population, they represent 7.6 percent of the students surveyed.



The DOH is able to provide school-specific data, aggregate data in this report and county-specific data to schools who submitted measurements on 100 or more students. Schools submitting data on less than 100 students are given the aggregate data in this report and county-specific data, provided there are 100 or more student measurements from all schools in that county.

Data is analyzed for short stature, underweight, overweight and obesity using the current national standards. This document focuses on excess weight as South Dakota students as a whole are neither short nor underweight.

The DOH began using the definitions of overweight and obesity beginning with the 2006-2007 report to describe elevated body mass index (BMI)-for-age for children and adolescents. BMI-for-age is the preferred term to describe the weight status of children and adolescents.

Children with a BMI-for-age between the 85th and 94th percentile are described as "overweight". If a child is at or above the 95th percentile, the term to describe the child is "obese".

Obesity in children and adolescents is associated with increased risk of psychological or psychiatric problems, cardiovascular risk factors, chronic inflammation, Type 2 diabetes mellitus and asthma. Excess weight in childhood and adolescence usually persists into adulthood. The higher the BMI in childhood, the greater the chance the child will be obese as an adult.



One of the objectives of the national Healthy People 2020 initiative is to "reduce the proportion of children and adolescents who are considered obese."

The national target for the 6 to 11 year old age group is 15.7 percent or less and the 12 to 19 year old age group is 16.1 percent or less. The DOH has also identified a South Dakota goal to reverse the trend and reduce the percent of school-age children and adolescents. Our state is still working toward the South Dakota Department of Health 2020 goal of 14 percent overweight and obese in children and adolescents.

Child overweight and child obesity is a multi-faceted problem that should be addressed by promoting healthy eating, increasing physical activity and decreasing inactivity. While it will take all South Dakotans working together to overcome this increasing problem, schools can play a key role in providing education and healthy environments.

**Overweight and Obese Body Mass Index, by Age
School Year 2016-2017**

Age	Number of Students	Overweight	Obese	Overweight and Obese Combined
5-8 years	18,480	14.8%	12.8%	27.6%
9-11 years	16,255	15.7%	17.4%	35.5%
12-14 years	11,793	17.3%	17.9%	35.2%
15-19 years	3,199	15.3%	19.8%	35.1%
Total	49,727	15.7%	16.0%	31.7%

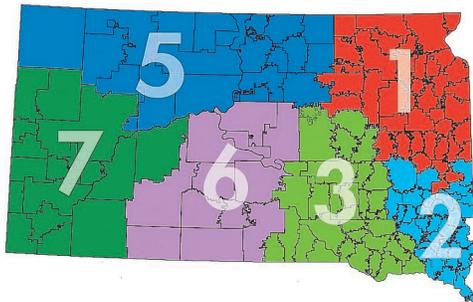
**Overweight and Obese Body Mass Index, by Race
School Year 2016-2017**

Race	Number of Students	Overweight	Obese	Overweight and Obese Combined
White	34,383	15.2%	13.7%	30.2%
American Indian	3,803	18.4%	29.3%	47.7%
Other Races	7,078	16.0%	19.2%	35.2%
Multi-race/Unspecified	4,463	17.4%	16.7%	34.1%
Total	49,727	15.7%	16.0%	31.7%

**Overweight and Obese Body Mass Index, by Gender
School Year 2016-2017**

Gender	Number of Students	Overweight	Obese	Overweight and Obese Combined
Female	24,162	16.4%	14.9%	31.3%
Male	25,565	15.1%	17.0%	32.1%

Regional Data



As in previous years, the data was analyzed by education service agency (ESA) regions. These educational regions reflect public, private and tribal schools located in the geographic areas in the map to the left.

Regions 2 and 7 are the only regions that are significantly below the state low confidence interval rate of 15.7 percent. Regions 3, 5 and 6 are significantly higher than the state rate. Region 1 is not significantly different as it falls into the statewide range of 15.7 to 16.4 percent.

**Overweight and Obese Body Mass Index, by Region
School Year 2016-2017**

Region	Number of Students	Overweight	Obese	Overweight and Obese Combined
1	10,944	16.5%	16.8%	33.3%
2	21,712	15.0%	14.2%	29.2%
3	6,139	18.2%	19.3%	37.5%
5	1,271	15.0%	31.4%	46.4%
6	3,047	16.6%	19.5%	36.1%
7	6,614	14.2%	12.4%	26.6%
Total	49,727	15.7%	16.0%	31.7%



Strong School Wellness Policies and Quality Physical Education Standards Help Make South Dakota Schools “Good & Healthy”

Schools play a critical role in promoting the health and safety of young people and helping them establish lifelong healthy behaviors. A goal of the South Dakota Department of Health (SD DOH) is to reduce the prevalence of obesity in school-age children and adolescents (ages 5 to 19) from the current 16.1 percent to 14 percent by 2020.

The SD DOH receives funds from the Centers for Disease Control and Prevention (CDC) to support the implementation of two school-based environmental approaches for the prevention of obesity and other chronic diseases in school-age children. SD DOH refers to the CDC grant as the Good & Healthy South Dakota grant. Two strategies are identified by CDC and included in the Good & Healthy South Dakota grant:

- 1.) Promote the adoption of food service guidelines and nutrition standards in schools; and
- 2.) Promote the adoption of physical education and physical activity in schools.

Through a collaborative effort with the South Dakota Department of Education (SD DOE), the SD DOH provides training, technical assistance and evidenced-based resources to schools/school districts across the state to help create and sustain healthy school environments. During the 2017 project year, the SD DOH and the SD DOE:

Collaborated with the SD DOE Child and Adult Nutrition Services (CANS) and Action for Healthy Kids to provide *School Wellness Policy* training, which was designed to help school districts comply with the new school wellness policy rules; strengthen and effectively implement school wellness policies; and gain access to tools and tips sheets and other evidence-based resources. Participants included 27 school personnel representing 15 local education agencies (LEAs) and eight South Dakota State University (SDSU) Extension field staff. Extension field staff were trained in order to provide technical assistance to school districts within their geographical region of the state. School districts were reimbursed for substitute teacher pay through the Good & Healthy South Dakota grant.

Utilized SHAPE America’s national trainers to provide two, six-hour trainings on implementing the *South Dakota Standards and Grade-level Outcomes for K-12 Physical Education*. The trainings addressed the knowledge and skills students need to establish and maintain physically active lifestyles throughout childhood and adolescence and into adulthood. Forty (40) elementary and 34 secondary physical education teachers representing 37 LEAs were in attendance.

Results from the 2016 South Dakota School Health Profiles Survey (*Profiles*) show the percentage of secondary schools that have implemented the following strategies for creating supportive school environments.

STRATEGY	% of Schools in 2016
Used the School Health Index or other self-assessment tool to assess school policies, activities and programs in nutrition and physical education/physical activity.	33.6%
Included objectives in the School Improvement Plan related to physical education/physical activity and nutrition.	31.0%
Have a school health council, committee or team that offers guidance on the development of policies or coordinates activities on health topics.	38.5%
Physical education teachers received professional development on physical education or physical activity.	66.7%

The Good & Healthy South Dakota grant has helped to increase efforts to serve schools and school districts and enhance coordination and collaboration among state agencies. While the SD DOH and SD DOE have made progress in creating supportive school environments for our youth, there is still much more work to be done.