Between December 2017 and April 2018, the Height/Weight Study was conducted to assess the extent of childhood obesity in Utah. First, third, and fifth grade students (n = 3,944) from 68 randomly selected public elementary schools throughout the state were weighed and measured. The data were collected to be representative of all public elementary schools in Utah. This study was first conducted in 1994, then every other year since 2006 by the Utah Department of Health, local health departments, local school districts, and school nurses. Findings from the study are as follows:

- Overall in 2018, 22.1% of students assessed were at an unhealthy weight (overweight or obese). This is similar to 2016, when the percentage was 21.5%.
- In 2018, the percentage of boys at an unhealthy weight increased steadily with each grade.
- In 2018, 10.6% of elementary school students were obese.
- In 1994, 16.9% of third graders were at an unhealthy weight. By 2018, the percentage increased to 21.6%.
- In each grade, the obesity rate for boys was close to or more than 1.5 times greater than the obesity rate for girls in 2018. (Figure 1).
- Almost 30% (29.7%) of fifth grade boys were at an unhealthy weight in 2018, the highest percentage observed of any group since the Height/Weight study began. (Figure 1).
- For boys, obesity rates doubled between 1994 and 2018, from 6.0% in 1994 to a little more than 12% in 2018 (Figure 2).

### Body Weight Terminology:

**Body Mass Index (BMI)** is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual.

**Classification of Unhealthy Weight (Barlow 2007)**

- **Overweight**  BMI ≥85th and <95th percentile for age and sex
- **Obese** BMI ≥95th percentile for age and sex

Reports prior to 2008 classified children as “at risk for overweight” with a BMI ≥ 85th and <95th percentile, and “overweight” with a BMI ≥95th. Based on the CDC 2000 Growth Charts.
The Effects of Childhood Overweight and Obesity

Childhood overweight predicts obesity later in life.¹,²
- Overweight and obese children are more likely to become obese adults.

Adult diseases are now being observed in obese children, including.³,⁴
- Hardening of arteries, high blood pressure, and high cholesterol, which can lead to heart disease
- Insulin resistance, glucose intolerance, and diabetes
- Sleep-associated breathing disorders
- Non-alcoholic fatty liver disease

Social and psychological impacts, including.⁵⁻⁹
- Social isolation
- Increased rate of suicidal thoughts and attempts associated with weight-based teasing
- Low self-esteem due to poor body image
- Increased rate of anxiety disorders and depression in overweight children
- Increased likelihood to report difficulties in school
- Reduced quality of life
- Increased likelihood of being bullied

Academic consequences.¹⁰
- Increased school absenteeism

Childhood Overweight and Obesity Prevention Strategies

The following are recommendations for preventing unhealthy weight in childhood

Children should get at least 60 minutes of physical activity daily.
- Provide safe, accessible environments in communities, schools, and child care facilities that encourage regular physical activity.

Children should eat at least 1½ to 2 cups of fruit and 1½ to 3 cups of vegetables daily.
- Ensure access to affordable, quality fruits and vegetables in communities, schools, and child care facilities.

Children should rarely have sugar-sweetened drinks and should eat few high-calorie foods with little or no nutritional value.
- Increase the availability of and access to healthy foods and drinks (including water) in neighborhoods, schools, child care facilities, and other places where children go.
- Establish nutrition standards for vending machines in schools and other places where children go.

Limit screen time (television, computer, and video games) to no more than 2 hours per day.
- Provide opportunities for schools, communities, faith-based organizations, and health care providers to support alternatives to screen time at home and school.
Recommendations:

- Implement the School Health Guidelines to Promote Healthy Eating and Physical Activity. These guidelines can be used as a foundation for developing, implementing, and evaluating school-based healthy eating and physical activity policies and practices for students. For more information, visit [www.cdc.gov/healthyschools/npao/strategies.htm](http://www.cdc.gov/healthyschools/npao/strategies.htm).

- The health of students is linked to their academic success. Create environments that support the recommended 60 minutes or more of physical activity each day for children and adolescents aged 6-17 and offer healthy eating options wherever food is sold. Find resources and tools to help your school meet nutrition standards at [www.fns.usda.gov/healthierschoolday/tools-schools-focusingsmart-snacks](http://www.fns.usda.gov/healthierschoolday/tools-schools-focusingsmart-snacks).

- Use the School Health Index (SHI): Self-Assessment and Planning Guide to identify strengths and weaknesses of school health policies and programs, create an action plan, and encourage the community in promoting better health, available at [www.cdc.gov/healthyschools/shi/introduction.htm](http://www.cdc.gov/healthyschools/shi/introduction.htm).


- The Alliance for a Healthier Generation’s Healthy Schools Program is an evidence-based initiative that aims to help create and sustain healthy environments. See how your school can adopt this framework by visiting [https://schools.healthiergeneration.org](https://schools.healthiergeneration.org).

- Ensure that school districts have a comprehensive wellness policies. For policy requirements, resources, and help, visit [www.fns.usda.gov/tn/local-school-wellness-policy-requirements](http://www.fns.usda.gov/tn/local-school-wellness-policy-requirements) or contact the Utah Action for Healthy Kids at utafhk@gmail.com.

---

**How can we impact children’s lives to change this trend?**

**By focusing on:**

- More Physical Activity
- More fruits and vegetables
- Less screen time
- Fewer high-calorie foods
- Fewer sugar-sweetened drinks
References


Resources

The Utah Department of Health (UDOH) Healthy Living Through Environment, Policy and Improved Clinical Care (EPICC) Program and Utah’s local health departments work with partners, including the Utah State Board of Education and local school districts, to provide resources and assistance to improve nutrition and physical activity policies, practices, and environments. Additional resources available at http://www.choosehealth.utah.gov/preK-12.php.

Utah Action for Healthy Kids brings partners together to improve nutrition and physical activity environments in schools by implementing school-based strategies, working with the Utah State Board of Education and local school boards to improve or develop policies including local district wellness policies. For more information, contact Utah Action for Healthy Kids at utahfk@gmail.com.

Acknowledgments

The Utah Department of Health would like to recognize the following school districts for participating in the collection of statewide data: Alpine, Box Elder, Cache, Canyons, Davis, Emery, Granite, Jordan, Murray, North Sanpete, Nebo, Ogden, Park City, Piute, Provo, South Sanpete, South Summit, Salt Lake City, Tintic, Tooele, Uintah, Wasatch, Washington, and Weber. We would also like to thank participating local health districts and school nurses.

Contact Information

Healthy Living Through Environment, Policy and Improved Clinical Care (EPICC) Program
Bureau of Health Promotion
Utah Department of Health
(801) 538-6229 or www.choosehealth.utah.gov