

Utah's Elementary School Height and Weight Measurement Project

Submitted by Patrice Isabella, Utah Department of Health, Bureau of Health Promotion, Healthy Living Through Environment, Policy, and Improved Clinical Care (EPICC) Program

Background/Introduction

Childhood overweight and obesity is a problem nationwide. To quantify the extent of this problem in Utah and to monitor response to intervention, a statewide prevalence rate must be determined.

Project Goals

Determine the prevalence of overweight and obesity among elementary school students in Utah, monitor trends over time, share results with partners, stakeholders, and policymakers.

Methods

Conducting a statewide census of students' Body Mass Index (BMI) is not feasible in Utah Schools. The Utah Department of Health (UDOH) estimates childhood overweight and obesity on the basis of a representative random sample of elementary school students. The BHP epidemiologist used data from a 2002 pilot study to accurately determine the sample size and number of schools that were required to calculate a reliable statewide estimate and to establish sentinel grades. Every two years from 2006 through 2014, data were collected by school nurses and local health department staff in 69 selected schools. In each school, students in one first, third, and fifth grade class were weighed and measured between January 1 and March 31, after obtaining parental consent (active or passive, at the discretion of the principal). UDOH provided a Tanita digital scale, portable stadiometer, measurement protocol, and data collection forms to each school. The data include students' height, weight, date of birth, and sex. The data are returned to UDOH for analysis. Results are published in a 4-page report and shared with school nurses, administrators, stakeholders, and policymakers.

Results

In 2014, 11.9% of students were overweight (BMI $\geq 85^{\text{th}}$ and $< 95^{\text{th}}$ percentile for age and sex), and 8.9% were obese ($\geq 95^{\text{th}}$ percentile). More boys than girls were overweight and obese in each grade. The percentage of boys at an unhealthy weight (overweight or obese) increased dramatically from 1st to 5th grade. The prevalence of overweight and obesity did not change significantly between 2006 and 2014.

Summary/Discussion

One in five elementary school students in Utah is at an unhealthy weight. Obesity prevention strategies must be implemented in early childhood and throughout elementary school, especially targeting boys.

People involved in UDOH:

BHP/EPICC staff: Patrice Isabella, Nutrition Coordinator; Catherine Sparks, School Nurse Liaison; Mike Friedrichs, Epidemiologist; Carolyn Croxall, Office Tech
Salt Lake County Health Department: Terri Sory

School nurses in 66 schools throughout Utah