
December 26, 2012 / Volume 308 / No. 24

*The data for this study is from the Pediatric Nutrition Surveillance System (PedNSS), which includes almost 50% of preschool children eligible for federally funded maternal and child health and nutrition programs, primarily the WIC Program. The study population included 27.5 million children aged 2 through 4 years from 30 states and the District of Columbia that consistently reported data to PedNSS from 1998-2010.

Extreme Obesity and Obesity decline among low-income preschool children

- The prevalence of extreme obesity:
  - From 2003 through 2010, decreased slightly from 2.22% to 2.07%
  - From 1998 through 2003, increased from 1.75% to 2.22%

- The prevalence of obesity:
  - From 2003 through 2010, decreased slightly from 15.21% to 14.94%
  - From 1998 through 2003, increased from 13.05% to 15.21%

Race

- The prevalence of extreme obesity from 2003 through 2010 decreased in all groups except American Indians/Alaska Natives; and the greatest decreases were among Asian/Pacific Islander children.

- The prevalence of extreme obesity from 1998 through 2003 increased in all racial/ethnic groups except Asians/Pacific Islanders; and the greatest average annual increases were among non-Hispanic whites.

Age

- From 1998 through 2003, the prevalence of extreme obesity increased among low-income children aged 2 years, 3 years, and 4 years; the greatest average annual increase was among 4-year-olds.

- From 2003 through 2010, the prevalence of extreme obesity decreased among low-income children aged 2 years, 3 years, and 4 years; the greatest decrease was among 2-year-olds.
Gender

- From 1998 through 2003, the prevalence of extreme obesity increased among boys and girls aged 2-4 years living in low-income families.
- From 2003 through 2010, the prevalence of extreme obesity decreased from 2.17% to 2.01% among boys and from 2.27% to 2.14% among girls.

Risk Factors

- Childhood obesity has been associated with cardiovascular risk factors, increased health care costs, and premature death.
- The prevalence of cardiovascular risk factors increases with severity of childhood obesity.
- Children who are obese or extremely obese during early childhood are also likely to be obese during middle or late childhood and adulthood.
- Obese adults are at increased risk for stroke and many chronic diseases, including coronary heart disease, hypertension, type 2 diabetes, and certain types of cancer.

Obesity and Extreme Obesity defined

A child's weight status is determined using an age- and sex-specific percentile for BMI (Body Mass Index), rather than the BMI categories used for adults, because children's body composition varies as they age and varies between boys and girls. The weight status of children 2 years and older is defined based on the sex-specific smoothed percentile curves for BMI-for-age in the 2000 CDC growth charts.

- Obesity is a BMI at or above the 95th percentile for children of the same age and sex. For example, a 3-year-old boy of average height who weighs more than 37 pounds would be considered obese.

- Extreme obesity is defined as a BMI at or above 120% of the 95th percentile for children of the same age and sex. For example, a 3-year-old boy of average height who weighs more than 44 pounds would be classified as extremely obese.