



# CHRONIC DISEASE BURDEN UPDATE

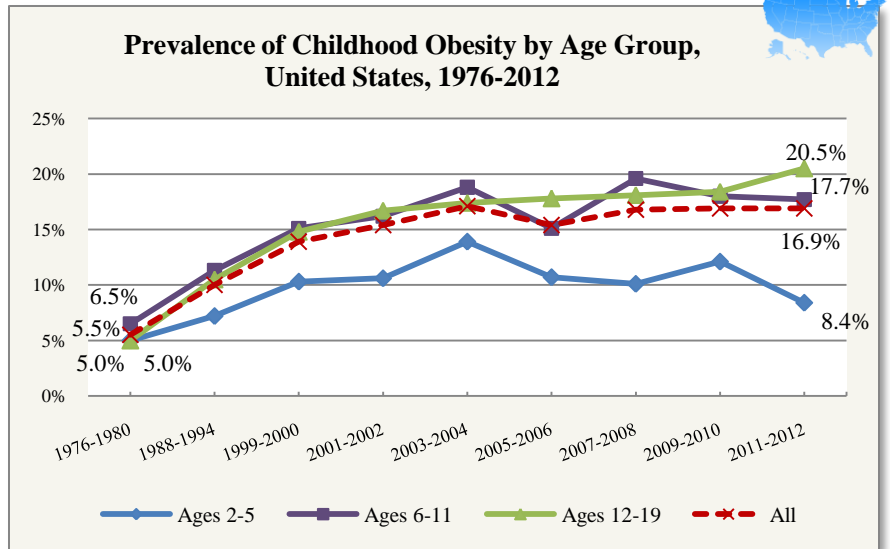
September is National Childhood Obesity Awareness Month.

Childhood obesity has been called one of the most serious public health challenges of the 21st century. Childhood overweight and obesity affects more than 30 percent of children in the United States and in Illinois. Childhood obesity can profoundly affect children's physical health, social and emotional well-being, and self esteem.

## OBESITY TRENDS IN THE U.S.

Over the last 30 years the prevalence of childhood (ages 2-19) obesity in the U.S. has tripled from 5.5 percent in 1976 to 17 percent in 2012. The rate of children who are overweight also increased during this time, from 10 to 15 percent. That means, in a classroom with 28 children, five will be obese and four will be overweight.

Childhood obesity prevalence also increased for every age group. However, in 2003-2004 there was a significant decrease in the prevalence of obesity among children 2 to 5 years old.



Source: Prevalence of Overweight and Obesity Among Children and Adolescents: United States, 1963–1965 Through 2011–2012 C. Fryar, M.S.P.H., M. Carroll, M.S.P.H., and C. Ogden, Ph.D., Division of Health and Nutrition Examination Surveys. [http://www.cdc.gov/nchs/data/hestat/obesity\\_child\\_11\\_12/obesity\\_child\\_11\\_12.pdf](http://www.cdc.gov/nchs/data/hestat/obesity_child_11_12/obesity_child_11_12.pdf)

## ADULT OBESITY HAS ORIGINS IN CHILDHOOD

For children and teens, BMI (body mass index) is age- and sex-specific and is often referred to as BMI-for-age. BMI-for-age is a screening tool to assess risk of overweight in children and adolescents, ages 2 to 20. When children are 5 to 6 years of age, BMI-for-age is at its lowest. Studies show that a child's weight during kindergarten may serve as a strong predictor of developing obesity in adolescence. A five-year-old entering kindergarten *overweight* is four times more likely than their normal weight peers to become *obese* by age 14 (32% compared to 8%). A five-year-old entering kindergarten *obese* is eight times more likely than their normal weight peers to be *obese* at age 14 (47% compared to 6%).<sup>¥</sup>

Rank	State	Obesity Rate
1	Mississippi	21.7%
2	South Carolina	21.5%
3	District of Columbia	21.4%
4	Louisiana	21.1%
5	Tennessee	20.5%
6	Arkansas	20.0%
7	Arizona	19.8%
8	Kentucky	19.7%
9	<b>Illinois</b>	<b>19.3%</b>
10	Texas	19.1%

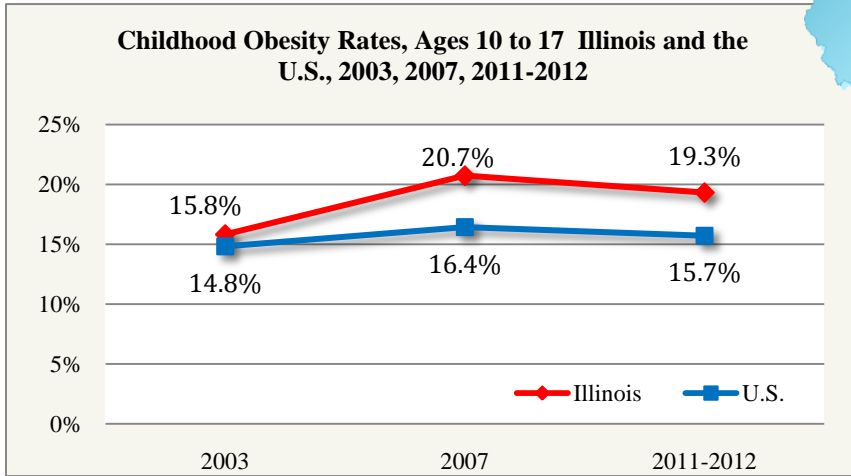
### State Rankings

When compared to other states and the District of Columbia, Illinois was ranked 9th (first being the worst) for obesity rates among children, ages 10 to 17.

Source: The State of Obesity, Better Policies for a Healthier America. A Project of the Trust for America's Health and the Robert Wood Johnson Foundation.

<sup>¥</sup> Incidence of Childhood Obesity in the United States, Solveig A. Cunningham, Ph.D., Michael R. Kramer, Ph.D., and K.M. Venkat Narayan, M.D., N Engl J Med 2014; 370:403-411 January 30, 2014

## CHILDHOOD OBESITY IN ILLINOIS



### 1 IN 5 CHILDREN IS OBESE

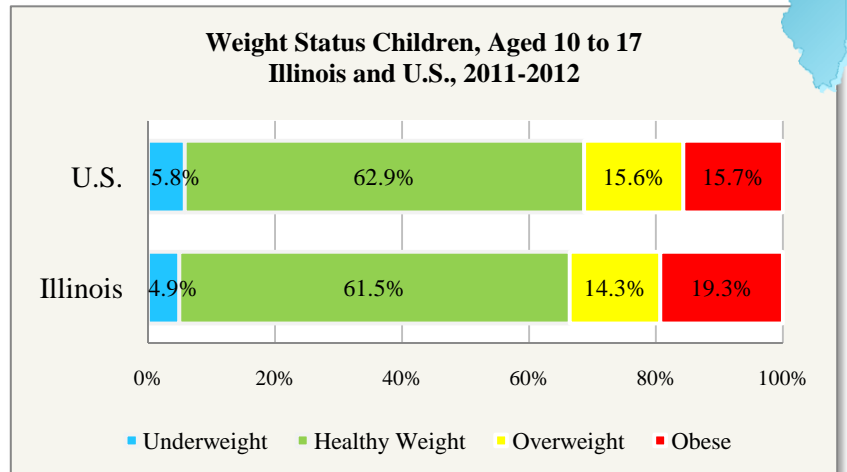
Almost 20 percent of children in Illinois are obese. The obesity rate for Illinois children, aged 10 to 17, was higher than the United States rate for all three of the measured points in time (2003, 2007, 2011-2012). From 2003 to 2011-2012, the rate in Illinois grew by 22 percent compared to 6 percent growth for the U.S.

Source: Data Resource Center for Child and Adolescent Health, National Survey of Children's Health. Accessed May 13, 2016. <http://childhealthdata.org/>

### 1 IN 3 CHILDREN IS OVERWEIGHT OR OBESE

Like the U.S., one third of Illinois children, ages 10 to 17, are overweight or obese (33.6%).

In children 10 to 15 years old, 75% of those with a BMI-for-age > 85th percentile (overweight and obese) were obese as adults and 80% of those with a BMI-for-age > 95th percentile (obese) were obese at age 25. Ten percent of those with a BMI-for-age < 85th percentile (healthy weight and underweight) were obese at age 25.<sup>€</sup>



Source: Data Resource Center for Child and Adolescent Health, National Survey of Children's Health. Accessed May 13, 2016. <http://childhealthdata.org/>

	2008	2009	2010	2011
<b>Illinois</b>	14.7%	14.6%	14.6%	14.7%
<b>U.S.</b>	14.6%	14.7%	14.4%	14.4%

### Preschoolers (Ages 2 to 4)

The prevalence of obesity among low-income Illinois children, ages 2 to 4, did not change from 2008 through 2011. Illinois was among 21 states without a statistically significant change. During this time, 19 states had significant decreases and three states had significant increases.

Source: Pediatric Nutrition Surveillance System (PedNSS), data includes children from low-income families who participated in federal nutrition programs and is based on actual measurements.

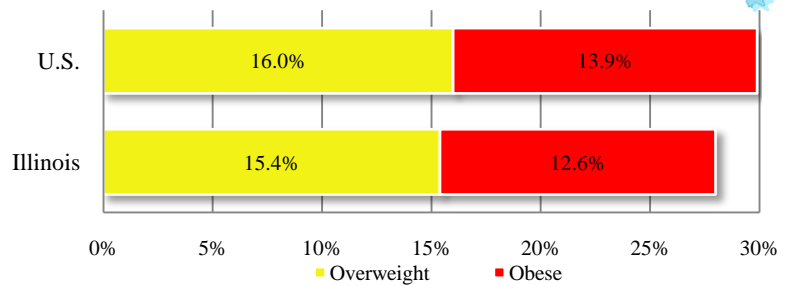
€ CDC Division of Nutrition, Physical Activity, and Obesity; Nutrition, Growth Chart Training. Using the BMI-for-Age Growth Charts. <http://www.cdc.gov/nccdphp/dnpa/growthcharts/training/modules/module1/text/module1print.pdf>

## YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM (YRBSS)

### Adolescent Overweight and Obesity

Data from the YRBSS show that similar to other data sources, nearly one third (28 percent) of Illinois high school students are overweight or obese.

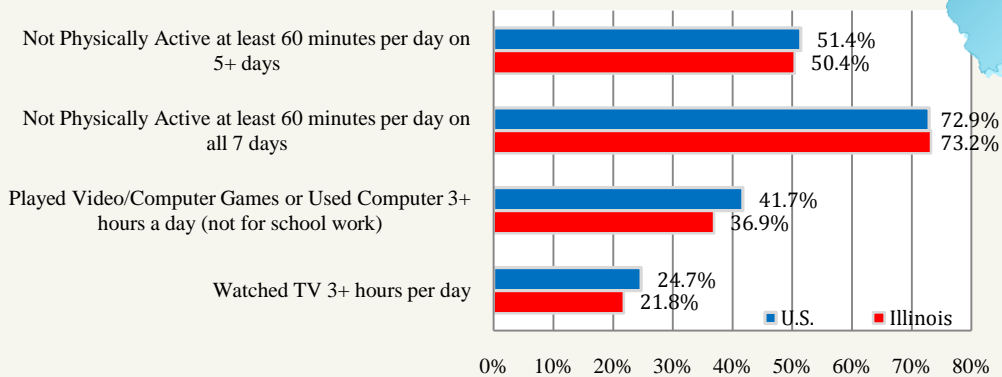
High School Students Self-Identified as Overweight or Obese, Illinois, YRBSS, 2015



### Adolescent Physical Activity

It is recommended children and adolescents have sixty minutes or more of physical activity each day. Over 73 percent of Illinois high school students are not meeting that recommendation and more than half do not have sixty minutes or more of physical activity at least five days of each week.

Physical Activity Behaviors of High School Students, Illinois, YRBSS, 2015



More than one third of Illinois high school students are spending three or more hours a day playing video or computer games or on the computer for something other than school work. Over 25 percent of students watch TV for three or more hours a day.

## WEIGHT MISPERCEPTION

Recognizing overweight and obesity can be an important predictor of later weight control behaviors. Nearly 42 percent of obese children and adolescents, 8 to 15 years old, consider themselves to be about the right weight and 76 percent that are overweight believe they are about the right weight.

Overweight or obese adolescents who misperceive their weight are less likely to try to lose weight and more likely to do nothing about their weight.

Parents also misperceive children's weight. Misperception is most pronounced among parents of children, aged 2 to 5. Studies show that

almost 95 percent of parents of an overweight 2 to 5 year old perceive their child as about the right weight and 78 percent of parents perceive their obese 2 to 5 year old as just about the right weight. Researchers believe parents with accurate perceptions are more likely to implement behavior changes leading to weight reduction.

Weight Status Misperception Among U.S. Children and Adolescents, Aged 8 to 15, by BMI Category, 2005-2012

