

Childhood Obesity

Disease Information Packets – Slide Sets



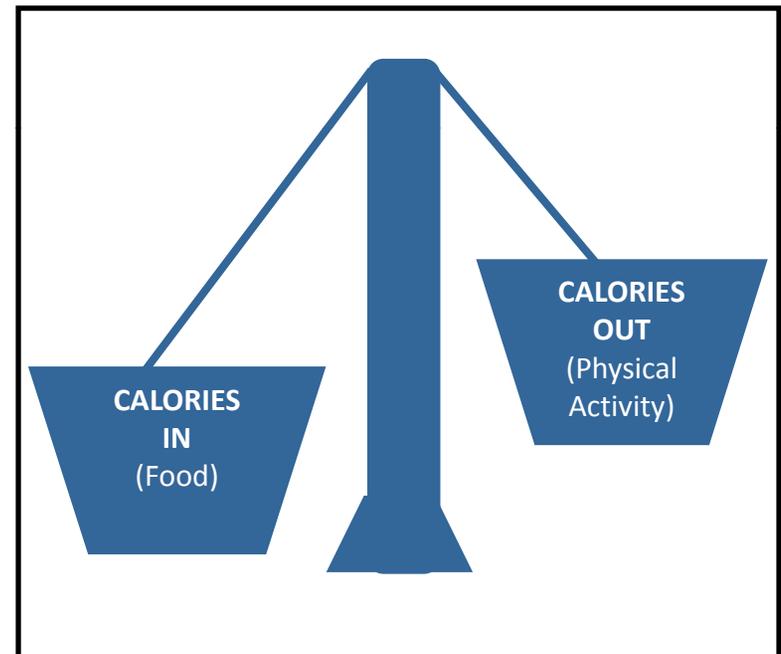
Public Health Services,
Community Health Statistics

11/2012

What is Obesity?

Obesity is a condition of overweight in which an individual has a body weight greater than what is considered healthy for his or her height.

- Body weight is influenced by many factors, including: genes, metabolism, behaviors, environment, culture, and socioeconomic status.
- Excess body weight represents an imbalance between calorie intake and expenditure.



What is Obesity?



- Body mass index (BMI) is used to measure overweight and obesity.
- In children, it is calculated using a child's weight and height.
 - A child is overweight if their weight is at or above the 85th percentile but below the 95th percentile for children of their age and gender.
 - A child is considered obese if their weight is at or above the 95th percentile for children of their age and gender.

Source: Centers for Disease Control and Prevention. Overweight and Obesity. Basics About Childhood Obesity. Last updated April 27, 2012. Accessed October 1, 2012.

Demographic Risk Factors

- **Age**
 - Adolescents are more likely to be obese than preschool-aged children. (Ogden)
- **Gender**
 - The prevalence of obesity is higher among boys than girls. (Ogden)
- **Race/Ethnicity**
 - Hispanic boys and non-Hispanic black girls are more likely to be obese than non-Hispanic white children. (CDC)
- **Genetics/Family History**
 - Children with a family history of obesity may be predisposed to gain weight. (CDC Genomics)



Social and Behavioral Risk Factors

- **Poor Nutrition**

- Media may contribute to poor nutritional choices and increased snacking among children. (CDC)

- **Lack of Physical Activity**

- In 2011, 69% of high school students did not attend PE classes daily when they were in school. (CDC)
- Studies have shown that television and computer time are associated with an increased likelihood of obesity in children. (Zimmerman)



Social and Behavioral Risk Factors

- **Poverty/Low Income**

- 1 in 3 low income children aged 2-4 years is likely to be obese by their 5th birthday. (CDC)
- Lower-income neighborhoods that have less access to healthy, affordable foods can act as barriers to a healthy diet. (Larson)
- Access to supermarkets is associated with a reduced risk for obesity. (Larson)

Sources: - Centers for Disease Control and Prevention. Obesity Among Low-Income Preschool Children Factsheet. Accessed October 2, 2012. - Larson N, et al. (2009). Neighborhood environments: disparities in access to healthy foods in the U.S. Am J Prev Med. 36(1):74–81.e10.

Intermediate Conditions

- **Cardiovascular Disease (CVD)**
 - Obese children are more likely to have high blood pressure and high cholesterol, which are risk factors for CVD. (CDC)
- **Diabetes (Type II)**
 - Childhood obesity can lead to increased risk of impaired glucose tolerance and insulin resistance. (Whitlock)
- **Cancer**
 - Consequences of childhood obesity are associated with several cancers in adulthood. (Biro)

Sources: - Centers for Disease Control and Prevention. Overweight and Obesity. Basics About Childhood Obesity. Last updated April 27, 2012. Accessed October 1, 2012. - Whitlock EP, et al. (2005). Screening and interventions for childhood overweight: a summary of evidence for the US Preventive Services Task Force. *Pediatrics*. 116(1):e125—144. Biro FM, Wien M. Childhood obesity and adult morbidities. (2010). *Am J Clin Nutr*. 91(5):1499S—1505S.

Intermediate Conditions

- **Breathing Problems**

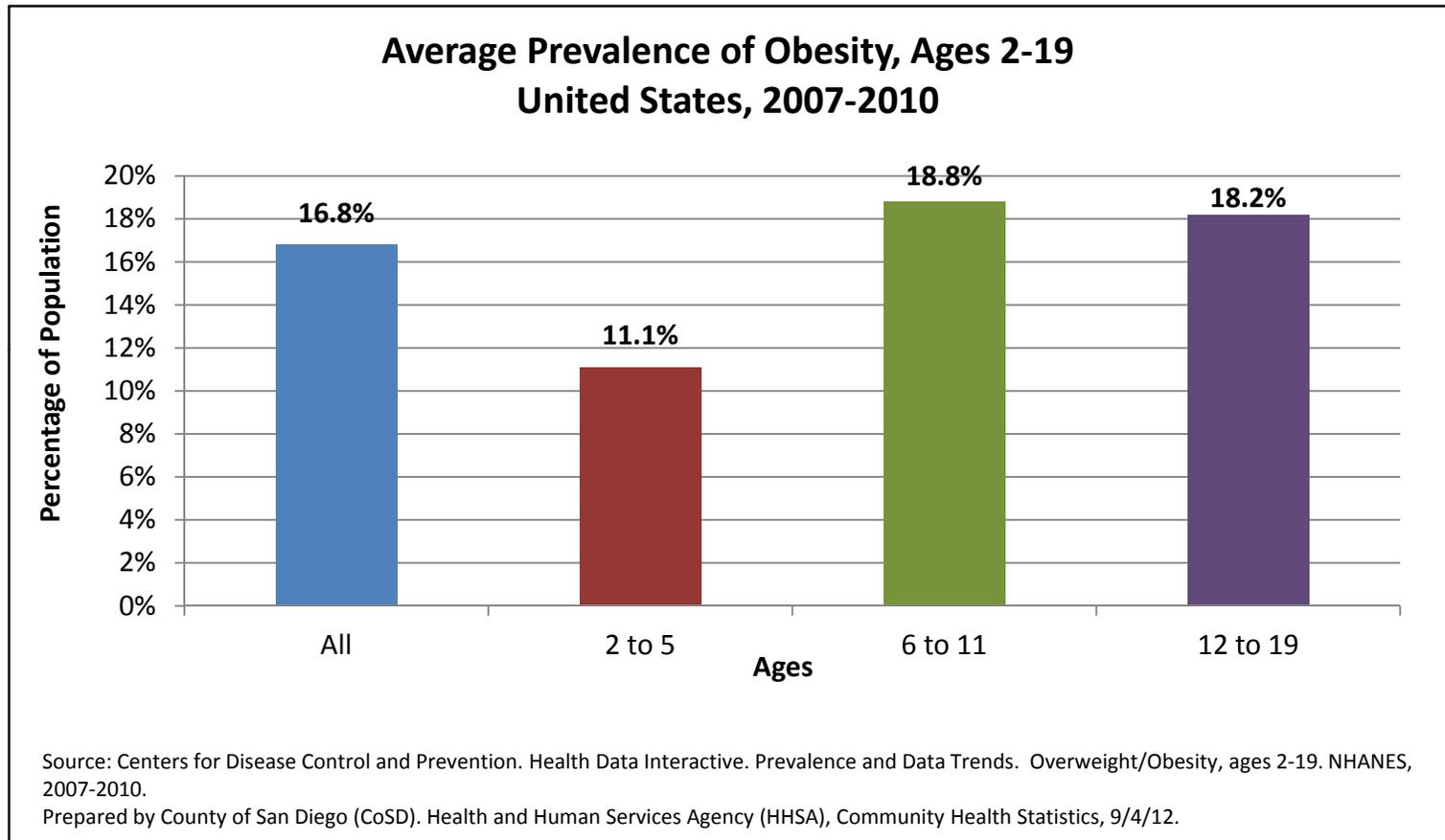
- Obese children are more likely to have breathing problems, such as sleep apnea and asthma. (Han, Sutherland)

- **Additional Consequences**

- The risk of obesity in adulthood is greater among obese children. (Biro)
- Obese children are more likely to have fatty liver disease and gastro-esophageal reflux (i.e. heartburn). (Han)
- Overweight or obese children are at least twice as likely to be iron-deficient as children of normal weight. (Han)

Sources: - Han JC, Lawlor DA, Kimm SY. (2010). Childhood obesity. *Lancet*. 375(9727):1737—1748. - Sutherland ER. (2008). Obesity and asthma. *Immunol Allergy Clin North Am*. 28(3):589—602, ix. - Biro FM, Wien M. Childhood obesity and adult morbidities. (2010). *Am J Clin Nutr*. 91(5):1499S—1505S.

National Statistics



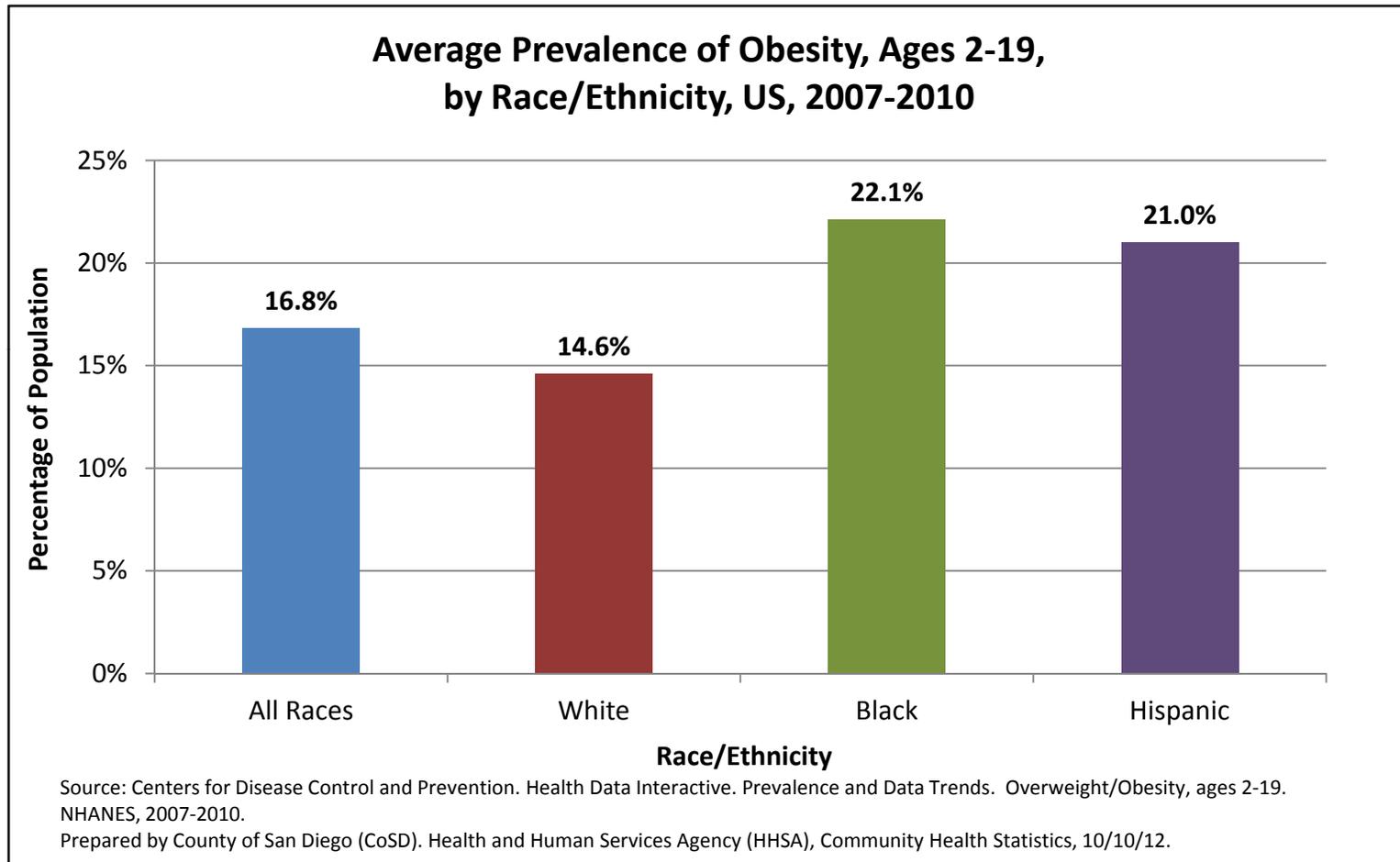
- Between the years 2007-2010, 1 in 6 children (aged 2-19 years) was considered obese.

National Disparities

- In 2009-2010, approximately 17% of children and adolescents in the United States were considered obese. (Ogden)
- In 2009-2010, more boys were obese (18.6%) than girls (15.0%). (Ogden)
- In 2007-2008, Hispanic boys and non-Hispanic girls had higher prevalence of obesity than non-Hispanic whites. (CDC)
- 1 in 7 low income, preschool-aged children is obese. (CDC Factsheet)

Sources: - Ogden CL, et al. Prevalence of obesity in the United States, 2009–2010. NCHS data brief, no 82. Hyattsville, MD: National Center for Health Statistics. 2012. - Centers for Disease Control and Prevention. Overweight and Obesity. Childhood Obesity Facts. Last updated August 28, 2012. Accessed October 1, 2012. - Centers for Disease Control and Prevention. Obesity Among Low-Income Preschool Children Factsheet. Accessed October 2, 2012.

National Disparities



- Between 2007-2010, black and Hispanic children were more likely to be obese than white children.

Cost

- In 2010, the cost of childhood obesity was over \$3 billion.



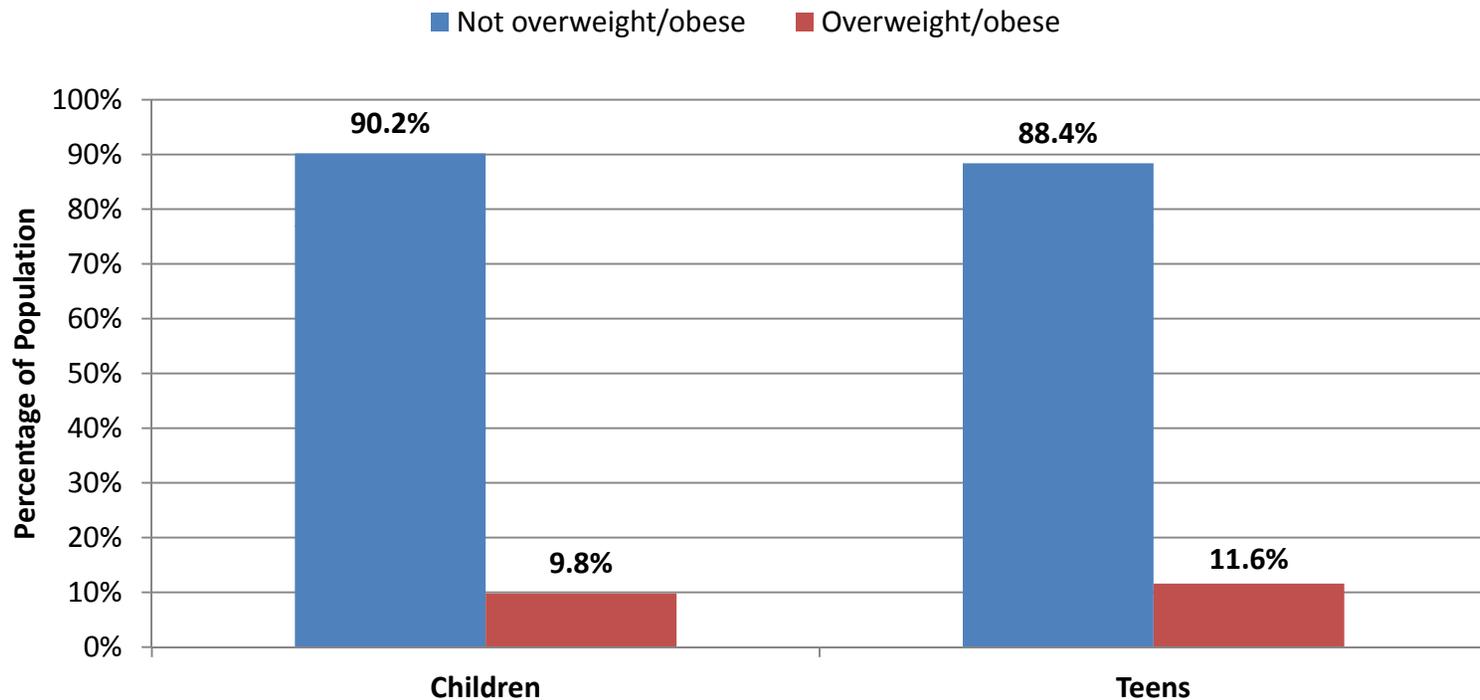
Source: Centers for Disease Control and Prevention. About CDC. Public Health Grand Rounds. Last updated June 18, 2010. Accessed October 10, 2012.

Local Statistics

- In San Diego County in 2009:
 - 10% of children were considered overweight or obese.
 - 12% of teens were overweight or obese.
 - An additional 10% of teens were at risk of becoming overweight or obese.

Local Statistics and Disparities

Overweight and Obese Weight Status Among San Diego County Children* and Teens, 2009**



* Children aged 0-11 years

** Adolescents aged 12-17 years

Source: UCLA Center for Health Policy Research. "2009 California Health Interview Survey". <http://www.chis.ucla.edu> (accessed 10/2012)

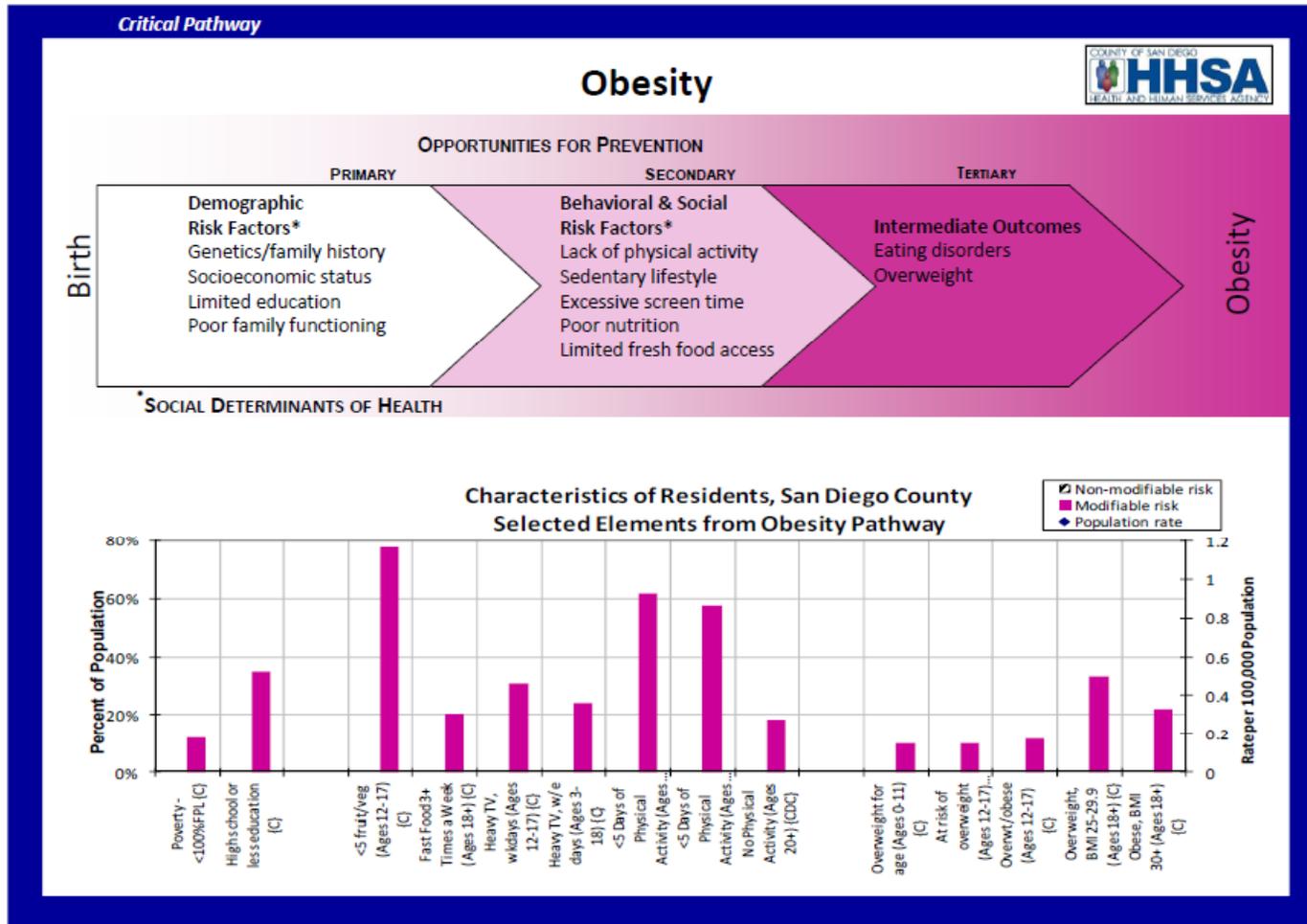
Prepared by County of San Diego (CoSD), Health and Human Services Agency (HHSA), Community Health Statistics, 10/2012.

Prevention

- Parents can:
 - Limit media time for kids.
 - Serve children healthy food and drinks.
 - Make sure children get at least 60 minutes of physical activity each day.
- States and communities can:
 - Expand programs that bring local fruits and vegetables to schools.
 - Create and maintain safe neighborhoods to encourage physical activity.
 - Support quality physical education in classes.



Critical Pathway to Obesity



Source: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit. (2012). *Critical Pathways: the Disease Continuum*. January, 2012. Accessed September 11, 2012.

Contact Us

County of San Diego
Health and Human Services Agency

Public Health Services

Community Health Statistics

(619) 285-6479

www.SDHealthStatistics.com