

# Overweight and Obesity Among American Indian and Alaska Native Youths

**Leadership for Healthy Communities**  
Advancing Policies to Support Healthy Eating and Active Living

Fact Sheet | May 2010

While childhood obesity rates are considerably higher than they were a generation ago among the general population, children from certain racial and ethnic communities have been disproportionately affected. Though the limited studies available suggest this also is true for American Indian and Alaska Native youths, there is an unfortunate dearth of current, comprehensive data on their rates of obesity.

This document highlights research findings on overweight and obesity among American Indian and Alaska Native children and adolescents, as well as the types of research needed for this population. Additional resources on childhood obesity can be found at [www.leadershipforhealthycommunities.org](http://www.leadershipforhealthycommunities.org).

Note: Leadership for Healthy Communities (LHC) generally uses the terms “American Indian and Alaska Native.” However, when citing research that uses terminology such as “Native American,” LHC defers to the authors’ terminology.

## Facts At A Glance

- More than 39 percent of low-income American Indian and Alaska Native children ages 2 to 5 are overweight or obese.
- Over a 10-year period, the number of diabetes cases increased by 68 percent among American Indian and Alaska Native adolescents.
- Urban and suburban American Indian and Alaska Native high school students watch more television than their white peers. Some studies suggest that a high rate of TV viewing is associated with obesity.



## Prevalence of Overweight and Obesity Among American Indian and Alaska Native Youths

The last extensive evaluation of obesity prevalence in the American Indian and Alaska Native population took place two decades ago. That study reported on the obesity rates of more than 9,000 children ages 5 to 18 living on or near American Indian reservations in 1990 and 1991. It found that 39.3 percent were overweight or obese based on the federal government's 1970s definitions of excess weight.<sup>1,2</sup> No comprehensive studies have been published since then.

Despite the lack of national prevalence rates for all age groups, several smaller studies are likely to be of interest to individuals working to prevent childhood obesity in American Indian and Alaska Native communities:

- A study of 40 states, the District of Columbia, Puerto Rico and five Indian Tribal Organizations found that 39.5 percent of low-income American Indian and Alaska Native children ages 2 to 5 are overweight or obese. The study found the rate of overweight and obesity to be higher in American Indian and Alaska Native children than in any other racial or ethnic group.<sup>3,4</sup>
- A national survey found that 31.2 percent of American Indian and Native Alaskan 4-year-olds are obese. The obesity rate among American Indians and Native Alaskans was higher than that of any other racial or ethnic group studied and almost double the rate among white 4-year-olds.<sup>5</sup>
- A study of American Indian second-graders in Arizona, New Mexico and South Dakota found that 20.3 percent of the children are overweight and an additional 28.6 percent are obese. By gender, 21 percent of girls and 19.6 percent of boys are overweight, and 30.5 percent of girls and 26.8 percent of boys are obese.<sup>6</sup>
- An analysis of children ages 5 to 17 in the Aberdeen area, which includes tribes in North Dakota, South Dakota, Nebraska and Iowa, found that 48.1 percent of American Indian boys and 46.3 percent of American Indian girls are overweight or obese.<sup>7</sup>
- A national survey of American Indian and Alaska Native high school students from urban and suburban areas found that 18.9 percent are obese.<sup>8</sup>

## Consequences of Childhood Obesity

The obesity epidemic is a major concern because children who are overweight or obese are more likely to suffer from serious, lifelong illnesses than their healthy-weight peers.

- Childhood obesity is associated with an increased risk of type 2 diabetes, high blood pressure, cardiovascular disease, asthma, sleep apnea and social discrimination.<sup>9</sup>
- With rising obesity rates, there has been a dramatic increase in the number of American Indian and Alaska Native adolescents diagnosed with diabetes. Between 1994 and 2004, diabetes cases soared 68 percent among American Indians and Alaska Natives ages 15 to 19.<sup>10</sup>

## Causes and Determinants of Overweight and Obesity

A complex interplay of social, economic and environmental factors contributes to overweight and obesity; however, there are limited data to assess these factors' impact on access to healthy foods and opportunities for physical activity among American Indian and Alaska Native youths.

- Only 60.2 percent of urban and suburban American Indian and Alaska Native high school students have green salad in a given week, compared with 70.1 percent of white students.<sup>11</sup>

- Among urban and suburban American Indian and Alaska Native students in grades nine to 12, 45.1 percent watch more than three hours of television on an average school day, compared with 31.7 percent of their white peers.<sup>12</sup> One study of eighth- and 10th-graders found obesity and overweight to be positively associated with the number of hours spent watching television.<sup>13</sup>

## Reversing the Trend

Based on what studies have shown to be most effective, *Leadership for Healthy Communities* and the Robert Wood Johnson Foundation recommend reducing childhood obesity through the implementation of policies and practices that:

- provide only healthy foods and beverages to students at school,
- improve the availability of affordable healthy foods in all communities,
- increase the frequency, intensity and duration of physical activity at school,
- improve access to safe places where children can play, and
- limit screen time.

Much more research is needed on the causes and consequences of obesity within American Indian and Alaska Native communities. The U.S. Department of Health and Human Services, through its Office of the

Assistant Secretary for Planning and Evaluation,<sup>14</sup> has identified several areas for additional study. They include:

- improving surveillance systems to monitor obesity prevalence rates and track progress in reversing the epidemic among the American Indian and Alaska Native population,
- exploring the role food insecurity plays in obesity prevalence in American Indian and Alaska Native communities, and
- learning more about American Indian and Alaska Native children's physical activity and dietary behaviors.

Information learned from such research will begin to fill the data gaps regarding obesity in this population and identify any unique barriers to healthy eating and active living that American Indian and Alaska Native youths face. Ultimately, that information will help these communities build on their obesity-prevention efforts and implement the most effective solutions for creating healthy environments.

## Endnotes

1. The reference information for this study was the Centers for Disease Control and Prevention's 1970s definitions for children who were at or above the 85<sup>th</sup> percentile of body mass index (BMI) on sex- and age-specific growth charts.
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3. Current obesity prevalence rates are based on the CDC's 2000 sex- and age-specific BMI growth charts.
4. Polhamus B, Dalenius K, Borland E, et al. *Pediatric Nutrition Surveillance 2006 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.
5. Anderson SE and Whitaker RC. "Prevalence of Obesity Among U.S. Preschool Children in Different Racial and Ethnic Groups." *Archives of Pediatrics & Adolescent Medicine*, 163(4): 344-348, 2009.
6. Caballero B, Himes JH, Lohman T, et al. "Body Composition and Overweight Prevalence in 1704 Schoolchildren from 7 American Indian Communities." *American Journal of Clinical Nutrition*, 78(2): 308-312, 2003.
7. Zephier E, Himes JH, Story M, et al. "Increasing Prevalences of Overweight and Obesity in Northern Plains American Indian Children." *Archives of Pediatrics & Adolescent Medicine*, 160(1): 34-39, 2006.
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9. *Overweight and Obesity*. Centers for Disease Control and Prevention. <http://cdc.gov/nccdphp/dnpa/obesity/childhood/consequences.htm> (accessed March 2010). (No authors given.)
10. Acton KJ, Burrows NR, Wang J, et al. "Diagnosed Diabetes Among American Indians and Alaska Natives Aged < 35 Years – United States, 1994-2004." *Morbidity and Mortality Weekly Report*, 55(44): 1201-1203, 2006.
11. Rutman et al.
12. Rutman et al.
13. Delva J, Johnston LD and O'Malley PM. "The Epidemiology of Overweight and Related Lifestyle Behaviors: Racial/Ethnic and Socioeconomic Status Differences Among American Youth." *American Journal of Preventive Medicine*, 33(4S): S178-S186, 2007.
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