

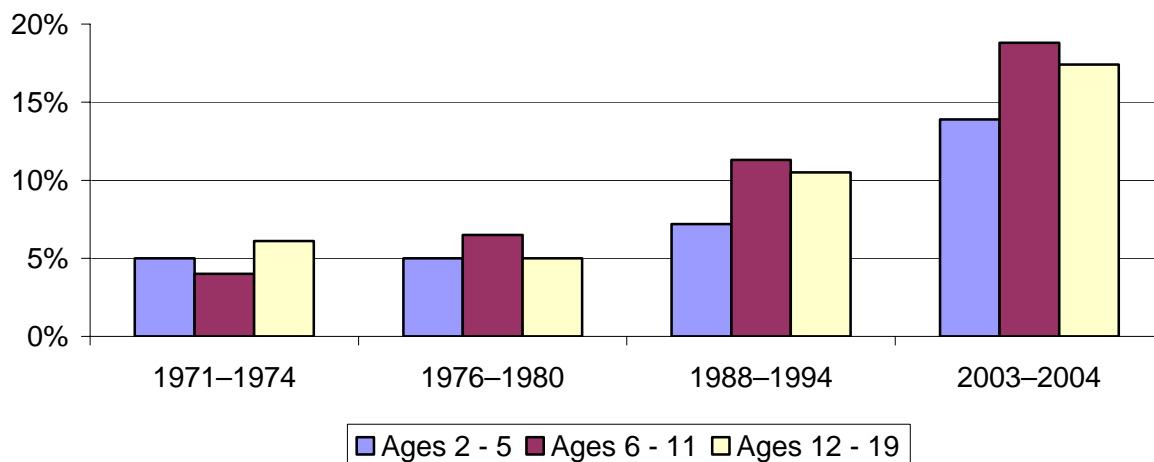


Topic: Risky Health Behaviors

3. Pediatric Overweight

Over the last forty years, the proportion of American children who are overweight has increased dramatically. An understanding of this problem among children is easier to see in national statistics because Michigan does not survey all children. Instead, we monitor lower income children age 0 to 5 in programs providing assistance, and public school students in grades 9 to 12. Alternatively, statistics from the National Health and Nutritional Examination Survey (NHANES) are based on clinical measurements of height and weight to compute BMI, not less reliable self-reports or parental reports. The Centers for Disease Control and Prevention (CDC) uses the term ‘Overweight’ for children with a BMI-for-Age at or above the 95th percentile, and ‘At Risk of Overweight’ for children between the 85th and 95th percentile, based on BMI-for-Age growth charts published by the CDC. NHANES surveillance shows that nationally childhood overweight has increased dramatically. In the 1963-1970 era four percent of children ages 6 to 11, and five percent for ages 12 to 19 were classified as overweight. By the 1999-2002 survey the percentage of overweight children had tripled, 16% for ages 6 to 11, and 16% for ages 12 to 19. The percentages have steadily increased over three decades. Michigan statistics, where available, are not significantly different from national averages.

**Prevalence of Overweight Among
U.S. Children and Adolescents (Aged 2–19 Years)
NHANES Survey Periods 1971 - 2004**



How are we doing?

Recent data from the state-level estimates provided by the 2003-2004 National Survey of Children’s Health (NSCH)/Michigan, for children ages 10 to 17, estimated 14% were ‘At Risk of Overweight’ and another 14% were ‘Overweight.’ This is approximately the same as national estimates. The Michigan Youth Risk Behavior Survey (YRBS) conducted every two years by the Michigan Department of Education provides a slightly lower estimate: “Overweight” in 2005 was 12%, and up slightly from 10% in 1999. “At Risk of Overweight” in 2005 was 14%, almost the same as the 15% in 1999. Data for other age groups is less available. For ages 0 to 5, there is a limited amount of data available from surveillance systems such as Pediatric Nutrition Surveillance System (PedNSS) that tracks mostly lower income



children. One estimate from 2003 PedNSS data is that approximately 13% of Michigan children ages 2 to 5 are overweight. The conclusion from all the available sources is that the percentage of Michigan children who are overweight has increased dramatically over the last few decades. Because childhood overweight often continues into adulthood, the long-term ramifications are significant.

According to the 2005 YRBS, one-third of students grades 9 to 12 do not receive the recommended amount of both moderate and vigorous physical activity during the week and many students watch hours of television daily. Most of the nutritional and physical activity trends have been stable over the last nine years. In 2005, about 61% of students exercised to lose weight or to keep from gaining weight. About 40% reported eating less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight. Some students engaged in unsafe weight loss practices: fasting for 24 hours or more, 11%; taking diet pills, powders or liquids without doctor's advice, 5%; and vomiting or taking laxatives, 5%.

2005 YRBS survey data on physical activity also demonstrate that a significant percentage of students do not get enough physical activity or engage in excessive television viewing: 33% did not participate in the recommended amount of weekly physical activity, 36% watched three or more hours of television on an average school day, and only 38% attended physical education class one or more days during an average school week.

Various other questions on the YRBS point to increasing numbers of youth at risk of weight gain from a lack of physical activity. National data demonstrate that this pattern occurs at younger ages as well. Much of the increase in weight among American children occurs between ages 6 and 13, but all ages are at risk of excessive weight gain. Overweight children, especially adolescents, are more likely to become obese adults than children with a healthy weight. Serious health conditions – high blood pressure, high cholesterol, hypertension, early maturation, and orthopedic problems – occur with increased frequency in overweight youth. Type 2 diabetes, once regarded as an adult disease, has increased among children and adolescents.

How does Michigan compare with the U.S.?

The 2003 National Survey of Children's Health looked at the weight status of children ages 10 to 17, using body mass index for age (BMI-for-age) and found Michigan children were similar to national measures. Nationwide 14.8% were overweight, and in Michigan, 14.4%. The Youth Risk Behavior Survey, 2005, looking at the weight status of children in grades 9 to 12, found 12% of Michigan children overweight, the same as the average (median) among other states, 12%.

How are different populations affected?

The noticeable differences are between grade 9-12 females and males, and between Whites and Blacks. The sample size for other ethnic/race groups was too small for comparison. As self-reported in the Michigan YRBS, only eight percent of the grade 9 to 12 females were overweight, compared to 16% of males. In the Michigan YRBS the high percentage of female students reporting that they were trying to lose weight, 59%, compared to male students, 31%, suggests that the percentage of overweight young females may be closer to that of young males. The percentage of White students overweight, 10%, was about half that of Black students, 22%.

What is the Department of Community Health doing to improve this indicator?

In response to the rising rates of pediatric overweight, the MDCH has concentrated on prevention and treatment initiatives. Some of the prevention projects include the development of "The Role of Michigan Schools in Promoting Healthy Weight", "Michigan Action for Healthy Kids", the "Healthy Schools Action Tools" (HSAT), and "Healthy Kids Healthy Weight." The Department awarded grants to schools and communities to improve healthy eating and increase physical activity. There are published clinical guidelines for the prevention, identification and treatment of childhood overweight and obesity. The



Critical Health Indicators

Department collaborated with the Michigan Quality Improvement Consortium (MQIC) and drafted guidelines based on a comprehensive review of literature, input of an expert advisory committee and discussion with the Consortium.