19-3. Reduce the proportion of children and adolescents who are overweight or obese.

19-3c. Children and adolescents aged 6 to 19 years.

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.3 (Nutrition) (also 1.2, 15.10, 17.12)
Leading Health Indicator	Overweight and Obesity.
Changes since the 2000 Publication	None.
Measure	Percent.
Baseline (Year)	11 (1988-94)
Target	5
Target-Setting Method	Better than the best racial/ethnic subgroup. For a discussion of target-setting methods, see Part A, section 4.
Numerator	Number of persons aged 6 to 19 years with a BMI at or above the gender-and age-specific 95th percentile from the CDC Growth Charts; United States.
Denominator	Number of persons aged 6 to 19 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used to Obtain the National Baseline Data	Not applicable.
Expected Periodicity	Periodic.
Comments	The NHANES obtains measured weights and heights without shoes. BMI is calculated by dividing weight in kilograms by the square of height in meters.

BMI will be used as a proxy for overweight and obesity in children and adolescents until a better measure is developed.[1] There is a prepubertal increase in subcutaneous fat that is lost during adolescence in boys, while in girls, fat deposition continues. There also is a differential increase in muscle (or lean body mass) by gender during puberty. Thus, without measures of sexual maturity, measures of body fat and body weight are equally difficult to interpret in preadolescents and adolescents.

In 2000, the 1977 NCHS Growth Charts were revised to consider additional large, nationally representative samples of children aged 2 to 20 years from the 1976-80 NHANES and the 1988-94 NHANES and to provide BMI for age in lieu of weight for age.[2] When extrapolated to age 20 years, the gender- and age-specific 95th percentile of BMI from the Revised CDC Growth Charts approximates a BMI of 30. Thus, the 95th percentiles of BMI for children aged 6 to 11 years and for adolescents aged 12 to 19 years were chosen to estimate the prevalence of overweight and obesity for this objective. The CDC Growth Charts can be found on the Internet at http://www.cdc.gov/growthcharts.

This measure is used to track the Overweight and Obesity Leading Health Indicator. See Appendix E for a complete list.

Objective 19-3 differs from Healthy People 2000 objective 2.3, in two ways. First, objective 2.3 was limited to adolescents aged 12 to 19, while objective 19-3 tracks children aged 6 to 11 years through subobjective 19-3a, adolescents aged 12-19 years through 19-3b, and children and adolescents aged 6 to 19 years through 19-3c. Second, the Healthy People 2000 objective defined overweight for adolescents based on modified age-and gender-specific 85th percentile values of the 1976-80 NHANES II. For adolescents, overweight was defined as a BMI equal to or greater than 23.0 for males aged 2 to 14 years, 24.3 for males aged 15 to 17 years, 25.8 for males aged 18 to 19 years, 23.4 for females aged 12 to 14 years, 24.8 for females

aged 15 to 17 years, and 25.7 for females aged 18 to 19 years.

For some measures, data do not meet the criteria for statistical reliability, data quality, or confidentiality and have been suppressed. Information on suppression of data for the major Healthy People 2010 data systems has been published in a *Healthy People Statistical Note.*[3]

See Part C for a description of NHANES and Appendix A for focus area contact information.

References

1. Troiano, R.P., and Flegal, K.M. Overweight children and adolescents: Description, epidemiology, and demographics. *Pediatrics* 101:497-504, 1998.
2. Kuczmarski, R.J.; Ogden, C.L.; Grummer-Strawn, L.M.; et al. *CDC Growth Charts: United States.* Advance Data No. 314 (revised). Centers for Disease Control and Prevention (CDC), June 8, 2000.
3. Klein, R.J.; Proctor, S.E.; Boudreault, M.A.; Turczyn, K.M. Healthy People 2010 Criteria for Data Suppression. *Statistical Notes* No. 24. Hyattsville, MD: National Center for Health Statistics. 2002.