

Statistical Fact Sheet 2015 Update

Youths & Cardiovascular Diseases

Out-of-Hospital Cardiac Arrest

- Each year, approximately 6,300 children younger than 18 years of age experience out-of-hospital cardiac arrest (EMS assessed).
- Most sudden deaths in athletes were attributable to CVD (56%). Of the cardiovascular deaths that occurred, 29% occurred in blacks, 54% in high school students, and 82% with physical exertion during competition/training, and only 11% occurred in females, although this proportion has increased over time.
- A longitudinal study of students 17 to 24 years of age participating in National Collegiate Athletic Association sports showed that the incidence of nontraumatic out-of-hospital cardiac arrest was 1 per 22,903 athlete participant years. The incidence of cardiac arrest tended to be higher among blacks than whites and among men than women.

Congenital Cardiovascular Defects (ICD/10 codes Q20-Q28) (ICD/9 codes 745-747)

- An estimated minimum of 40,000 infants are expected to be affected each year in the United States. Of these, about 25%, or 2.4 per 1,000 live births, require invasive treatment in the first year of life.
- The most commonly reported incidence of congenital heart defects in the United States is between 4 and 10 per 1,000, clustering around 8 per 1,000 live births.
- Congenital cardiovascular defects are the most common cause of infant death resulting from birth defects; 24% of infants who die of a birth defect have a heart defect.
- Between 1997 and 2004, hospitalization rates increased by 28.5% for cardiac and circulatory congenital anomalies.
- In 2010, 62,000 U.S. adults and children (38,000 males; 24,000 females) diagnosed with congenital heart defects were discharged from short-stay hospitals.

Stroke in Children

- The annual incidence of stroke in children ranges from 4.6 to 6.4 per 100,000 children.
- The prevalence of perinatal strokes is 29 per 100,000 live births, or one per 3,500 live births.
- Approximately half of all incident childhood strokes are hemorrhagic.
- Despite current treatment, 1 of 10 children with ischemic or hemorrhagic stroke will have a recurrence within 5 years.

High Blood Pressure (HBP)

- Data from participants aged 12 to 19 years in the 2005 to 2010 NHANES found ideal blood pressure (<95th percentile) to be present in 78% of males and 90% of females; poor blood pressure (>95th percentile) was found in 2.9% of male and 3.7% of female participants.
- Analysis of data from NHANES III (1988–1994) and NHANES 1999 to 2008 found the prevalence of elevated BP (SBP or DBP \geq 90th percentile or SBP/DBP \geq 120/80 mm Hg) increased from 15.8% to 19.2% among boys and from 8.2% to 12.6% among girls
- Among older children, male sex, black race/ethnicity, higher BMI, and higher sodium intake were independently associated with elevated BP for participants 8 to 17 years of age in NHANES 1999 to 2008.

Smoking

In 2013, in grades 9 through 12:

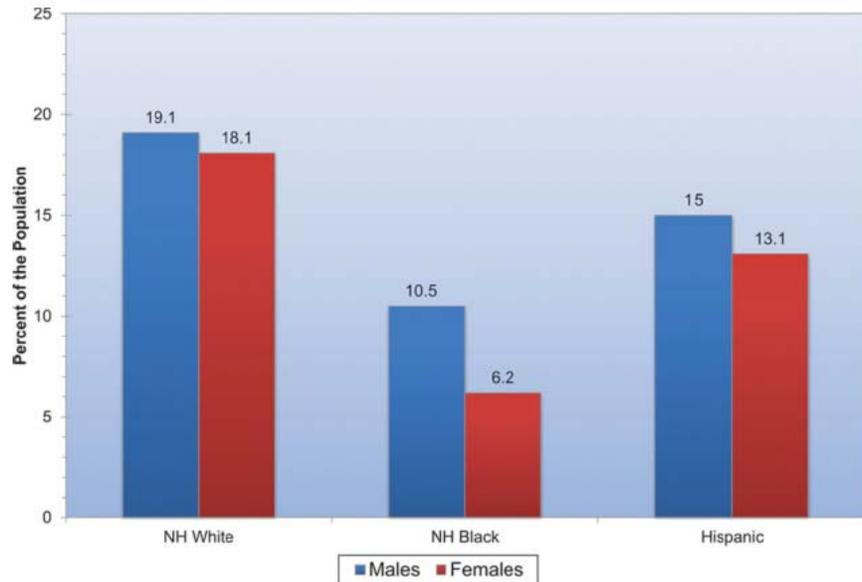
- 15.7% of students reported current cigarette use (on \geq 1 day during the 30 days before the survey), 12.6% of students reported current cigar use, and 8.8% of students reported current smokeless tobacco use. Overall,

Youths & CVD - 2015 Statistical Fact Sheet

22.4% of students reported any current tobacco use.

- Male students were more likely than female students to report current cigarette use (16.4% compared with 15.0%). Male students were also more likely than female students to report current cigar use (16.5% compared with 8.7%) and current smokeless tobacco use (14.7% compared with 2.9%).
- Non-Hispanic white students were more likely than Hispanic or non-Hispanic black students to report any current tobacco use, which includes cigarettes, cigars, or smokeless tobacco (26.9% compared with 18.0% for Hispanic students and 14.3% for non-Hispanic black students).
- 48.0% of students in grades 9 to 12 who currently smoked cigarettes had tried to quit smoking cigarettes during the previous 12 months. The prevalence of trying to quit smoking was higher among female student smokers (51.0%) than among male student smokers (45.4%). Six of 10 black student smokers (61.0%) tried to quit compared with 48.0% of white students and 42.4% of Hispanic students.

Prevalence of High School Students Reporting Current Cigarette Use by Race/Ethnicity and Sex

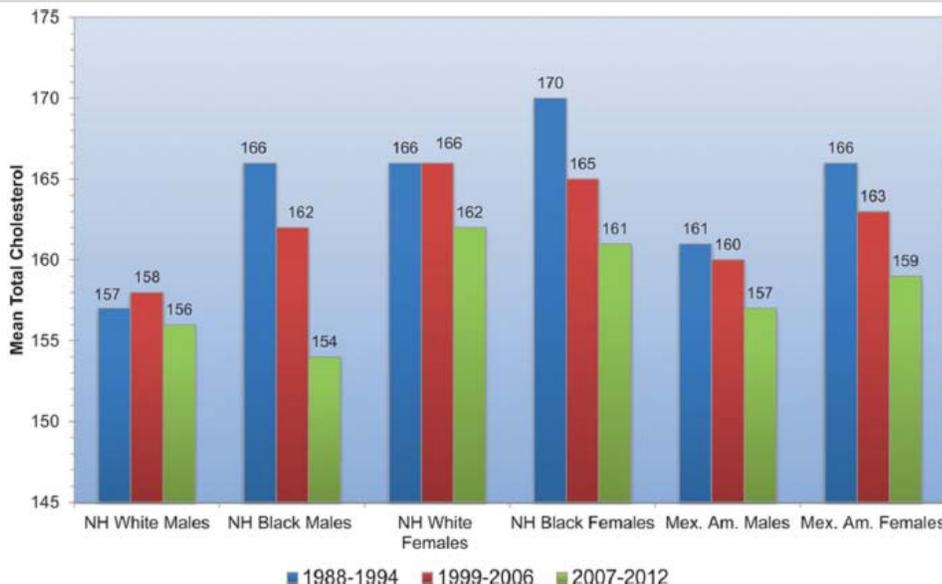


NH indicates non-Hispanic. Source: Youth Risk Behavior Surveillance System, 2013.

High Blood Cholesterol

- Among children age 6 to 11 years, the mean total blood cholesterol level is 160.2 mg/dL; 160.5 mg/dL for boys and 159.8 mg/dL for girls.
- Among adolescents age 12 to 19 years, the mean total blood cholesterol level is 158.3 mg/dL; 155.2 mg/dL for boys and 161.6 mg/dL for girls.
- Approximately 8.5% of adolescents have total cholesterol levels ≥ 200 mg/dL.
- Fewer than 1% of adolescents are eligible for pharmacological treatment on the basis of guidelines from the American Academy of Pediatrics.

Trends in mean total serum cholesterol among adolescents 12–17 years of age by race, sex



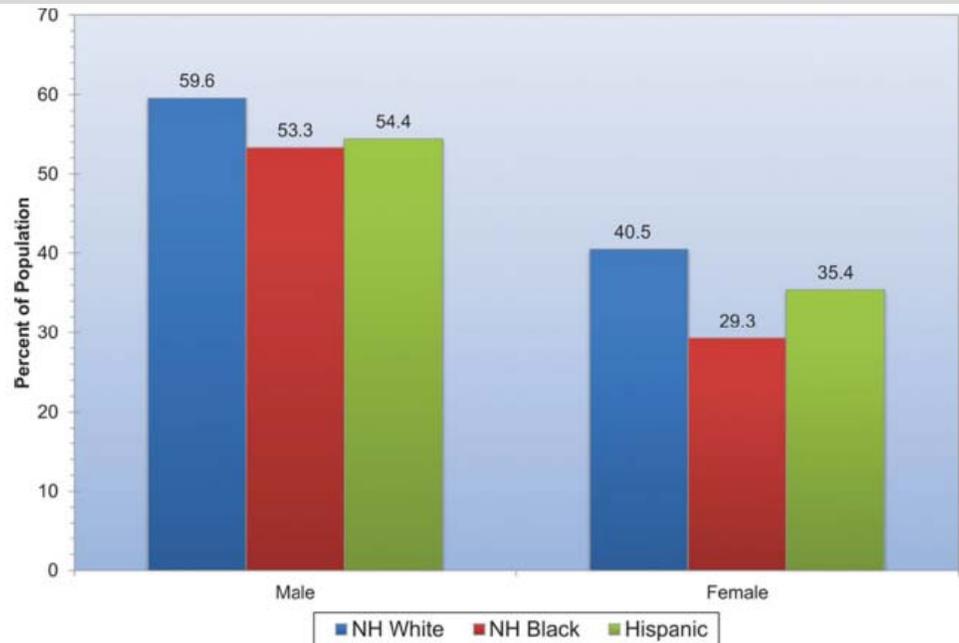
Values are in mg/dL. NH indicates non-Hispanic; Mex. Am., Mexican American. Source: National Health and Nutrition Examination Survey: 1988–1994, 1999–2006, and 2007–2012.

Youths & CVD - 2015 Statistical Fact Sheet

Physical Activity

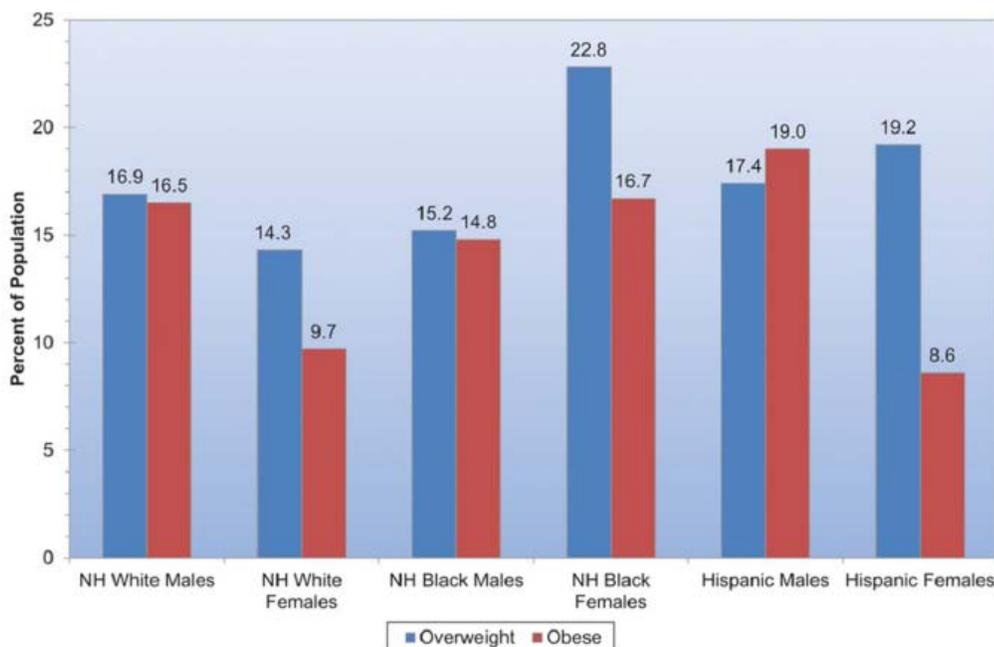
- Nationwide, 15.2% of adolescents reported that they did not participate in ≥ 60 minutes of any kind of physical activity that increased their heart rate and made them breathe hard on any 1 of the previous 7 days.
- Girls were more likely than boys to report inactivity (19.2% versus 11.2%).
- The prevalence of inactivity was highest in black (27.3%) and Hispanic (20.3%) girls, followed by white girls (16.1%), black boys (15.2%), Hispanic boys (12.1%), and white boys (9.2%).
- Nationwide, 41.3% of adolescents used a computer for activities other than school work (eg, videogames or other computer games) for ≥ 3 hours per day on an average school day. 32.5% of adolescents watched television for ≥ 3 hours per day.
- A greater proportion of black and Hispanic students used computers or watched television >3 hours per day than white students.

Prevalence of students in grades 9–12 who met currently recommended levels of physical activity during the past 7 days by race/ethnicity and sex



NH indicates non-Hispanic. Source: Youth Risk Behavior Surveillance: 20113

Prevalence of overweight and obesity among students in grades 9 through 12 by sex and race/ethnicity



NH indicates non-Hispanic. Source: Youth Risk Behavior Surveillance—United States, 2013.

Overweight and Obesity

- 23.7 million children ages 2 to 19 are overweight or obese; 32.0% of boys and 31.6% of girls.
- Of these children, 12.6 million are obese; 16.7% of boys and 17.2% of girls.

Diabetes

- Approximately 186,000 people under 20 years of age have diabetes. Each year, about 15,000 people under 20 years of age are diagnosed with type 1 diabetes. Healthcare providers are finding more and more children with type 2 diabetes, a disease usually diagnosed in adults 40 years of age and older. Children

Youths & CVD - 2015 Statistical Fact Sheet

who develop type 2 diabetes are typically overweight or obese and have a family history of the disease. Most are American Indian, black, Asian, or Hispanic/Latino.

- During 2008 to 2009, an estimated 18 436 people <20 years of age in the United States were newly diagnosed with type 1 DM annually, and 5089 people <20 years old were newly diagnosed with type 2 DM annually.
- Between 2001 and 2009, the prevalence of type 2 DM in youth increased by 30.5%.
- Among adolescents 10–19 years of age diagnosed with diabetes, 57.8% of African Americans were diagnosed with type 2 versus type 1 diabetes, compared with 46.1% of Hispanic and 14.9% of Caucasian youth.
- Among youths with type 2 DM, 10.4% are overweight and 79.4% are obese.

Healthy Diet

- Average whole grain consumption was low, between 0.6 to 0.8 servings per day in all age and sex groups, with less than 4% of all children in different age and sex subgroups meeting guidelines of 3 or more servings per day.
- Average fruit consumption was low and decreased with age: 1.5 to 1.7 servings per day in younger boys and girls (5–9 years of age), 1.2 servings per day in adolescent boys and girls (10–14 years of age), and 0.9 to 1.2 servings per day in teenage boys and girls (15–19 years of age). The proportion meeting guidelines of 2 or more cups per day was also low and decreased with age: about 8% to 9% in those 5 to 9 years of age, 5% to 7% in those 10 to 14 years of age, and 5% in those 15 to 19 years of age. When 100% fruit juices were included, the number of servings consumed approximately doubled, and proportions consuming 2 or more cups per day increased to nearly 1 in 5 of those 5 to 9 years of age and 1 in 7 of those 10 to 14 years and 15 to 19 years of age.
- Average vegetable consumption was low, ranging from 1.1 to 1.7 servings per day, with less than 5% (and often less than 1%) of children in different age and sex subgroups meeting guidelines of 2.5 or more cups per day.
- Average consumption of fish and shellfish was low, ranging between 0.3 and 0.8 servings per week in all age and sex groups. Among all ages, only 4% to 11% of youth consumed 2 or more servings per week.
- Average consumption of sodium ranged from 3.3 to 3.5 g/d. Only between 2% and 9% of children in different age and sex subgroups consumed less than 2.3 g/d.
- Average consumption of sugar-sweetened beverages was higher in boys than in girls and increased with age, from about 7 to 8 servings (8 fl oz) per week in 5- to 9-year-olds, 9 to 11 servings per week in 10- to 14-year-olds, and 14 to 17 servings per week in 15- to 19-year-olds.

For additional information, charts and tables, see
[Heart Disease & Stroke Statistics - 2015 Update.](#)

Additional charts may be downloaded directly from the online publication at:

<http://circ.ahajournals.org/content/131/4/e29.full.pdf+html> Or at: www.heart.org/statistics

The American Heart Association requests that this document be cited as follows:

Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, de Ferranti S, Després J-P, Fullerton HJ, Howard VJ, Huffman MD, Judd SE, Kissela BM, Lackland DT, Lichtman JH, Lisabeth LD, Liu S, Mackey RH, Matchar DB, McGuire DK, Mohler ER 3rd, Moy CS, Muntner P, Mussolino ME, Nasir K, Neumar RW, Nichol G, Palaniappan L, Pandey DK, Reeves MJ, Rodriguez CJ, Sorlie PD, Stein J, Towfighi A, Turan TN, Virani SS, Willey JZ, Woo D, Yeh RW, Turner MB; on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2015 update: a report from the American Heart Association. *Circulation*. 2015;131:e29–e322.

If you have questions about statistics or any points made in the 2015 Statistical Update, please contact the American Heart Association National Center, Office of Science & Medicine at statistics@heart.org. Please direct all media inquiries to News Media Relations at inquiries@heart.org or 214-706-1173.