

Heart Disease and Stroke Statistics 2018 At-a-Glance

Here are a few key statistics about heart disease, stroke, other cardiovascular diseases and their risk factors, in addition to commonly cited statistics about the American Heart Association's research program. The source for the health statistics is the Association's 2018 Heart Disease and Stroke Statistics Update, which is compiled annually by the American Heart Association, the Centers for Disease Control and Prevention, the National Institutes of Health and other government sources. The years cited are the most recent available for each statistical category. The source for the research information is the Association's Science Operations Department.

Key words included in the article:

cardiovascular diseases; epidemiology; risk factors; statistics; stroke

American Heart Association Research

- The American Heart Association does not conduct research. Rather, the organization uses donations to fund research projects. Research applications are carefully weighed and selected by teams of scientists and healthcare professionals who volunteer for the association.
- The American Heart Association has funded 13 Nobel Prize winners and several important medical breakthroughs, including techniques and standards for CPR, the first artificial heart valve, implantable pacemakers, cholesterol inhibitors, microsurgery and drug-coated stents.
- The American Heart Association funds more research into cardiovascular diseases and stroke than any organization except for the federal government.
- The American Heart Association has funded more than \$4 billion in research since 1949.

Heart Disease, Stroke and other Cardiovascular Diseases

- Cardiovascular disease, listed as the underlying cause of death, accounts for nearly 836,546 deaths in the US. That's about 1 of every 3 deaths in the US.
- About 2,300 Americans die of cardiovascular disease each day, an average of 1 death every 38 seconds.
- Cardiovascular diseases claim more lives each year than all forms of cancer and Chronic Lower Respiratory Disease combined.
- About 92.1 million American adults are living with some form of cardiovascular disease or the after-effects of stroke. Direct and indirect costs of total cardiovascular diseases and stroke are estimated to total more than \$329.7 billion; that includes both health expenditures and lost productivity.
- Nearly half of all NH black adults have some form of cardiovascular disease, 47.7 percent of females and 46.0 percent of males.
- Coronary Heart Disease is the leading cause (43.8 percent) of deaths attributable to cardiovascular disease in the US, followed by Stroke (16.8 percent), Heart Failure (9.0 percent), High Blood Pressure (9.4 percent), diseases of the arteries (3.1 percent), and other cardiovascular diseases (17.9 percent).
- Heart disease accounts for 1 in 7 deaths in the US.

- Cardiovascular disease is the leading global cause of death, accounting for more than 17.9 million deaths per year in 2015, a number that is expected to grow to more than 23.6 million by 2030.
- CVD and stroke accounted for 14% of total health expenditures in 2013-2014. This is more than any major diagnostic group.
- Total direct medical costs of CVD are projected to increase to \$749 billion in 2035.

Heart Disease

- Heart Disease (including Coronary Heart Disease, Hypertension, and Stroke) remains the No. 1 cause of death in the US.
- Coronary heart disease accounts for 1 in 7 deaths in the US, killing over 366,800 people a year.
- The overall prevalence for MI in the US is about 7.9 million, or 3 percent, in US adults.
- In 2015, heart attacks claimed 114,023 lives in the US
- The estimated annual incidence of heart attack in the US is 720,000 new attacks and 335,000 recurrent attacks. Average age at the first heart attack is 65.6 years for males and 72.0 years for females.
- Approximately every 40 seconds, an American will have a heart attack.
- From 2005 to 2015, the annual death rate attributable to coronary heart disease declined 34.4 percent and the actual number of deaths declined 17.7% – but the burden and risk factors remain alarmingly high.
- The estimated direct and indirect cost of heart disease in 2013 to 2014 (average annual) was \$204.8 billion.
- Heart attacks (\$12.1 billion) and Coronary Heart Disease (\$9.0 billion) were 2 of the 10 most expensive conditions treated in US hospitals in 2013.
- Between 2013 and 2030, medical costs of Coronary Heart Disease are projected to increase by about 100 percent.

Stroke

- Someone in the US has a stroke about once every 40 seconds.
- Stroke accounts for 1 of every 19 deaths in the US.
- Stroke kills someone in the US about every 3 minutes 45 seconds.
- When considered separately from other cardiovascular diseases, stroke ranks No. 5 among all cause of death in the US, killing nearly 133,000 people a year.
- From 2005 to 2015, the age-adjusted stroke death rate decreased 21.7 percent, and the actual number of stroke deaths declined 2.3 percent.
- Each year, about 795,000 people experience a new or recurrent stroke. Approximately 610,000 of these are first attacks, and 185,000 are recurrent attacks.
- Stroke is a leading cause of serious long-term disability in the US.
- In 2015, stroke deaths accounted for 11.8% of total deaths worldwide, making stroke the second leading global cause of death behind heart disease.

Sudden Cardiac Arrest

- In 2015, any-mention sudden cardiac arrest mortality in the US was 366,807.
- The majority of Out of Hospital Cardiac Arrests (OHCA) occurs at public settings (39.5 percent). In 2015, home or residence (27.5 percent) and nursing homes (18.2 percent) were the second and third most common locations of OHCA.

Heart Disease, Stroke and Cardiovascular Disease Risk Factors

The American Heart Association gauges the cardiovascular health of the nation by tracking seven key health factors and behaviors that increase risks for heart disease and stroke. We call these “Life’s Simple 7” and we measure them to track progress toward our 2020 Impact Goal: to improve the cardiovascular health of all Americans by 20 percent and reduce deaths from cardiovascular diseases and stroke by 20 percent, by the year 2020. Life’s Simple 7 are: not-smoking, physical activity, healthy diet, body weight, and control of cholesterol, blood pressure, and blood sugar. Here are some key facts related to these factors:

Smoking

- Worldwide, tobacco smoking (including second-hand smoke) was 1 of the top 3 leading risk factors for disease and contributed to an estimated 7.2 million deaths in 2015.
- Tobacco use is the largest preventable cause of deaths in the US, killing >480,000 Americans per year. Of these, 41,000 were attributed to secondhand smoke exposure.
- In 2015, 6.0 percent of adolescents aged 12 to 17 report being current smokers.
- In 2015, 15.1 percent of adults are current smokers (16.7 percent male and 13.6 percent females)
- In 2015, the average initiation of cigarette use was 17.9 years.
- Among adults, those most likely to smoke were Non-Hispanic American Indian or Alaska Native males (21.9 percent), Non-Hispanic blacks (16.7 percent), Non-Hispanic whites (16.6%), Hispanics (10.1 percent), and Asians (7%).

Physical Inactivity

- About one in every three US adults or 30.4 percent, do not engage in leisure time physical activity. Hispanic and Non-Hispanic black adults were more likely to be inactive.
- Among students in grades 9-12, only about 27.1 percent meet the American Heart Association recommendation of 60 minutes of exercise every day. More high school boys (36 percent) than girls (17.7 percent) reported having been physically active at least 60 minutes per day on all 7 days.

Nutrition

- Between 2003 to 2004 and 2011 to 2012 in the United States, the mean AHA healthy diet score improved in both children and adults. The prevalence of an ideal healthy diet score increased from 0.2 percent to 0.6 percent in children and from 0.7 percent to 1.5 percent in adults.
- These improvements were largely attributable to increased whole grain consumption and decreased sugar-sweetened beverage consumption in both children and adults, as well as a small, nonsignificant trend in increased fruit and vegetable consumption. No major trends were evident in children or adults in progress toward the targets for consumption of fish or sodium.
- Between 1999 and 2012, although AHA healthy diet scores tended to improve in all race/ethnicity, income, and education levels, many disparities present in earlier years widened over time, with generally smaller improvements seen in minority groups and those with lower income or education.

Overweight/Obesity

- In the US, the prevalence of obesity among adults, estimated using NHANES data, increased from 1999 to 2000 through 2013 to 2014 from 30.5 percent to 37.7 percent.

- In the US, the prevalence of overweight and obesity among children and adolescents age 2-19 years, estimated using NHANES data, is 33.4 percent (16.2 percent were overweight and 17.2 percent were obese).
- By age group, the prevalence of obesity for children aged 2 to 5 years was 9.4 percent; for children aged 6 to 11 years, prevalence was 17.4 percent; and for adolescents aged 12 to 19 years, prevalence was 20.6 percent.
- Worldwide, between 1980 and 2013, the proportion of overweight or obese adults increased from 28.8 percent to 36.9 percent among males and from 29.8 percent to 38.0 percent among females.

Using the Global Burden of Disease study statistical model, the Pacific Island countries have the highest mortality rates attributable to high Body Mass Index.

Cholesterol

- About 94.6 million, or 39.7 percent, of American adults have total cholesterol of 200 mg/dL or higher. The race and gender breakdown are:
 - 37.0 percent of NH white males
 - 43.4 percent of NH white females
 - 32.6 percent of NH black males
 - 36.1 percent of NH black females
 - 43.1 percent of Hispanic males
 - 41.2 percent of Hispanic females
 - 39.9 percent of NH Asian males
 - 40.5 percent of NH Asian females
- About 28.5 million, or 11.9 percent, of American adults have total cholesterol of 240 mg/dL or higher. The race and gender breakdown are:
 - 10.8 percent of NH white males
 - 13.8 percent of NH white females
 - 7.3 percent of NH black males
 - 9.6 percent of NH black females
 - 13.6 percent of Hispanic males
 - 12.5 percent of Hispanic females
 - 10.8 percent of NH Asian males
 - 11.2 percent of NH Asian females
- Nearly 1 of every 3 American adults have high levels of LDL cholesterol (the “bad” kind).
- About 18.7 percent of American adults have low levels of HDL cholesterol (the “good” kind).

Diabetes

- An estimated 23.4 million, or 9.1 percent, of American adults have diagnosed diabetes. The race and gender breakdown are:
 - 8.0 percent of NH white males
 - 7.4 percent of NH white females
 - 14.1 percent of NH black males
 - 13.6 percent of NH black females
 - 12.6 percent of Hispanic males
 - 12.7 percent of Hispanic females
 - 11.8 percent of NH Asian males
 - 9.1 percent of NH Asian females
- An estimated 7.6 million, or 3.1 percent, of American adults have undiagnosed diabetes. Additionally, about 81.6 million, or 33.9 percent, of American adults have prediabetes.

- Hispanics, NH blacks, and NH Asians bear a disproportionate burden of diabetes in the US.
- In 2015, an estimated 5.2 million deaths were attributed to diabetes globally. This represents a mortality rate of 82.4 per 100,000.
- It is estimated that there will be 642 million people with diabetes in 2040.

High Blood Pressure

- Using the 2017 ACC/AHA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults, 45.6 percent of US adults have hypertension.
- In 2015, there were 78,862 deaths primarily attributable to High Blood Pressure.
- From 2005 to 2015, the death rates attributable to High Blood Pressure increased 10.5%, and the actual number of deaths attributable to High Blood Pressure rose 37.5%.
- Projections show that by 2035, the total direct costs of High Blood Pressure could increase to an estimated \$220.9 billion.

Benjamin EJ, Virani SS, Callaway CW, Chang AR, Cheng S, Chiuve SE, Cushman M, Delling FN, Deo R, de Ferranti SD, Ferguson JF, Fornage M, Gillespie C, Isasi CR, Jimenez MC, Jordan LC, Judd SE, Lackland D, Lichtman JH, Lisabeth L, Liu S, Longenecker CT, Lutsey PL, Matchar DB, Matsushita K, Mussolino ME, Nasir K, O'Flaherty M, Palaniappan LP, Pandey DK, Reeves MJ, Ritchey MD, Rodriguez CJ, Roth GA, Rosamond WD, Sampson UKA, Satou GM, Shah SH, Spartano NL, Tirschwell DL, Tsao CW, Voeks JH, Willey JZ, Wilkins JT, Wu JHY, Alger HM, Wong SS, Muntner P; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. [Heart disease and stroke statistics 2018 update: a report from the American Heart Association](#) [published online ahead of print January 31, 2018]. *Circulation*. DOI: 10.1161/CIR.0000000000000558.