

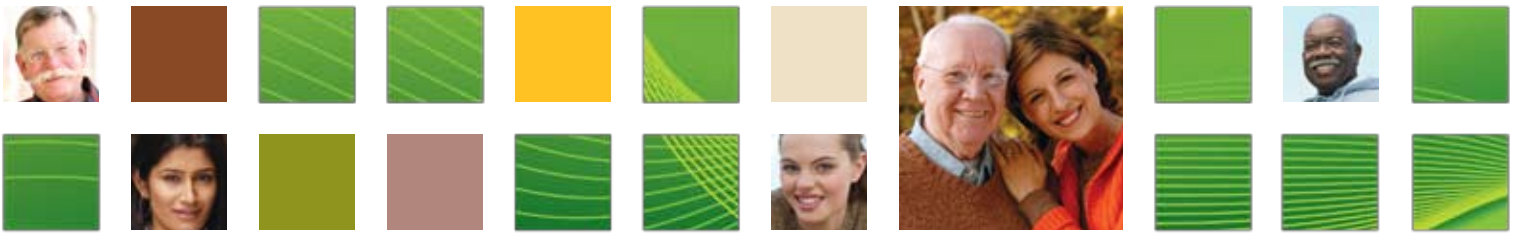


**HEART DISEASE
AND STROKE
PREVENTION**
ADDRESSING THE
NATION'S LEADING
KILLERS

AT A GLANCE
2011

National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Stroke Prevention





Heart Disease and Stroke: The Nation's Leading Killers

Heart disease and stroke, the first and third leading causes of death for men and women, are among the most widespread and costly health problems facing our nation today, yet they also are among the most preventable. Cardiovascular diseases, including heart disease and stroke, account for more than one-third (33.6%) of all U.S. deaths.

In 2007, of all Americans who died of cardiovascular diseases, 150,000 were younger than age 65. Heart disease and stroke also are among the leading causes of disability in the United States, with nearly 4 million people reporting disability from these causes.

The Costs of Disease Are Staggering

Death rates alone cannot describe the burden of heart disease and stroke. In 2010, the total costs of cardiovascular diseases in the United States were estimated to be \$444 billion. Treatment of these diseases accounts for about \$1 of every \$6 spent on health care in this country. As the U.S. population ages, the economic impact of cardiovascular diseases on our nation's health care system will become even greater.

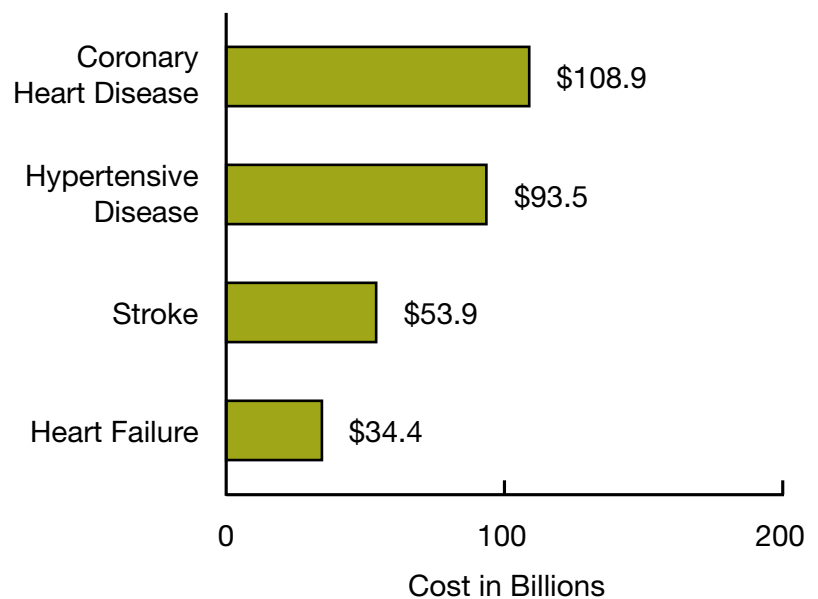
Overall, death rates for heart disease and stroke have decreased in the United States in recent decades. However, rates for incidence and death continue to be high, especially among some populations, including members of certain racial and ethnic groups, people with low socioeconomic status, and those living in the southeastern United States.

For example, age-adjusted death rates for cardiovascular disease are 37% higher among African Americans than among whites. The risk of having a first-ever stroke is nearly two times higher among African Americans than among whites. In addition, about 55,000 more women than men have a stroke each year. Recent studies show that the prevalence of heart disease and the percentage of associated premature deaths are higher among American Indians and Alaska Natives than among any other U.S. racial or ethnic group.

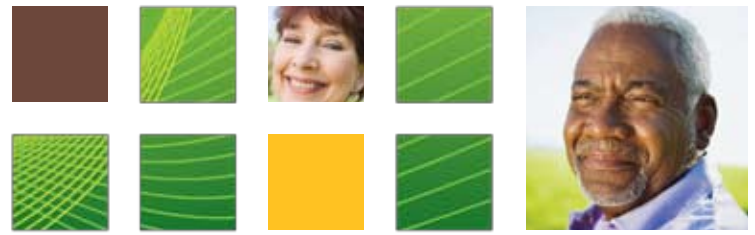
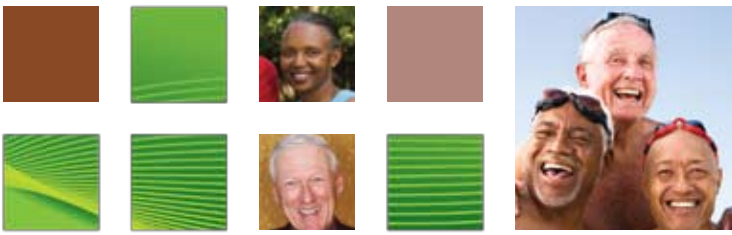
The Cost of Heart Disease and Stroke

- More than 1 of 3 (83 million) U.S. adults currently lives with one or more types of cardiovascular disease.
- An estimated 935,000 heart attacks and 795,000 strokes occur each year.
- Nearly 68 million adults have high blood pressure, and about half do not have this condition under control.
- An estimated 71 million adults have high cholesterol (i.e., high levels of low-density lipoprotein cholesterol). Nearly 2 of 3 do not have this condition under control.

Estimated Direct and Indirect Costs of Major Cardiovascular Diseases, United States, 2010



Source: Heidenreich PA, Trogon JG, Khavjou OA, Butler J, Dracup K, Ezekowitz MD, et al. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. *Circulation* 2011;123(8):933-944.



Prevention Saves Lives

Leading a healthy lifestyle—not using tobacco, being physically active, maintaining a healthy weight, and making healthy food choices—greatly reduces a person’s risk of developing heart disease or stroke. Preventing and controlling high blood pressure and high cholesterol also play a significant role in cardiovascular health. For example, a 12–13 point reduction in average systolic blood pressure over 4 years can reduce heart disease risk by 21%,

stroke risk by 37%, and risk of total cardiovascular death by 25%. Public health strategies and policies that promote healthy living, encourage healthy environments, and promote control of blood pressure and cholesterol levels are vital to improving the public’s health and saving lives. Ensuring that all Americans have access to early, affordable, and appropriate treatment also is essential to reducing disability and costs.

CDC’s Response

Through the Division for Heart Disease and Stroke Prevention, CDC translates prevention research into public health practice and provides national and state leadership to help reduce the burden of heart disease and stroke. CDC has funded heart disease and stroke prevention programs in the United States since 1998. With \$56.2 million in Fiscal Year 2010, CDC funded health departments in 41 states and the District of

Columbia to conduct heart disease and stroke prevention programs, 6 states to continue their Paul Coverdell National Acute Stroke Registry programs, and 5 sites to support sodium reduction efforts. CDC also funds national data collection, applied research, and evaluation initiatives. CDC’s work is grounded in goals and strategies set forth in *Healthy People 2020*, the Division for Heart Disease and Stroke Prevention’s strategic plan, and *A Public Health Action Plan to Prevent Heart Disease and Stroke*.

State Activities Supported by CDC Funding

- Working with primary care providers, health plans, and others to make system changes that help increase the number of people who lower their blood pressure. Activities include implementing automated reminders from providers to patients and creating electronic patient management systems.
- Promoting policies that help communities create healthier food environments and reduce sodium intake among residents.
- Promoting heart-healthy and stroke-free policies and programs in the workplace, such as smoke-free work sites, wellness programs, and insurance coverage of preventive health services for employees.
- Coordinating stroke prevention efforts to ensure that systems of care provide the highest quality of stroke care for all patients.
- Promoting training, standard protocols, and electronic reporting systems for emergency medical services personnel.

ABCS Initiative

High blood pressure, high cholesterol, and smoking continue to put more people at risk of heart disease and stroke. To address these risk factors, CDC is focusing on the ABCS of heart disease and stroke prevention—appropriate **A**spirin therapy, **B**lood pressure control, **C**holesterol control, and **S**moking cessation.

National Heart Disease and Stroke Prevention Program

CDC-funded state programs promote changes to policies and systems in health care, work site, and community settings and elimination of health disparities by emphasizing the ABCS of heart disease and stroke prevention. Some programs also work to improve emergency response and quality of acute care.

Paul Coverdell National Acute Stroke Registry

CDC’s Paul Coverdell National Acute Stroke Registry program helps to improve the delivery and quality of care for acute stroke patients by identifying gaps between recommended treatment guidelines and actual hospital practices. CDC currently funds programs in Georgia, Massachusetts, Michigan, Minnesota, North Carolina, and Ohio.



CDC's Response (continued)

In 2007, CDC partnered with the American Heart Association (AHA) and The Joint Commission to develop performance measures for acute stroke care. These measures are now core measures for the Paul Coverdell National Acute Stroke Registry; The Joint Commission's hospital accreditation program; the AHA Get With The Guidelines program; and stage 1 of the Centers for Medicare & Medicaid Services program to promote the meaningful use of certified electronic health record technology, which began in 2011. The measures are used in more than 1,400 hospitals that participate in one of these programs. This effort will reduce duplication, increase collaboration, and encourage hospitals to participate in these programs to improve the care of stroke patients.

Sodium Reduction Initiative

Eating too much sodium is a major contributor to high blood pressure, and the majority of the sodium that people eat comes from processed and restaurant foods. Policy and environmental changes can help decrease sodium intake and have immediate, positive effects on a person's blood pressure. CDC is working to reduce sodium intake by promoting local, state, and national strategies; meeting with public and private stakeholders; enhancing the monitoring of sodium intake and changes in the food supply; and expanding scientific literature on sodium.

In September 2010, CDC began funding sodium reduction efforts in California (working with Shasta County), Kansas (working with Shawnee County), Los Angeles County, New York City, and New York State (working with Broome and Schenectady counties). This 3-year project will support policy changes designed to create healthier food environments and make it easier for people to eat less sodium.

Better Tracking of Cardiovascular Disease

Researchers are currently unable to accurately estimate the annual incidence for heart disease or stroke or the prevalence of their risk factors at state or local levels. A comprehensive, national surveillance system that provides timely local data is

needed. Such a system would improve capacity to monitor risk factor trends, identify populations at greatest risk, and evaluate the effect of efforts to control risk factors for cardiovascular disease.

CDC Activities Support State Programs

CDC also conducts the following activities to help prevent heart disease and stroke at state and local levels:

- **Evaluation.** CDC conducts evaluation research and helps states evaluate the effectiveness of prevention programs and policy and system-level changes.
- **Monitoring and Tracking Disease.** CDC tracks data and trends in heart disease and stroke to help states make informed program decisions.
- **Training and Technical Assistance.** CDC provides guidance and training to states and partners on how to apply evidence-based practices and develop effective programs.
- **Translating Science into Practice.** CDC interprets the science of prevention and translates it into practices and programs for states and communities.
- **Partnerships.** CDC builds partnerships with other federal agencies and national groups, such as the Federal Inter-agency Committee on Emergency Medical Services, to promote policies and system improvements to prevent heart disease and stroke across the country.

Cardiac Arrest Registry to Enhance Survival

The Cardiac Arrest Registry to Enhance Survival (CARES) program, which began in 2004, is a database that communities across the United States can use to identify out-of-hospital cardiac arrest events, measure key aspects of prehospital care, determine rates of survival, and improve emergency cardiac care. In 2011, CARES participants include 40 communities in 25 states, with state-level expansion planned for 7 states.

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