



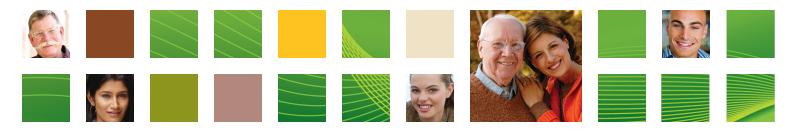
HEART DISEASE
AND STROKE
PREVENTION
ADDRESSING THE
NATION'S LEADING
KILLERS

AT A GLANCE 2010

NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION
IMPROVING HEALTH AND QUALITY OF LIFE FOR ALL PEOPLE







## **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 (34.3%) of all U.S. deaths.

In 2006, of all Americans who died of cardiovascular diseases, 151,000 were younger than age 65. Heart disease and stroke also are among the leading causes of disability in the United States, with nearly 3 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. The cost of cardiovascular diseases in the United States, including health care expenditures and lost productivity from deaths and disability, is estimated to be more than \$503

billion in 2010. 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 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 for first-ever stroke is nearly twice as high for African Americans than it is for 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 racial or ethnic group in the United States.

#### The Cost of Heart Disease and Stroke

- More than 1 in 3 (81 million) U.S. adults currently live with one or more types of cardiovascular disease.
- An estimated 935,000 heart attacks and 795,000 strokes occur each year.
- Americans make more than 79 million doctor visits every year for treatment and management of cardiovascular diseases.
- Nearly 6 million hospitalizations occur each year because of cardiovascular diseases.

### **Estimated Direct and Indirect Costs of Major Cardiovascular** Diseases and Stroke,\* United States, 2010 Heart Diseases<sup>†</sup> \$316.4 Coronary **Heart Disease** Hypertensive \$76.6 Disease Stroke \$73.7 Heart \$39.2 Failure 50 100 150 200 250 300 \_\_\_ 350 Cost In Billions \* Totals do not add up because of rounding and overlap. † Includes coronary heart disease, congestive heart failure, part of hypertensive disease,

cardiac dysrhythmia, rheumatic heart disease, cardiomyopathy, pulmonary heart

Source: American Heart Association. Heart Disease and Stroke Statistics - 2010 Update.

disease, and other or ill-defined "heart" diseases.









































## **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 blood cholesterol also play a significant role in cardiovascular health. For example, a 12-13 point reduction in systolic blood pressure can reduce heart disease risk by 21%, stroke risk

by 37%, and risk for death from heart disease or stroke 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 \$54.1 million appropriated in Fiscal Year 2009, CDC funded health departments in 41 states and the District of Columbia to conduct heart disease and stroke prevention programs; six states were funded to continue their Paul Coverdell National Acute Stroke Registry programs. 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 2010, the Division for Heart Disease and Stroke Prevention's strategic plan, and A Public Health Action Plan to Prevent Heart Disease and Stroke.

## **National Heart Disease and Stroke Prevention Program**

CDC-funded state programs promote policy and systems changes in health care, worksite, and community settings. These programs also work to

- Increase awareness of the warning signs and symptoms of heart attack and stroke and the importance of calling 911 immediately.
- Improve emergency response and quality of care.
- Eliminate health disparities among racial and ethnic minority populations.

## **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

# **State Activities Supported by CDC Funding**

- Promote heart-healthy and stroke-free worksite policies and programs, such as smoke-free workplaces, wellness programs, and insurance coverage of preventive health services for employees.
- Work with health care providers to make system changes, such as automated reminders from providers to patients, that help increase the number of people who bring their blood pressure under control.
- Coordinate stroke prevention efforts to ensure that systems of care provide the highest quality of stroke care for all.
- Promote training and standard protocols for emergency medical service staff.

guidelines and actual hospital practices. CDC currently funds programs in Georgia, Massachusetts, Michigan, Minnesota, North Carolina, and Ohio.

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, and the AHA Get With The Guidelines program. 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 one or more of the programs.



## CDC's Response (continued)

#### **ABCS Initiative**

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

#### **Sodium Initiative**

Eating too much sodium is a major contributor to high blood pressure, and the majority of sodium people consume comes from processed and restaurant foods. Policy and environmental changes can help Americans consume less sodium and have immediate and positive results on 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.

#### **Better Tracking of Cardiovascular Disease**

Although heart disease and stroke are the first and third leading causes of death in the United States, we currently cannot track the number of new cases of these diseases each year and their occurrence at local, state, or national levels. This information could help track the reduction of heart disease and stroke and their risk factors. A comprehensive, national surveillance system for cardiovascular disease is critical to building a heart-healthy and stroke-free nation.

#### **CDC Activities Support State Programs**

In addition to funding state programs, CDC 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 systems-level changes.
- Monitoring and Tracking Disease. CDC tracks data and trends in heart disease and stroke to help states make

informed program decisions. Recently published studies include "Trends in high levels of low-density lipoprotein cholesterol in the United States, 1999–2006," published in JAMA, and "Paul Coverdell National Acute Stroke Registry Surveillance—four states, 2005–2007" published in Morbidity and Mortality Weekly Report.

- 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 Healthy People 2010 Partnership and the Federal Interagency 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 (CARES)**

The Cardiac Arrest Registry to Enhance Survival (CARES) program is a quality improvement registry that enables communities across the United States to identify incidents of out-of-hospital cardiac arrest, measure key aspects of prehospital care, and determine rates of survival. The program began in 2004 in metro Atlanta. In June 2009, CARES participants included 28 communities in 17 states and the District of Columbia. The goal is to create a national registry that helps local Emergency Medical Service (EMS) administrators and medical directors identify when and where cardiac arrests occur, what elements of their EMS systems are functioning properly, and what changes can be made to improve outcomes.

For more information, please contact the Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion 4770 Buford Highway NE, Mail Stop K-47, Atlanta, GA 30341-3717 Telephone: 800-CDC-INFO (800-232-4636) • TTY: 888-232-6348 E-mail: cdcinfo@cdc.gov • Web: http://www.cdc.gov/dhdsp

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