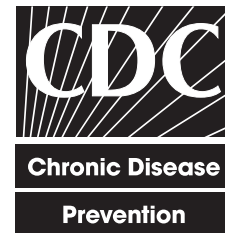


# Preventing Chronic Diseases: Investing Wisely in Health

## Preventing Heart Disease and Stroke



U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES

### The Reality

- Heart disease and stroke are the first and third leading causes of death in the United States, accounting for nearly 35% of all deaths.
- More than 1,357,000 Americans die of cardiovascular diseases each year, which amounts to one death every 37 seconds.
- More than 80 million Americans (almost one third of the population) have some form of cardiovascular disease, which is responsible for more than 6 million hospitalizations each year.
- Much of the burden of heart disease and stroke could be eliminated by reducing its major risk factors: high blood pressure, high blood cholesterol, tobacco use, diabetes, physical inactivity, and poor nutrition.
- About 90% of middle-aged Americans will develop high blood pressure in their lifetime. Nearly 65% of those with high blood pressure do not have it under control.
- In 2005, more than 106 million people were told that they had total blood cholesterol levels that were high (200 mg/dL or higher).
- The rate of death from cardiovascular diseases among African Americans is nearly twice that among whites.

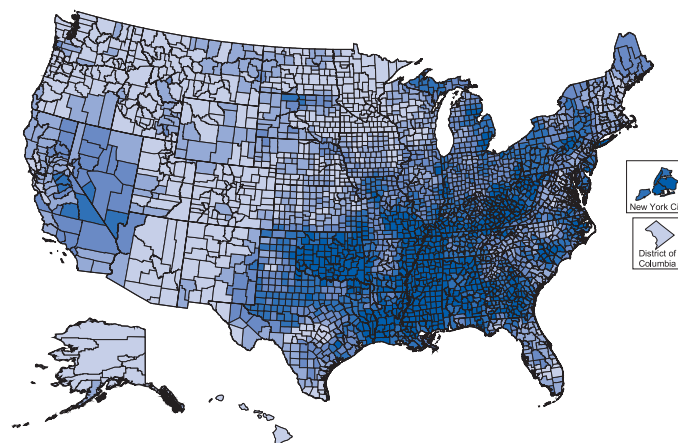
### The Cost of Heart Disease and Stroke

- In 2008, the cost of heart disease and stroke in the United States is projected to exceed \$448.5 billion; \$296.4 billion for health care expenditures and \$152.1 billion for lost productivity from death and disability.
- In 2008, \$69.4 billion in health care spending was attributed to high blood pressure.
- In 2001, the cost of hospitalization for cardiovascular problems among Medicare beneficiaries topped \$29 billion.

### Reducing Risk Factors for Heart Disease Saves Lives and Money

- Reducing systolic (the number above the line in a reading, as in 120/80) blood pressure just 12–13 mm Hg over 4 years can reduce:
  - ☐ Coronary heart disease by 21%.
  - ☐ Stroke by 37%.
  - ☐ Cardiovascular disease deaths by 25%.
  - ☐ Overall deaths by 13%.
- Reducing serum cholesterol levels by 10% can reduce the number of heart attacks and stroke by 30%.
- U.S. adults substantially lowered their blood pressure, high cholesterol levels, and other heart disease risk factors during the 1980s. As a result, U.S. costs associated with coronary heart disease declined by an estimated 9%—from about \$240 billion in 1981 to about \$220 billion in 1990.

### Heart Disease Death Rates by County Adults Aged 35 Years and Older, 2000–2004



Age-Adjusted Average Annual  
Deaths per 100,000\*

Number of  
Counties

268 – 402	627
403 – 451	623
452 – 495	621
496 – 544	622
545 – 771	609

\* Heart disease death rates are spatially smoothed to enhance the stability of rates in counties with small populations. Deaths defined according to International Classification of Diseases (ICD) codes: ICD-10: 100–109, 111, 113, 120–151.

Data Source: National Vital Statistics System, U.S. Census Bureau.

Revised August 2008

## State Program in Action:

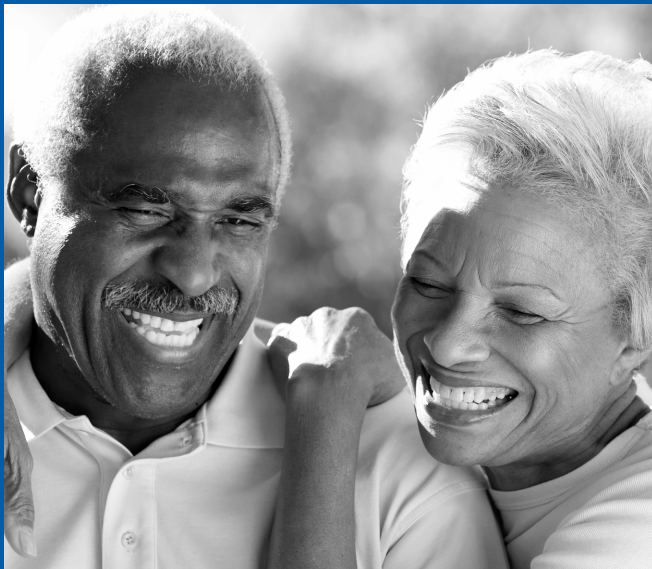
### Maine Employer Prevention Incentives

Employers are a principal source of health insurance in the United States and are important in promoting prevention strategies. Because of this, state Heart Disease and Stroke Prevention programs work to promote policies that encourage increased health promotion and access to prevention services offered through work sites.



For example, the Maine Chamber of Commerce joined a large state health insurer to partner with the Maine Heart Disease and Stroke Prevention program and the Maine Council for Worksite Wellness to launch a health promotion incentive program. Through this program, participating small businesses (2–50 employees) and self-employed Chamber members were eligible for a 2% annual insurance premium reduction if they increased employee participation in certain work site health promotion activities such as health risk appraisals.

Reducing health care costs and promoting health care management in the workplace is a win-win for all parties including employers, employees, and their insurance carriers. This new program demonstrated the impact that state Heart Disease and Stroke Prevention programs can have on promoting employer-based preventive health insurance coverage and increasing employee health promotion work site programs.



For more information and references supporting these facts, please visit [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp).

## Effective Strategies

- Community health centers and other health care settings need to have systems in place that will improve the quality of care that high-risk patients receive. For example, community health centers and private clinics and doctors' offices can use electronic reminder messages to alert doctors of patients' follow-up needs. In **Utah**, community health centers have used such a system to substantially increase the proportion of patients who have their blood pressure under control. Before the system was in place, 33% of patients had their blood pressure under control; just 6 months after the centers began using the system, 58% of patients had controlled their blood pressure.
- Work sites are an ideal place to promote the cardiovascular health of millions of people. For example, employers can offer health screenings and follow-up services to help employees control their blood pressure and cholesterol levels. These services are proven effective in the workplace. In addition, employees can be trained to recognize and respond to the signs of a heart attack and stroke. Another strategy is for work sites to offer adequate insurance coverage for health services that aim to prevent heart disease and stroke.
- Educating the public about signs of a heart attack and stroke and the importance of calling 911 quickly is an important step to improving the chances for survival and minimizing the damage that can occur following a heart attack or stroke. Research indicates that 47% of deaths from heart attack occur before a person can be admitted to a hospital, and about 48% of stroke victims die before emergency medical personnel arrive. Only 27% of adults in this country know both the signs of a heart attack and the importance of immediately calling 911.
- Other strategies to reduce people's risk for heart disease and stroke are:
  - Avoid tobacco use.
  - Eat healthier foods.
  - Control diabetes.
  - Be more physically active.

## Hope for the Future

Preventing and controlling major risk factors for heart disease and stroke are critical to achieving a heart-healthy and stroke-free America. Health agencies at the federal, state, and local levels are working to reduce these risk factors and to eliminate disparities in health and in the delivery of health care services.

Whether you are a citizen, health care provider, employer, school administrator, or elected official, there are things you can do to improve the health of your heart. For suggestions, check out CDC's *Moving Into Action*, available at [http://www.cdc.gov/dhdsp/library/moving\\_into\\_action/index.htm](http://www.cdc.gov/dhdsp/library/moving_into_action/index.htm).