

Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities

Employers



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Heart Disease and Stroke Need Your Attention

What do we know about heart disease and stroke?

Heart disease and stroke are deadly, disabling, and costly. They are the nation's first and third leading causes of death, killing nearly 930,000 Americans each year. Heart disease is a leading cause of premature, permanent disability in the U.S. workforce, and stroke alone has disabled more than 1 million currently surviving Americans. The cost of heart disease and stroke in the United States is projected to be \$394 billion in 2005, of which \$242 billion is for health care expenditures and \$152 billion for lost productivity from death and disability. The costs, the disability, and the deaths will only increase as the baby-boomer generation ages and its age-dependent risks for heart disease and stroke increase.

Heart disease and stroke are largely preventable. Years of research have indicated that controlling high blood pressure and high blood cholesterol reduces a person's risk of developing heart disease or having a heart attack or stroke. Stopping smoking, eating a heart-healthy diet, being physically active, maintaining a healthy weight, and controlling diabetes can also help decrease a person's risk for heart disease and stroke.

How can we translate knowledge into action?

Promoting heart-healthy and stroke-free communities involves efforts from all sectors of society. Health care systems, state and local governments, and workplaces have important and distinct roles to play in improving cardiovascular health. Health care organizations can implement systems to better monitor and manage cardiovascular conditions in accordance with national guidelines. Policy makers can establish coverage for preventive health services, no-smoking laws, and emergency response systems. Businesses can provide employees with screening and follow-up services for blood pressure and cholesterol control and offer opportunities for physical activity.

Why should employers promote heart-healthy and stroke-free communities?

Employers hold an important and valuable position for protecting the health of the people in their organization. This document provides a range of actions you can take to promote heart-healthy and stroke-free communities, which revolve around four central themes:

- Demonstrate leadership.
- Implement policies and incentives to make healthy choices the easy choices.
- Promote coverage for and use of preventive health services.
- Implement life-saving improvements in health services and medical response.

The choice is yours. The time to act to address heart disease and stroke is now.

Actions for Employers

Demonstrate leadership

- Establish and support a worksite wellness committee. ①
- Hold a physical activity or health promotion day, month, or season spearheaded by a wellness committee and supported by the CEO. ①
- Sponsor campaigns to promote awareness of the risk factors for and signs and symptoms of heart attacks and strokes and the importance of calling 9-1-1 immediately when someone is having a heart attack or stroke. ②
- Disseminate heart disease and stroke prevention messages to employees (e.g., post signs reminding employees to get their blood pressure and cholesterol levels checked, eat 5 fruits and vegetables per day, quit smoking, and avoid exposure to secondhand smoke). ②

Implement policies and incentives to make healthy choices the easy choices

- Create opportunities for physical activity and good nutrition by
 - Promoting healthy options in cafeterias and vending machines. ②
 - Providing access to a gym at the workplace. ③
 - Providing walking trails with mile markers on or near the building property. ②
 - Placing signs by elevators that encourage people to use the stairs. ③
- Provide shower and locker room facilities and bike racks to encourage physical activity and alternative forms of transportation. ①
- Prohibit all tobacco use in indoor areas and near building entrances and exits. Reduce exposure to secondhand smoke by establishing smoke-free campus policies. ③
- Promote office-based team incentives such as gift certificates and lower insurance premiums for employees who participate in health risk assessments, competitions, and support groups that promote disease prevention measures (e.g., logging miles walked, quitting smoking, getting blood pressure checked, getting cholesterol checked). ②
- Provide a health club membership or reimbursement for a health club membership for employees. ②
- Partner with food vendors and cafeteria managers to provide low-cost, healthy food choices for employees, along with point-of-purchase nutrition information. ②
- Provide heart-healthy nutrition, weight control, and tobacco cessation classes through a worksite health promotion program. ②

Promote coverage for and use of preventive health services

- Provide health risk assessments, medical screening, and effective follow-up education and counseling to help employees control their blood pressure, blood cholesterol, and blood sugar levels and quit smoking. ②
- Negotiate health benefit plan designs that provide coverage for preventive services and emphasize quality, cost-effective medical care. ②
- Provide tobacco cessation counseling or access to counseling services (e.g., refer employees to quitline service provider). Provide coverage for FDA-approved medications to help employees quit using tobacco. ②

Implement life-saving improvements in health services and medical response

- Install automatic external defibrillators (AEDs) as appropriate. Train employees to use AEDs. (This training can be coordinated with annual CPR training.) ②
- Ensure that you have an emergency response plan. ①

What the Symbols Mean

The actions in this document are divided into three categories, which are indicated by the number following each action.

- ① Approaches that will bring visibility and support to the issues of heart disease and stroke.
- ② Interventions found by several studies or scientific reviews to support cardiovascular health.
- ③ Interventions recommended by CDC's Guide to Community Preventive Services or clinical guidelines.

References for level ② and level ③ actions are listed on the following page. References for level ② include pre/post, quasi-experimental, and experimental studies.

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Examples of Employers Promoting Heart-Healthy and Stroke-Free Communities

- Sponsor campaigns to promote awareness of the risk factors for and signs and symptoms of heart attacks and strokes and the importance of calling 9-1-1 immediately when someone is having a heart attack or stroke.



The Montana State Heart Disease and Stroke Prevention Program collaborated with Emergency Medical Services and staff from the Montana Department of Public Health and Human Services (MDPHHS) on a multi-phase MDPHHS worksite intervention. Objectives were to 1) increase employees' awareness of signs and symptoms of heart attack and stroke and the need to call 9-1-1, 2) install AEDs in selected MDPHHS buildings and the capitol, and 3) increase the purchase of heart-healthy items in vending machines and snackbars.

To address the first objective, health communication messages were sent out weekly to staff through e-mail distribution lists. Educational messages were also displayed in bathrooms, and weekly contests on recognizing heart disease and stroke symptoms were conducted via e-mail. As a result of the intervention, awareness of heart attack signs and symptoms increased significantly among employees.



- **Prohibit all tobacco use in indoor areas and near building entrances and exits. Reduce exposure to secondhand smoke by implementing smoke-free campus policies. Provide tobacco cessation counseling or access to counseling services. Provide coverage for FDA-approved medications to help employees quit using tobacco.**

Union Pacific Railroad (UPRR) implemented a “Butt Out and Breathe” program, which incorporated policy changes with activities to raise employers’ awareness of the health risks of smoking and provide education, risk identification, and clinical interventions to help them quit smoking. At the beginning of this process in 1987, UPRR’s smoking policy was to prohibit smoking in offices, but smoking rooms were available until 1996. Smoking was not prohibited at all sites and on all equipment until 1999. Smoking cessation services are now available for UPRR employees who are interested in quitting. These services include a readiness review survey, health risk appraisal, self-directed workbooks, telephone counseling, in-person counseling, Internet counseling, health coaches, and periodic assessments. Clinical interventions available through employee health plans include access to prescription drugs to help employees quit smoking and may include nicotine replacement therapy in the future. UPRR’s “Butt Out and Breathe” program is having positive results. The proportion of UPRR employees who smoke decreased from about 40% in 1993 to 25% in 2001. The Assistant Vice President credits the company’s commitment to smoking cessation for the continuing decline of smoking among employees.



➤ **Establish and support a worksite wellness committee.**

The South Carolina Heart Disease and Stroke Prevention Program collaborated with the University of South Carolina Prevention Research Center to produce Worksite Wellness in South Carolina. This project was a comprehensive assessment of worksite policies and environmental supports for heart disease and stroke prevention and control, including the availability of preventive health screenings. Nine hundred worksites with at least 50 employees responded to the assessment. The most common types of screening offered were for blood pressure and cholesterol. The project also assessed cardiac emergency preparedness, including the availability of AEDs and CPR training and the presence of signs describing the signs and symptoms of a stroke and providing instructions for contacting 9-1-1. Survey findings revealed that worksites that had wellness committees or coordinators offered a greater number of employee health and wellness services. The state program will use this information to develop worksite wellness activities and evaluation measures.



- **Negotiate health benefit plan designs that provide reimbursement for preventive services and emphasize quality, cost-effective medical care.**



North Carolina Prevention Partners developed the BASIC Model Preventive Benefits Initiative, which is designed to increase the number of health plans in the state that cover assessment, counseling, and referral for tobacco use, physical inactivity, and unhealthy eating. The initiative has increased the number of health plans that provide coverage for tobacco use by 100%, for nutrition by 100%, and for physical activity by 50%. Efforts have included training employers in purchasing preventive benefits and making the business case for doing so. “Starting the Prevention Conversation” brochures for tobacco, physical activity, and nutrition have been developed for distribution to physicians’ offices. The initiative is now promoting coverage for hypertension and cholesterol control and developing supports

to help physicians treat risk factors according to the latest Joint National Committee (JNC7) guidelines and the National Cholesterol Education Program (NCEP ATP III) guidelines.



What the Science Tells Us

Blood Pressure

- Sixty-five million Americans have high blood pressure, and another 59 million are prehypertensive.¹
- A 12–13 point reduction in systolic blood pressure can reduce heart attacks by 21%, strokes by 37%, and all deaths from cardiovascular disease by 25%.² Nearly 70% of people with high blood pressure do not have it under control.³
- The Dietary Approaches to Stop Hypertension (DASH) study has shown that following a healthy eating plan can both reduce a person’s risk of developing high blood pressure and lower an already elevated blood pressure.⁴
- Medications can also help reduce high blood pressure.⁵

Cholesterol

- A 10% decrease in total blood cholesterol levels may reduce the incidence of coronary heart disease by as much as 30%.⁶ Only 18% of adults with high blood cholesterol have it under control.⁷
- Lowering saturated fat and increasing fiber in the diet, maintaining a healthy weight, and getting regular physical activity can reduce a person’s risk for cardiovascular disease by helping to lower LDL (bad) cholesterol and raise HDL (good) cholesterol.⁸
- A class of drugs called statins can reduce deaths from heart disease by reducing cholesterol levels.⁹

Emergency Response

- Forty-seven percent of heart attack deaths occur before an ambulance arrives and 48% of stroke deaths occur before hospitalization.^{10, 11}
- Only 3%–10% of eligible stroke victims get the emergency therapy (tPA) that can lead to recovery.¹²

Tobacco

- Cigarette smokers are 2–4 times more likely than nonsmokers to develop coronary heart disease.¹³
- Cigarette smoking approximately doubles a person’s risk for stroke.¹³

- People who quit smoking reduce their risk of death from cardiovascular disease by half within a few years.¹³
- Each year, secondhand smoke results in an estimated 35,000 deaths due to heart disease among nonsmokers.¹⁴

Nutrition¹⁵

- Fruits and vegetables are high in nutrients and fiber and relatively low in calories. A diet rich in fruits and vegetables can lower a person's risk of developing heart disease, stroke, and hypertension.
- Grain products provide complex carbohydrates, vitamins, minerals, and fiber. A diet high in grain products and fiber can help reduce a person's cholesterol level and risk of cardiovascular disease.
- Foods that are high in saturated fats (e.g., full-fat dairy products, fatty meats, tropical oils) raise cholesterol levels.
- People can lower their blood pressure by reducing the salt in their diets, losing weight, increasing physical activity, increasing potassium, and eating a diet rich in vegetables, fruit, and low-fat dairy products.

Physical Activity¹⁶

- Regular physical activity can decrease a person's risk of cardiovascular disease and prevent or delay the development of high blood pressure.
- People of all ages should get a minimum of 30 minutes of moderate-intensity physical activity (such as brisk walking) on most, if not all, days of the week.

Obesity^{15, 17}

- Because people who are overweight or obese have an increased risk for cardiovascular disease, diabetes, and hypertension, weight management can reduce a person's risk for these conditions.

Diabetes^{17, 18}

- Adults with diabetes have heart disease death rates about 2 to 4 times higher than adults without diabetes, and the risk for stroke is 2 to 4 times higher among people with diabetes. About 65% of deaths among people with diabetes are due to heart disease and stroke.

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The Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) is one of the 13 major operating components of the Department of Health and Human Services (HHS), which is the principal agency in the United States government for protecting the health and safety of all Americans. Since it was founded in 1946 to help control malaria, CDC has remained at the forefront of public health efforts to prevent and control infectious and chronic diseases, injuries, workplace hazards, disabilities, and environmental health threats.

CDC's Heart Disease and Stroke Prevention Program is located in the National Center for Chronic Disease Prevention and Health Promotion, which is part of the Coordinating Center for Health Promotion. The central strategies of the program include a focus on high blood pressure and cholesterol control, increasing knowledge of signs and symptoms of heart attack and stroke, improving emergency response, improving quality of care, and eliminating health disparities between population groups. Heart disease and stroke outcomes are also related to healthy eating, physical activity, and tobacco use, as well as diabetes and obesity. CDC's Heart Disease and Stroke Prevention Program coordinates these activities to improve overall cardiovascular health in the United States.

For more information on heart disease and stroke prevention at CDC, please visit www.cdc.gov/cvh.

The American Heart Association/American Stroke Association

The American Heart Association is a national voluntary health agency whose mission is to reduce disability and death from heart disease and stroke. Together with the American Stroke Association, the volunteer-led affiliates and their divisions form a national network of local AHA organizations involved in providing research, education, and community programs to prevent heart disease and stroke. The network continues to gain strength as it expands at the grass-roots level in states and local communities.

For more information on the American Heart Association/American Stroke Association, please visit www.americanheart.org.

The Association of State and Territorial Health Officials

The Association of State and Territorial Health Officials (ASTHO) is the national nonprofit organization representing the state and territorial public health agencies of the United States, the U.S. Territories, and the District of Columbia. ASTHO's members, the chief health officials of these jurisdictions, are dedicated to formulating and influencing sound public health policy and to assuring excellence in state-based public health practice.

For more information on the Association of State and Territorial Health Officials, please visit www.astho.org.

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