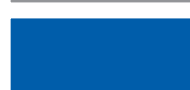


# Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities

## Local Officials



American Stroke  
Association®  
A Division of American  
Heart Association



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

## What Is *Moving into Action*?

*Moving into Action* is a series of action lists designed to help governors, state legislators, local officials, employers, and health care leaders promote heart-healthy and stroke-free communities. Each list suggests actions that range from ways to encourage general interest and awareness of these health issues to specific policies that promote healthy behaviors and reduce risks associated with heart disease and stroke. Included are examples gathered from states and communities that are working to reduce these risks and a summary of the science underlying heart disease and stroke prevention.

Suggested actions are based on current national guidelines, scientific evidence, and existing efforts from states throughout the country. For example, some actions are supported by years of research from leading public health, public policy, and medical organizations, while others stem from efforts by communities and organizations to address unhealthy behaviors related to heart disease and stroke.

*Moving into Action* can help policy makers, employers, and health care leaders assess what actions are most appropriate for their communities and can lend support to the efforts of individuals to prevent, manage, and control their risks for heart disease and stroke.

## Share Your Experiences

In suggesting these actions, we also invite you to share your ideas and experiences. Please e-mail your questions, suggestions, and experiences on how you are *Moving into Action* in your community at [ccdinfo@cdc.gov](mailto:ccdinfo@cdc.gov).

### Additional Copies

Additional copies of these lists can be requested at [ccdinfo@cdc.gov](mailto:ccdinfo@cdc.gov). They will also be made available on the Cardiovascular Health Web site at [www.cdc.gov/cvh](http://www.cdc.gov/cvh).

### Suggested Citation

Centers for Disease Control and Prevention. *Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities (Local Officials)*. Atlanta, GA: U.S. Department of Health and Human Services; 2005.

# A Message from the Centers for Disease Control and Prevention

Heart disease and stroke, the principal components of cardiovascular disease, are the nation's first and third leading causes of death. They are also major causes of morbidity and health disparities. Millions of Americans are at risk for these largely preventable conditions. Advances in science have been considerable, but the challenge of translating this knowledge into action remains.

To address this need, the Centers for Disease Control and Prevention, in collaboration with the American Heart Association/American Stroke Association and the Association of State and Territorial Health Officials, along with a host of other partners, developed *A Public Health Action Plan to Prevent Heart Disease and Stroke*. The *Action Plan*, released in 2003, calls for engagement by all sectors of society to support the prevention and control of heart disease and stroke. *Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities* suggests how certain sectors of society—policy makers, employers, and health care leaders—can take steps in this direction.

Can we imagine a world where our communities are designed to encourage safe physical activity? Where worksites and school cafeterias provide affordable, heart-healthy food options? Where the environment of public spaces is smoke-free? Where health care purchasers universally include preventive services, coverage for prescription drugs for heart disease, and counseling for therapeutic lifestyle changes? Where large and small health systems implement national guidelines recommended by federal agencies and national voluntary organizations? These scenarios are possible. The question is, how can we turn these scenarios into a reality?

Becoming engaged in the prevention of heart disease and stroke is a worthy cause for everyone, especially for those who can influence decisions that affect communities across the country. By sharing ideas, experiences, and expertise and by taking action now, we can effectively combat the persistent burden of heart disease and stroke and their related disparities in our society.

George A. Mensah, MD, FACP, FACC  
Acting Director  
National Center for Chronic Disease Prevention and Health Promotion  
Centers for Disease Control and Prevention

## A Message from the American Heart Association/American Stroke Association

When *A Public Health Action Plan to Prevent Heart Disease and Stroke* was first released at the Steps for a HealthierUS Conference in April 2003, the American Heart Association's president, Dr. Robert Bonow, observed that "this plan will help the public health community make the nation's number-one health threat a number-one priority. We already have much science and knowledge to help prevent and treat heart disease and stroke. Now we have a national vision and roadmap for the public health community to help guide its efforts, and strategies to give Americans a healthier future."

As the nation's largest voluntary health organization fighting cardiovascular disease, the American Heart Association and our division, the American Stroke Association, recognized that the release of the *Action Plan* was only the first step in a journey that would require strong partnerships and the active involvement of a number of government agencies and other organizations. We are pleased to be working with the Centers for Disease Control and Prevention and the Association of State and Territorial Health Officials to help guide the projects and activities that continue to take place as a result of the release of the *Action Plan*.

One such project is *Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities*. This document can help elected policy makers, public employers, and health care leaders across the country become more meaningfully engaged in heart disease and stroke prevention.

Once again, we applaud the Centers for Disease Control and Prevention for the release of this publication and for its continued commitment to *A Public Health Action Plan to Prevent Heart Disease and Stroke*. This is a significant step forward in furthering the vision of the *Action Plan* and the achievement of our shared goal of reducing heart disease and stroke and their risk factors.

Rose Marie Robertson  
Chief Science Officer  
American Heart Association/American Stroke Association

# A Message from the Association of State and Territorial Health Officials

As one of the lead partners supporting *A Public Health Action Plan to Prevent Heart Disease and Stroke*, we are very pleased, along with the Centers for Disease Control and Prevention and the American Heart Association/American Stroke Association, to present *Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities*.

Heart disease and stroke are the first and third leading causes of death in the United States and continue to pose a formidable challenge to the public health community. We cannot address this challenge alone. Only through collaboration with elected officials, employers, health care leaders, and others can we adequately address the continuing burden of heart disease and stroke.

ASTHO is the national nonprofit organization representing the state and territorial public health agencies. ASTHO's members, the chief health officials of these agencies, are dedicated to formulating sound public health policy and to assuring excellence in state-based public health practice. We hope this document can serve as an important resource for those interested in addressing heart disease and stroke in their states.

ASTHO is committed to this public health issue and we will continue to strive for policies that promote heart-healthy and stroke-free states and local communities.

George E. Hardy, Jr., MD, MPH  
Executive Director  
Association of State and Territorial Health Officials



# 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 local officials promote heart-healthy and stroke-free communities?

Local officials hold an important and valuable position for protecting the health of the people in their community. 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 Local Officials

## Demonstrate leadership

- Be a role model: display educational materials and establish worksite policies to support heart health in your office. Share your heart-healthy activities with the media (e.g., getting your blood pressure checked, using the stairs). If you or a family member has cardiovascular disease, share your story. ①
- Be a champion: create a local task force on heart disease and stroke. ①
- Support awareness campaigns about the
  - Signs and symptoms of heart attacks and stroke. ②
  - Urgency of calling 9-1-1 when these signs and symptoms first appear. ②
  - Prevention of risk factors, such as physical inactivity and smoking. ③
- Through county and local health departments, organize tobacco use cessation and blood pressure and cholesterol management programs or campaigns. Encourage collaboration among businesses, schools, health systems, community groups, and foundations. ①
- Start or encourage growth in walking clubs. Offer a walk with your mayor, county commissioner, or county supervisor. ①

## Implement policies and incentives to make healthy choices the easy choices

- Establish zoning laws for new communities to encourage high-density and mixed land use and require attention to walking/bike pathways, sidewalks, and green spaces for physical activity. ②
- Assess the walkability of your community. If needed, establish walking trails and parks to encourage physical activity. ③
- Institute transportation policies that encourage mass transit, walking, and biking. ②
- Set an example by establishing local policies to prohibit smoking in workplaces and public places. Include the prohibition of all tobacco use by students, staff, and visitors on school property and at school events, on or off campus. ③
- For school boards, promote coordinated school health programs, which can prevent risk behaviors that contribute to heart disease and stroke by
  - Maintaining or establishing enhanced physical education classes. ③
  - Serving and promoting heart-healthy food in cafeterias and vending machines. ②
  - Implementing smoke-free schools and campuses. ③
  - Prohibiting withholding of recess as punishment. ①
- Work with groups such as the Chamber of Commerce to encourage employers to provide healthy worksites. ①



## Promote coverage for and use of preventive health services in your community

- Negotiate a health benefits package for city and county employees that includes preventive services and incentives for preventing cardiovascular disease. ②
- Through county and local health departments and community health centers, support heart disease and stroke programs that prevent risk factors such as high blood pressure, high blood cholesterol, tobacco use, physical inactivity, and poor nutrition. ①
- Promote tobacco cessation services, including state quitlines. ③

## Implement life-saving improvements in health services and medical response

- Ensure that your wireless, enhanced 911 system (WE9-1-1), which allows an emergency call center to capture the precise location of a caller, identifies stroke as a medical emergency. ②
- Ensure that your hospital can provide the latest treatment advances in stroke care. ②

### 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 Local Officials Promoting Heart-Healthy and Stroke-Free Communities

- **Assess the walkability of your community. If needed, establish walking trails and parks to encourage physical activity.**



The Saint Louis University Prevention Research Center is helping residents of Missouri's Ozark and Bootheel regions reduce their risk for chronic diseases. With the help of local coordinators, the researchers established and trained 12 community coalitions. The coalitions join businesses, organizations, schools, and medical facilities in promoting health by sponsoring health fairs (which have attracted more than 10,000 school children and their families), health screenings for cholesterol and blood pressure, health education programs, and other activities. Residents have increased their level of physical activity by using one of the 25 coalition-built community walking trails and participating in coalition-sponsored physical

activity classes or sports teams. In fact, physical activity was nearly 7% greater among people who had walking trails available than among people in a control community with no trails. The coalitions also helped establish smoke-free policies, and some groups have received grants to introduce new health promotion opportunities.



- **Through county and local health departments and community health centers, provide programs that prevent risk factors such as high blood pressure, high cholesterol, tobacco use, physical inactivity, and poor nutrition.**

WISEWOMAN (Well-Integrated Screening and Evaluation for Women Across the Nation) projects across the country screen uninsured women for risk factors for heart disease and other chronic diseases, deliver nutrition and physical activity interventions, and provide referrals to medical care as needed. The Connecticut WISEWOMAN project wanted to enroll more uninsured women and encourage greater participation in the lifestyle intervention portion of the project, Stay Healthy for Life. The goal was to ensure that the project was using effective community outreach strategies for enrollment and to identify barriers that prevent women from engaging in heart-healthy lifestyle behavior changes. To achieve this goal, the project conducted focus groups with women in the Connecticut Breast and Cervical Cancer Early Detection Program who were eligible for WISEWOMAN services but had chosen not to participate in the program. Women in the focus groups suggested ways in which the WISEWOMAN staff could improve communication with patients, outreach to health care providers, and attendance in the lifestyle intervention activities. One community health center in Middletown, Connecticut, used the focus group feedback to promote outreach with affiliated health care staff in five satellite sites. As a result of the outreach, the number of enrollees in the WISEWOMAN project increased by 20%–25%.



# What the Science Tells Us

## Blood Pressure

- Sixty-five million Americans have high blood pressure, and another 59 million are prehypertensive.<sup>1</sup>
- 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%.<sup>2</sup> Nearly 70% of people with high blood pressure do not have it under control.<sup>3</sup>
- 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.<sup>4</sup>
- Medications can also help reduce high blood pressure.<sup>5</sup>

## Cholesterol

- A 10% decrease in total blood cholesterol levels may reduce the incidence of coronary heart disease by as much as 30%.<sup>6</sup> Only 18% of adults with high blood cholesterol have it under control.<sup>7</sup>
- 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.<sup>8</sup>
- A class of drugs called statins can reduce deaths from heart disease by reducing cholesterol levels.<sup>9</sup>

## Emergency Response

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

## Tobacco

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



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

## **Nutrition**<sup>15</sup>

- 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 Activity**<sup>16</sup>

- 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**<sup>15, 17</sup>

- 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**<sup>17, 18</sup>

- 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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# Acknowledgments

The following individuals contributed their scientific and editorial expertise to the creation of this document.

## **National Center for Chronic Disease Prevention and Health Promotion**

George Mensah, MD, FACP, FACC  
Rosemarie Henson, MSSW, MPH  
Barbara Bowman, PhD  
Sean Cucchi, MHA  
Phyllis Moir, MA  
Teresa Ramsey, MA  
Mark Conner, BFA

## **Division of Adolescent and School Health**

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## **Division of Adult and Community Health**

Wayne Giles, MD  
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Amy Holmes-Chavez, MPH  
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## **Heart Disease and Stroke Prevention Program**

Darwin Labarthe, MD, PhD, MPH  
Kurt Greenlund, PhD  
Nancy Watkins, MPH  
Janet Croft, PhD  
Dyann Matson-Koffman, PhD  
Lazette Lawton, MPH  
Marsha Houston  
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## **Division of Diabetes Translation**

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## **Division of Nutrition and Physical Activity**

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## **Office on Smoking and Health**

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Terry Pechacek, PhD  
David Nelson, MD, PhD  
Dana Shelton, MPH

## **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](http://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](http://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](http://www.astho.org).

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