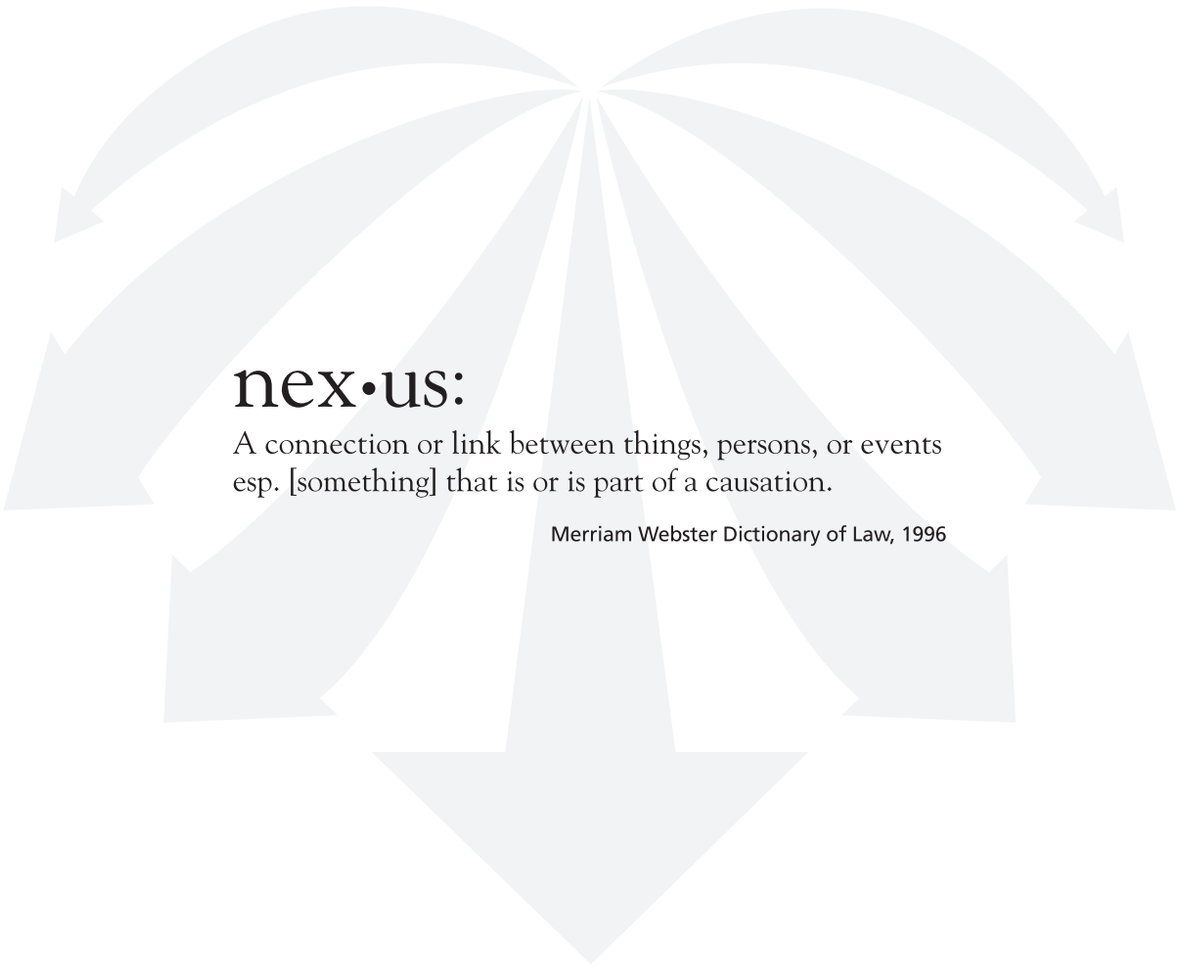
UPDATE TO
A Public Health Action Plan to Prevent Heart Disease and Stroke



nex•us:

A connection or link between things, persons, or events esp. [something] that is or is part of a causation.

Merriam Webster Dictionary of Law, 1996

Contents

An Overview of *A Public Health Action Plan to Prevent Heart Disease and Stroke* 1

Milestones and Landmark Events for *A Public Health Action Plan to Prevent Heart Disease and Stroke* and the National Forum 3

Know These Key Messages 5

Updating the *Action Plan:* Celebrating Our First 5 Years 9

Reflections from the Chair of the National Forum 15

Commentary from the American Heart Association. 19

Commentary from the Association of State and Territorial Health Officials 21

Commentary from the National Association of Chronic Disease Directors and the Cardiovascular Health Council 23

Reducing Heart Disease and Stroke in the United States: Making Progress or Losing Ground? 25

Burden and Disparities Today: Update from 2003 27

Making Connections: The Conceptual Basis of Effective Action. 37

Mission Statements and Strategies of the Implementation Groups (chart) 40

A Review of the Essential Components and Recommendations of *A Public Health Action Plan to Prevent Heart Disease and Stroke* by the National Forum's Implementation Groups 43

Action Framework for a Comprehensive Public Health Strategy to Prevent Heart Disease and Stroke (chart) 74

Implementation Group's Selected Priority Actions for 2008–2009 75

Appendices

Appendix A — Organizational Profiles of Co-Lead Agencies A–1

Appendix B — Leadership of the National Forum B–1

Appendix C — Roster of Participants 1999–2007 . . . . . C–1

Appendix D — Charting the Course: Expert Panel Group Photographs and Reprint of *A Public Health Action Plan to Prevent Heart Disease and Stroke* D–1

AT THE nexus

An Overview of *A Public Health Action Plan to Prevent Heart Disease and Stroke*

The National Forum for Heart Disease and Stroke Prevention was established in 2003 to implement *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. The *Action Plan* provides a comprehensive public health strategy and a framework to guide health practitioners' and policy makers' action in heart disease and stroke prevention. The National Forum involves participants from more than 80 national and international organizations representing public and private health care, faith, advocacy, academic, and policy organizations. The Centers for Disease Control and Prevention, the American Heart Association/American Stroke Association, and the Association of State and Territorial Health Officials were the lead partners in developing the *Action Plan* and continue to participate in the leadership of the National Forum. Throughout the year, National Forum participants work in one or more of seven implementation groups: Action Priorities, Communications, Monitoring and Evaluation, Organizational Capacity, Policy Research, Public Health Leadership and Partnership, and Regional and Global Collaboration. The full body of the National Forum meets annually. Each of the Implementation Groups meets monthly via conference calls and in person twice per year.

For more information about the National Forum for Heart Disease and Stroke Prevention and *A Public Health Action Plan to Prevent Heart Disease an Stroke*, please visit: www.cdc.gov/dhdsp/library/action_plan/index.htm

AT THE nexus

Milestones and Landmark Events for *A Public Health Action Plan to Prevent Heart Disease and Stroke* and the National Forum

1998-2001
Laying the Groundwork

In 1998, the U.S. Congress awarded an appropriation to the Centers for Disease Control and Prevention (CDC) to establish and support a state heart disease and stroke prevention program. With these funds, CDC launched the new program through its Cardiovascular Health Branch in the Division of Adult and Community Health within the National Center for Chronic Disease Prevention and Health Promotion. Shortly thereafter, leaders were appointed to create a long-range strategic plan for heart disease and stroke prevention. In 2000, CDC and the National Institutes of Health (NIH) were designated as co-lead agencies for *Healthy People 2010*. The Healthy People 2010 Partnership for Heart Disease and Stroke Prevention was established with the American Heart Association, the Center for Medicaid and Medicare Services, the Indian Health Service, the National Institutes of Health, the Office of Disease Prevention and Health Promotion, and the Centers for Disease Control and Prevention.

These activities were the foundation for the development of *A Public Health Action Plan to Prevent Heart Disease and Stroke* and the establishment of the National Forum for Heart Disease and Stroke Prevention.

2001
Charting the Course

- Strategic planning process for developing *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)* launched with first work group meeting.

2002
Coming Together for a Common Cause

- Ten expert panels convened to review and finalize the content of the *Action Plan*.
- Second and third work group meetings.
- First meeting of the group that was to become the National Forum.
- Draft *Action Plan* completed.

2003
Launching the Plan

- CDC published *A Public Health Action Plan to Prevent Heart Disease and Stroke*.
- U.S. Department of Health and Human Services Secretary Tommy Thompson released the *Action Plan* at the Steps to a HealthierUS Conference.
- 25,000 copies of the *Action Plan* were distributed nationally and internationally within a year.

2004
2nd National Forum for Heart Disease and Stroke Prevention: Setting Priorities.

- Darwin R. Labarthe, MP, MPH, PhD, then Associate Director for Cardiovascular

Health Policy in the Division for Heart Disease and Stroke Prevention, received the U.S. Secretary of Health and Human Services Award for Distinguished Service for "Charting a Course to Assist in Promoting the Achievement of National Goals for Preventing Heart Disease and Stroke."

2005
3rd National Forum for Heart Disease and Stroke Prevention: Taking Action.

- Conducted focus groups with key informants on their knowledge of the *Action Plan*.
- Engaged in a concept mapping process of the *Action Plan*.

2006
4th National Forum for Heart Disease and Stroke Prevention: Building Momentum.

- Dr. Julie Gerberding, Director, CDC, delivered the opening remarks for the National Forum.
- Launched the National Forum Video and Archive Project to preserve the history of activities of the National Forum. Produced and distributed the first DVD about the National Forum.
- Official signing ceremony of the Memorandum of Understanding for the Health People 2010 Partnership, with participation by leaders of six federal agencies and the American Heart Association

2007
5th National Forum for Heart Disease and Stroke Prevention: Making the Connections: Science, Policy, and Action

- Published the article "Essential Features of a Surveillance System to Support Prevention and Management of Heart Disease and Stroke" in the January 2, 2007, issue of *Circulation*
- First workshop on branding and messaging. Key messages were selected for use in National Forum materials.
- "State of the science" conference (Evaluation of Policy and Environmental Change for Heart Disease and Stroke Prevention) with international evaluation research experts. Experts were asked to identify specific needs in research approaches, strategies, programs, or funding to improve the state of evaluation research and to make recommendations for bridging science and practice and for building capacity at multiple levels of the socioecolo gic model.
- Published the *National Forum Reader on Economics*, which contains articles, commentaries, and a list of resources on economics and prevention, the major topic of discussion during the 5th National Forum

2008
6th National Forum for Heart Disease and Stoke Prevention: At the Nexus of Heart Disease and Stroke Prevention.

- Partnered with the National Association of County and City Health Officials (NACCHO) to host A Town Hall Meeting featuring the PBS Television Documentary " Unnatural Causes: Is Inequality Making Us Sick?" and with the Association of Black Cardiologists, Inc., to host a Leaders Luncheon.
- The National Forum published *Update to A Public Health Action Plan to Prevent Heart Disease and Stroke*.
- The National Forum accepted a new slate of officers and new members during its leadership transition.
- The National Forum ratified "A Policy Framework Statement for Regional and Global Partnerships."

Know These Key Messages

The following key messages were developed by the Communications Implementation Group to clearly communicate the primary goals and objectives of the National Forum, both internally and externally. Priority target audiences include current and potential National Forum members, groups that influence the public (e.g., health care professionals and journalists), key decision makers, and policy makers from both private and governmental sectors.

During the National Forum's April 2007 meeting in Washington, D.C., the messages were tested in three focus groups facilitated for the National Forum by staff of Fleishman Hilliard Worldwide Communications. The messages were reviewed, revised and approved by the Coordinating Board for use in the National Forum's communication materials.

1. **The National Forum for Heart Disease and Stroke Prevention (National Forum) is made up of more than 80 individual organizations that collaborate to provide national leadership for those committed to building a heart-healthy and stroke-free society.**

   - More than 80 national and international organizations from every sector of heart disease and stroke prevention are represented in the National Forum for Heart Disease and Stroke Prevention.
   - *A Public Health Action Plan to Prevent Heart Disease and Stroke*—a national plan to chart a course for the prevention of heart disease and stroke—was developed, and the National Forum's purpose is to provide leadership for this plan.
   - Each year the National Forum assembles the world's leading experts to discuss developments in heart disease and stroke prevention and gain valuable information in community intervention, communication, and research strategies.
   - The National Forum has seven implementation groups that carry out its work:

     - **Action Priorities:** identifies effective policies in cardiovascular health promotion.
     - **Communications:** communicates the urgency and importance of preventing heart disease and stroke.
     - **Monitoring and Evaluation:** monitors the burden of heart disease and stroke and measures progress in prevention and treatment.
     - **Organizational Capacity:** builds the capacity of federal, state, and local public health agencies to address heart disease and stroke.
     - **Policy Research:** develops a comprehensive research agenda and fosters translation of research into practice.
     - **Public Health Leadership:** fosters the necessary leadership and partnerships for

a comprehensive public health strategy to prevent heart disease and stroke.
- Global and Regional Partnerships: engages regional and global partners to mobilize resources in heart disease and stroke prevention and treatment.

2. The National Forum for Heart Disease and Stroke Prevention brings together expertise from the most respected and influential organizations and individuals to address heart disease and stroke, leading causes of death and disability in the United States and the world.

- *A Public Health Action Plan to Prevent Heart Disease and Stroke* provides health practitioners and policy makers with a framework for developing a health care system that equally supports treatment and prevention.
- The founding organizations of the National Forum are the American Heart Association, the Association of State and Territorial Health Officials, and the Centers for Disease Control and Prevention. In addition, the forum represents organizations involved in
  - Advocacy
  - Faith
  - Academia
  - Policy
  - Public and private health care.
- Each year the National Forum assembles the nation's leading experts to discuss developments in heart disease and stroke prevention and to gain valuable information in community intervention, communication, and research strategies.

3. There are proven strategies to prevent and manage heart disease and stroke, but these are not universally applied. We must act now to put them into practice.

The National Forum for Heart Disease and Stroke Prevention is committed to working with partner organizations to put these strategies into practice.

- Heart disease and stroke are the nation's leading causes of death and are among the leading causes of disability. When final figures are available, in the United States alone, the cost of heart disease and stroke is projected to be more than $400 billion for 2007.
- More than 910,000 Americans die of heart disease every year, yet heart disease is largely preventable.
- Less than 3% of state health department budgets are dedicated to heart disease and stroke prevention.
- Despite gains in recent years, unless we take action now the number of victims and health care expenses related to heart disease and stroke will escalate.
- The National Forum addresses the *Healthy People 2010 (HP 2010)* goals. Strategies already exist to achieve all of them:
  - Prevention of risk factors (e.g., by increasing physical activity, improving nutrition, and reducing tobacco use and exposure to tobacco smoke).
  - Detection and treatment of risk factors (e.g., through screening programs and effective care by health providers).
  - Early identification and treatment of heart attacks and strokes (e.g., by organizing know-the-symptoms campaigns).
  - Prevention of recurrent cardiovascular events.

4. The National Forum for Heart Disease and Stroke Prevention includes nearly every national organization involved in heart disease and stroke prevention and management and is a source of knowledge and expertise on the prevention of heart disease and stroke.

- We have knowledge from decades of research and experience that can be used to inform sound policies to prevent heart disease and stroke. Because it represents nearly every national organization involved in research on heart disease and stroke, the National Forum is a single source for knowledge and expertise on these two health conditions.

  - The National Forum is also a single source of information on how to put this knowledge to use as the basis for action to achieve the *HP 2010* goals.

  - Although many National Forum members have research expertise, such expertise is not a prerequisite for membership in the National Forum.

5. Membership in the National Forum for Heart for Heart Disease and Stroke Prevention is an effective way for your organization to add your voice to the national call for urgent action to prevent heart disease and stroke. Collaboratively, we can make the case to the nation and the world that heart disease and stroke can be prevented.

   - The National Forum works with its regional and global partners to ensure all members reap the full benefits of sharing knowledge and experience in heart disease and stroke prevention.
   - The National Forum provides a vehicle to gain visibility for your organization's efforts to prevent heart disease and stroke.
   - The National Forum's Regional and Global Collaborations Implementation Group produced an inventory of international programs and policies for cardiovascular health.
   - The National Forum has five priority areas for policy and legislative focus: 1) risk factors, 2) chain of survival, 3) quality of care, 4) disparities, and 5) support for heart disease and stroke prevention in all 50 states and in U.S. territories.

6. The National Forum for Heart Disease and Stroke Prevention fosters research on policies and programs aimed at preventing heart disease and stroke. This research is focused especially on policies and programs at the national, state, and community levels.

   - The National Forum contributed to a research article "Essential Features of a Surveillance System to Support the Prevention and Management of Heart Disease and Stroke," which was published in the January 2007 issue of *Circulation*.
   - The National Forum sponsored a state-of–the-science conference (Evaluation of Policy and Environmental Change for Heart Disease and Stroke Prevention) in August 2007 to convene a group of international experts engaged in evaluation research.

7. A priority for the National Forum is to address the disparity among groups in deaths and disabilities related to heart disease and stroke.

   - Health disparities is one of five priority areas established by the Action Priorities Implementation Group.
   - Working through member organizations such as the Association of Black Cardiologists and Association of State and Territorial Health Officials, the National Forum focuses on promoting policies that address the disparities in heart disease and stroke mortality in areas or populations with limited access to health care.

Updating the *Action Plan*: Celebrating Our First 5 Years

To assure long-term success, the need to review and evaluate all aspects of the plan and adapt it to future conditions must be anticipated. For example, we must consider the projected demographic shift toward an increasingly older U.S. population and the expected increase in demand for health services by the population as a whole. These recognized factors were considered when the recommendations for this plan were developed. However, other contingencies resulting from unforeseen social and economic forces may require significant adaptations over the next two decades.

– A Public Health Action Plan to Prevent Heart Disease and Stroke, p. 73

As 2008 marks the 5th anniversary of the release of *A Public Health Action Plan to Prevent Heart Disease and Stroke* (*Action Plan*), it is time to take stock of the recommendations made in 2003 in light of current data and perspectives. The motivating question is whether the *Action Plan*'s 22 recommendations, with the two fundamental requirements of communication and leadership, remain valid as the key elements of a comprehensive public health strategy for heart disease and stroke prevention. If so, their reaffirmation will serve to support continuation of the work they have guided to the present time. If not, adapting to changing conditions will redirect action steps to assure the most effective investment of our collective efforts as we move forward.

Shortly after release of the *Action Plan*, the National Forum for Heart Disease and Stroke Prevention became established as a continuing partnership organization to implement the plan. Anticipating the present 5-year milestone, the Executive Committee of the National Forum proposed, and the Coordinating Board approved, a process for an update to the plan, for release at the 6th National Forum meeting in March 2008. This document is the welcome result.

In addition to a fresh printing of the *Action Plan*, this update includes several commentaries that represent diverse perspectives of the National Forum; restatement (with or without amendment) of the respective missions, guiding recommendations, proposed action steps and expected outcomes from each of the National Forum's seven Implementation Groups; and the most recent available data corresponding to those presented in the original printing of the *Action Plan*.

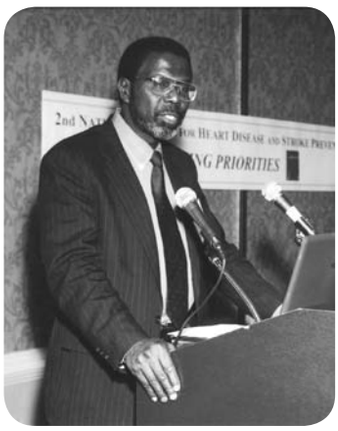
Development of this update was an inclusive process that engaged, among others, the membership of each Implementation Group. The great majority of original recommendations and the action steps proposed to achieve them were found to remain valid and were

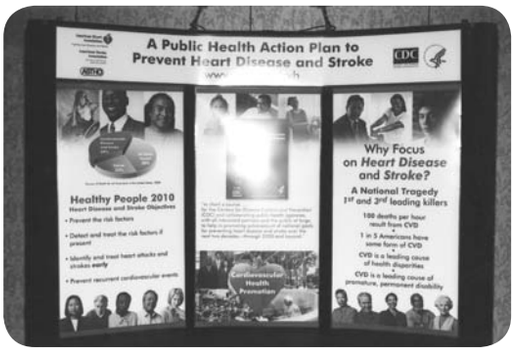
reaffirmed without modification. Several action steps were given new emphasis as each group identified priority recommendations to be achieved in the 2008–2009 program year. These program priorities are also presented in the reports from each Implementation Group.

The National Forum is pleased to present this *Update to A Public Health Action Plan to Prevent Heart Disease and Stroke*. We trust that it will be a relevant and useful guide worldwide for individuals and organizations working to promote cardiovascular health and eradicate preventable heart disease and stroke.

The National Forum brings together expertise from the most respected and influential individuals and organizations.

The National Forum brings together expertise from the most respected and influential individuals and organizations.





The National Forum brings together expertise from the most respected and influential individuals and organizations.

Reflections from the Chair of the National Forum

Darwin R. Labarthe, MD, PhD, MPH
Chair, National Forum for Heart Disease and Stroke Prevention

This foreword is a personal perspective on the developments culminating at this 5-year mark in implementing *A Public Health Action Plan to Prevent Heart Disease and Stroke*. Perhaps it suggests a measure of naiveté, since I arrived late in my career to the mainstream of public health practice and have been swept along by the force of a powerful current. As a result, I am now an academic turned public health practitioner.

An accidental consequence of writing a book led me to the Centers for Disease Control and Prevention (CDC). In 1998, I was on the faculty at the University of Texas School of Public Health in Houston. I had just finished writing a textbook on epidemiology and the prevention of cardiovascular diseases as a global challenge. The bulk of my work was on the science of cardiovascular epidemiology and prevention. I was conscious that in the 30 years I had been at the university, my work in public health was somewhat lean.

About this same time, the U.S. Congress appropriated the first funds for CDC to support state health departments in cardiovascular health. By the beginning of 1999 a state cardiovascular health program was starting, and CDC leaders determined that a long-range strategic plan for state cardiovascular health programs was in order through the National Center for Chronic Disease Prevention and Health Promotion. All of this was happening just as I was realizing the extent of unmet needs in public health approaches to cardiovascular disease prevention. I thought, this could possibly be the most exciting position in the world from which to work on heart disease and stroke prevention — the opportunity to participate in CDC's development of activities in this area. In January 2000, I joined CDC to lead the development of a strategic plan to promote achievement of the *Healthy People 2010* national goals for preventing heart disease and stroke during the next two decades and beyond.

The question then was how to go about developing this strategic plan. States had a high level of interest in what such a plan would look like. They made it clear that, if the plan were to be of any practical value, representatives of the state public health agencies must be significantly engaged in its development. Therefore, to ensure the states' input into the process that was to lead to *A Public Health Action Plan to Prevent Heart Disease and Stroke*, we collaborated with the Cardiovascular Health Council, which is part of National Association of Chronic Disease Directors, which in turn is part of the Association of State and Territorial Health Officials.

By mid-2001, two parallel tracks converged: one within and one outside CDC. CDC committed significant resources to the process of developing the strategic plan and

recruited outside experts in heart disease and stroke prevention to collaborate with CDC staff in structuring the plan. Nominations for participants were solicited from the Cardiovascular Health Council and from the CVH Coordinating Committee of the National Center for Chronic Disease Prevention and Health Promotion. I invited acquaintances from academic and government agencies working on epidemiology and prevention to participate in leading the process. From the beginning, the American Heart Association/American Stroke Association and the Association of State and Territorial Health Officials were co-lead partners with CDC in the development of the plan.

On December 6, 2001, a working group consisting of five expert panels met to provide guidance to the process. The five expert panels were each given a separate mission to cover different components of the proposed plan: 1) taking action, 2) strengthening capacity, 3) evaluating impact, 4) advancing policy, and 5) regional and global partnerships. A series of meetings from January through May 2002 yielded draft recommendations, proposed action steps, and expected outcomes. Also recommended was the inclusion of two other major components to the plan: effective communication and and strategic leadership.

In September 2002, the working group convened a meeting in Washington, D.C., to obtain broader input for the "national action plan for cardiovascular health." With input from this convened group of national and international experts in heart disease and stroke prevention, a draft document of the "national action plan for cardiovascular health" was submitted to the U.S. Department of Health and Human Services for clearance to publish. Interestingly, this occurred on December 6, 2002, one year to the day from the first working group meeting. There was no expectation that the September 2002 meeting would be anything more than a one-time event. This was still the case when *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)* was released by U.S. Department of Health and Human Services Secretary Tommy Thompson at the first Steps to a HealthierUS summit in April, 2003.

During the working group meeting at the Steps to a HealthierUS summit, it was recommended that the National Forum be constituted on a permanent basis as the primary multipartner vehicle for implementing the *Action Plan*. It is now tradition that a spring meeting of the National Forum to Prevent Heart Disease and Stroke is held annually in Washington, D.C. This gathering now includes a fairly constant composition of 80 to 85 national and international organizations and individual members.

Looking back over the first five years of activities to implement the *Action Plan*, we can all be proud of the significant accomplishments achieved through the collective efforts of many partners and colleagues. I am personally proud that we have institutionalized the National Forum by coming together to create a vision and mission that goes above and beyond our individual interests and that we have achieved results no single organization could achieve alone:

- Created a strategic action plan to carry us to 2020 and beyond.
- Developed key messages for marketing National Forum materials and products.
- Co-authored the article "Essential Features of a Surveillance System to Support the Prevention and Management of Heart Disease and Stroke," which was published in the January 2, 2007, issue of *Circulation*. This seminal report fulfills the *Action Plan's* call for critical assessment of U.S. data sources to

support heart disease and stroke prevention and recommends 11 measures for building a system adequate to today's requirements.
- Developed resources to make the case for investing in prevention such as the *National Forum Reader on Economics and Prevention*, which contains articles, commentaries, and key references on the economics of health promotion and disease prevention.
- Developed a tool to rate policy issues on the basis of their potential effects on public health. The National Forum will use the ratings of this tool to guide its efforts in prioritizing policy, environmental, and system change initiatives within a comprehensive cardiovascular health policy plan.
- Published an update to the *Action Plan* — a review and reaffirmation of the *Action Plan* recommendations by the seven Implementation Groups of the National Forum.

On the basis of these and other accomplishments, we now have an even greater opportunity than in 2003 to mobilize action to prevent heart disease and stroke and a greater accountability for doing so. These are some items that remain to be done:

- Establish a leadership council of prominent experts along the lines of a presidential commission or national blue-ribbon panel to help increase the visibility of the National Forum and assist in resource development so that the Forum will be better able to achieve its goals.
- Craft prevention messages in clear terms that lead to meaningful action. Society has a strong interest in the first of the *Action Plan*'s strategic imperatives: to strike a new balance in our investment in health by putting prevention first. We need to communicate effectively, and in the right places, the tremendous potential for prevention.
- Continue progress in transforming public health agencies into their new role as leaders for chronic disease prevention, which includes creating and sustaining multi-sector partnerships to bring about policy, environmental, and system changes that will improve cardiovascular health.
- Increase our focus on the critical role of upstream approaches to intervention (i.e., preventing the risk factors for heart disease and stroke). We must not wait to treat risk factors and their consequences until after they occur when we know it is possible to prevent people acquiring these risk factors in the first place.

The National Forum is at a stage where growth in the number of committed member organizations and agencies is essential to increasing our capacity and impact and to maintaining diversity across all sectors of society. Converging forces brought us to a significant point in tackling the challenges of heart disease and stroke prevention. The *Action Plan* and the National Forum have attracted the interest and commitment of organizations and individuals with a common purpose and is a model for chronic disease prevention and health promotion.

People elsewhere look to the United States for leadership in public health. To the extent that we have yet to become fully engaged in preventing preventable chronic disease, we reflect complacency about our current health situation. We also have a substantial effect on the health of other countries through our own policies on agriculture, trade, and financial aid. I hope the National Forum can be a meaningful force for a more enlightened policy both within the United States and throughout the world.

My coming to CDC was, in part, an unintended consequence of writing a book. I am now in the latter stages of a second edition to that

book. The first edition was an epidemiologist's book; the second edition, I think, will be a public health practitioner's book. The content has changed during these recent years in part because of the significant developments I have described here.

As I complete my tenure as Chair of the National Forum, know that I will continue to join you in embracing the immense opportunities that lie ahead for the National Forum. It has been my pleasure to serve as the first Chair of the National Forum for Heart Disease and Stroke Prevention, and in closing, I echo the message of the Victoria Declaration on Heart Health, a mantra of the *Action Plan:* "We know what to do; we need to do what we know."

Commentary from the American Heart Association

Mark A. Schoeberl, MPA
Executive Vice President, Advocacy

As the theme of our 6th National Forum for Heart Disease and Stroke suggests, we are at a nexus in history between celebrating our accomplishments and embracing the tremendous challenges we continue to face in realizing our shared vision of a heart-healthy and stroke-free society.

Earlier this year, our colleagues at the Centers for Disease Control and Prevention released data that show that age-adjusted death rates have fallen 25.8% for coronary heart disease and 24.4% for stroke. This success should not be attributed to any one organization, government program, or new initiative. Rather it is the result of the individual and collective efforts of an extraordinary cast of committed partners working together. And the role of National Forum cannot go unrecognized. The National Forum — guided by the recommendations and action steps outlined in *A Public Health Action Plan to Prevent Heart Disease and Stroke* — inspires, instigates, and sustains the kind of coordination and collaboration necessary to achieving such success. As American Heart Association President Dr. Robert Bonow said when the *Action Plan* was released, "We already have much of the 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. This plan will also help the American Heart Association reach its strategic goal of reducing heart disease, stroke, and risk by 25% by 2010 — a goal shared by many of our partners in the public health community."

Just as we rightfully celebrate this milestone in the reduction in mortality associated with coronary heart disease and stroke, we are also keenly aware that not all sectors of society benefited equally. Health outcomes continue to vary significantly on the basis of race/ethnicity, sex, socioeconomic status, educational status, and geographic location. As National Forum members and leaders in cardiovascular health, we must remain committed to addressing disparities within the United States and around the world.

And while the news is good relating to deaths from coronary heart disease and stroke, it is not so good with regard to risk factors. Reducing risk factors has proven difficult. The most recent National Health and Nutrition Examination Survey and National Health Interview Survey show that uncontrolled hypertension has declined 16%, cholesterol 19.2%, and tobacco use 15.4% — short of our goal of reducing risk by 25% by 2010. More sobering are the data that indicate that the rate of physical inactivity declined only 2.5% and the prevalence of obesity continues to increase at an annual rate of 1.39%.

We have the opportunity to continue to build on the solid foundation of the National Forum and to expand and grow successful collaborations that can confront and overcome the tremendous challenges we continue to face in our journey toward a heart-healthy and stroke-free society. The American Heart Association is extremely proud of the role we have played in the development of the *Action Plan*, the establishment of the National Forum, and the contributions we were able to make towards our shared efforts and successes. We remain committed to the mission and vision of the National Forum and look forward to being a part of this important collaboration that will have a significant role in our ultimate achievement of all of the goals in *Healthy People 2010*.

Commentary from the Association of State and Territorial Health Officials

Paul Jarris, MD, MBA
Executive Director

As a lead partner in implementing *A Public Health Action Plan to Prevent Heart Disease and Stroke*, the Association of State and Territorial Heath Officials (ASTHO) is pleased to join with the Centers for Disease Control and Prevention and the American Heart Association/American Stroke Association in releasing the update to this important document.

Heart disease and stroke are the first and third leading causes of death in the United States and continue to pose formidable challenges for the public health community. Challenges such as these cannot be met alone. Only through collaborations with elected officials, employers, health care leaders, and others can we reduce the burden of heart disease and stroke.

The work of state health agencies is essential to preventing and controlling chronic diseases (e.g., diabetes, cancer, and cardiovascular disease), to promoting healthy behaviors, and to providing choices to help people avoid or control these diseases. State health agencies also work to improve the quality of care and health outcomes for Americans with chronic conditions. To accomplish these goals, ASTHO works with the National Association of County and City Health Officials, the National Association of Chronic Disease Directors, the Tobacco Control Network, the Directors of Health Promotion and Education, the Association of Maternal and Child Health Programs, and the Association of State and Territorial Public Health Nutrition Directors to reduce tobacco use, prevent obesity, improve the built environment, and reform state health systems.

Through ASTHO staff participation on the Action Priorities Implementation Group of the National Forum, ASTHO helps the National Forum to build relationships with policy makers across the country. This year, the Action Priorities Implementation Group reviewed current and pending U.S. policies and legislation related to heart disease and stroke prevention. The group identified five priority areas in which new policies could have an effect: 1) risk factors, 2) chain of survival, 3) quality of care, 4) disparities as defined in *Healthy People 2010*, and 5) support for heart disease and stroke prevention programs in all 50 states and U.S. territories. The Action Priorities Implementation Group plans to correspond, on behalf of the National Forum, with governors and their health policy advisors, state legislators, and ASTHO members to encourage allocation of resources for cardiovascular disease prevention and health promotion.

The American Association of State and Territorial Health Officials (ASTHO) and its members, the chief health officials of state and territorial public health agencies, are committed to establishing and sustaining collaborations that will prevent heart disease and stroke. Preventing these conditions is of critical importance, a high priority issue for state health agencies and essential to creating a healthier America.

– David Sundwall, ASTHO President and Director of the Utah Department of Health.

We believe it is essential that ASTHO continues its strong relationship with the National Forum. Through the National Forum, ASTHO joins other public health organizations and partners in highlighting the need for comprehensive heart disease and stroke prevention. The National Forum allows key players and the public health community to come together in a way that will have a positive effect on federal, state, and local policies. ASTHO will continue to support the activities of the National Forum and is proud to promote *Update to A Public Health Action Plan to Prevent Heart Disease and Stroke* as an important resource for those interested in reducing heart disease and stroke in their states.

Commentary from the National Association of Chronic Disease Directors and the Cardiovascular Health Council

Kathy Foell, MS, RD
Director, Heart Disease and Stroke Prevention and Control Program
Massachusetts Department of Public Health

Miriam Patanian, MPH
Heart Disease and Stroke Prevention Program Manager
Washington State Department of Health

Jennifer Smith, MSHP
Manager, Adult Health and Chronic Disease Group
Texas Department of State Health Services

The Cardiovascular Health (CVH) Council and its parent organization, the National Association of Chronic Disease Directors (NACDD), are committed to implementing *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)* at the state and national levels. We are equally committed to supporting the National Forum. CVH Council members proudly lend a public health perspective to the National Forum as participants on the Implementation Groups and in the overall management of the National Forum through service on both the Coordinating Board and Executive Committee.

The *Action Plan* and the National Forum are important to the states' work to reduce the burden of heart disease and stroke. The *Action Plan* offers state-based programs a framework for building and implementing strategic state plans, and it serves as a succinct guide to help state-based programs develop interventions, take action, and strengthen capacity. The National Forum provides the CVH Council with a mechanism to receive guidance and support at a national level as we coordinate efforts to raise the visibility for increased funding for heart disease and stroke prevention.

In keeping with the components outlined in the *Action Plan*, state health departments are the focal point for assessing, analyzing, interpreting, and disseminating state-level heart disease and stroke data. Using the *Action Plan* framework, programs have undertaken planning processes to determine the burden of heart disease and stroke within their states, identify priority and high-risk populations, assess policy and environmental gaps, nurture partnerships, and develop interventions appropriate to meet the needs of their states. State-collected data are being used to inform, monitor, and evaluate program activities and interventions for heart disease and stroke prevention. States' collaborative efforts with a wide range of partners help strengthen policies and procedures to improve access and use of high-quality interventions.

Through the CVH Council, state heart disease and stroke prevention programs share information on lessons learned, promising

practices, and state findings. The National Forum provides an important avenue for expanding the dissemination of this information nationally and globally. And in turn, the diverse membership of the National Forum has the opportunity to learn how population-based interventions can be used to further the work of the National Forum.

The *Update to A Public Health Action Plan to Prevent Heart Disease and Stroke* reflects the accomplishments of the National Forum in implementing the *Action Plan*, and the CVH Council is proud to have had a significant role in these accomplishments. But we know that to reach our vision of a heart disease- and stroke-free nation, much work — individually and collectively through the National Forum — remains to be done: state-based programs continue to need national guidance to model partnerships and collaborations that can be duplicated; evidence-based interventions that will reduce heart disease and stroke must be developed; adequate funding to plan, implement, and evaluate comprehensive heart disease and stroke prevention programs must be secured.

As states continue to play a key role in implementing the recommendations of the *Action Plan*, we will see improved outcomes in prevention and treatment of heart disease and stroke and the wide array of chronic diseases that contribute to cardiovascular diseases. The CVH Council will continue to encourage state-based programs to collaborate with their tobacco, nutrition, physical activity, and diabetes colleagues to ensure that the primary risk factors for heart disease and stroke are being addressed through policy, system, and environmental change in local communities, worksites, and schools.

Together, the National Forum and the CVH Council of NACDD can support state health departments in making heart disease and stroke prevention a priority. Together our advocacy for resources so that health departments in all states, districts, tribes and territories are adequately funded to implement interventions and system level changes to promote heart disease and stroke prevention will be successful.

Reducing Heart Disease and Stroke in the United States: Making Progress or Losing Ground?

David C. Goff, Jr., MD, PhD

Is the glass half empty or half full? Several trends support the optimist's view that the glass is half full.

During the past century, death rates for both heart disease and stroke in the United States declined sharply. Continued advances in biomedical and community health sciences, especially prevention research, strongly support the argument that much of the burden of heart disease and stroke can be prevented. In the United States, age-adjusted death rates for both conditions are at their lowest since early in the 20th century.

The incidence of the major risk factors for heart disease and stroke has generally improved in recent decades. During the 20th century, the prevalence of smoking declined for men and women, and average cholesterol levels and prevalence of high blood pressure also declined.

Tremendous progress was made in acute care and secondary prevention for people with heart disease or stroke, especially during the last decade. Quality improvement led to great advances in evidence-based treatments, especially in hospitals. More widespread adoption of quality assurance programs and adaptation of these programs to the outpatient setting will expand these gains.

Unfortunately, not all the news is good; viewed from another perspective, the water level in the glass is dipping.

Recent slowing of favorable mortality trends for coronary heart disease and flattening of mortality trends for stroke could indicate trouble. The increasing incidence of obesity and diabetes — with their associated disturbances of blood pressure and lipid regulation — is cause for concern. Failure to address the twin epidemics of obesity and diabetes places at risk the hard-won gains of the past several decades in quantity and quality of life.

Much is known about the individual behavioral basis for obesity, hypertension, and dyslipidemia, but much less is known about which policies would help prevent these conditions at a population level. With regard to heart disease and stroke, however, researchers have identified some promising population-based approaches to preventing these conditions. For example, several recent studies in the United States and Italy documented a reduction in admissions for myocardial infarction following passage and implementation of comprehensive smoke-free policies. Clearly, more research on policy approaches to support population-based prevention of heart disease and stroke is needed.

Despite the progress of the past several decades, disparities related to ethnicity, sex, age, socioeconomic status, and other characteristics persist. The growth and aging of the population, combined with successes in acute care and secondary prevention, contributed to increases in the prevalence and number of people with chronic cardiovascular

We have the scientific knowledge to create a world in which most cardiovascular disease could be eliminated.

—2000 Victoria Declaration

disease, even in the face of declining mortality. Both the absolute number and the proportion, or prevalence, of people living with chronic cardiovascular conditions are likely to continue increasing during the coming decades. The rising levels of obesity and diabetes, if unabated, will reinforce this trend.

Great progress has been made. Yet more remains to be done and new threats have emerged. The level in the glass hovers at the half-way mark. Although gaps in scientific knowledge exist, we know enough to reduce the burden of heart disease and stroke through both prevention and treatment. The work of the National Forum for Heart Disease and Stroke Prevention and its implementation groups can have a significant influence on reversing the adverse trends, reinforcing favorable ones, and reducing both the burden of heart disease and stroke and the associated disparities related to race, sex, age, socioeconomic status, and other characteristics.

Burden and Disparities Today: Update From 2003

Section 1 of *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*[1] is "Heart Disease and Stroke Prevention: Time for Action." This section ("Time for Action") presents the case for developing an action plan. It includes selected measures of the burden and disparities of heart disease and stroke in the United States.

For this report, the tables in the original "Time for Action" are updated if new data are available (Tables1–4). The intent is to portray the picture of burden and disparities as though the *Action Plan* were being written today. Additional information is provided by the *Healthy People 2010 Midcourse Review*[2] published in December 2006 and by the *American Heart Association 2010 Impact Goal Progress Report* of June 2007.[3] The *Midcourse Review* reports on progress in heart disease and stroke prevention (Focus Area 12 in *Healthy People 2010*) with respect to 10 of 16 objectives. The American Heart Association (AHA) report addresses progress on eight indicators for the Association's goal. Progress has also been made in understanding the global dimensions of cardiovascular diseases in terms of the burden attributable to common risk factors and the cost-effectiveness of interventions.[4,5]

These observations and other developments since 2003 demonstrate important progress in some areas. But the urgency of taking effective action is even greater today than a half-decade ago.

The Current Burden

Table 1 compares data for selected available indicators of the cardiovascular disease (CVD) burden in the United States in 2008 with data available in 2003. Indicators shown are mainly those for which comparable data were available. Sources of the data are surveillance systems and studies by the Centers for Disease Control and Prevention (CDC), the National Heart, Lung, and Blood Institute, and others compiled by the American Heart Association.[6]

A comparison of the data related to these indicators for 2005 with those for 2000 reveals two broad patterns of change: for indicators of mortality, every change is favorable; for indicators of morbidity (i.e., number of cases of cardiovascular diseases and of persons with risk factors), the changes are unfavorable with only one exception: reduced prevalence of smoking among people aged 18 years or older. Greater numbers of Americans were living with coronary heart disease, heart failure, stroke, high blood cholesterol, high blood pressure, obesity, and diabetes in 2005 than in 2000: the public health burden of these conditions has increased.

Two points of clarification are important in considering an increase in prevalence. First, any of several factors could explain the increase — greater incidence of new cases, more frequent detection of cases, or increased survival of people with risk factors or disease after the condition is recognized. The latter

Table 1. Selected Indicators of the Cardiovascular Disease (CVD) Burden, United States, 2005 and 2000

Selected Indicators	2005	2000
Number of Deaths		
CVD deaths occurring every day	2,400 (1 every 37 seconds)	2,600 (1 every 33 seconds)
CVD deaths occurring each year among people younger than 65	148,000	150,000
Deaths from peripheral vascular disease, aortic aneurysm, and othera diseases of the arteries	35,554	40,429
Deaths from stroke	150,074	167,661
Prevalence (millions)		
People aged 20 or older living with coronary heart disease	16.0	12.9
People aged 20 or older living with heart failure	5.3	4.9
People aged 20 or older living with stroke	5.8	4.7
Risk Factors (millions)		
People aged 20 or older living with total cholesterol (>200mg/dL)	106.7	105.0
People aged 20 or older living with hypertension (systolic ≥140 mm Hg, diastolic ≥ 90 mm Hg) or taking antihypertensive medication	73.0	50.0
People aged 18 or older who were smokers	46.6	48.7
People aged 20 or older who were obese (body mass index >30.0 kg/m2)	67.3	61.2
People aged 20 or older with physician-diagnosed diabetes.	15.1	10.9
Projected Costs ($ billions)		
	2008	**2003**
Direct costs	296.4	209.3
Indirect costs	152.1	142.5
Total costs	448.5	351.8

Source: Based on data compiled from the Centers for Disease Control and Prevention, the National Institutes of Health, and other sources and reported by Rosamond et al., *Heart Disease and Stroke Statistics Update – 2008* (Reference 6).

two factors would reflect improvements in detection or in treatment and control of risk factors or complications. However, regardless of the explanation, greater prevalence indicates an increased public health burden, with attendant costs, that calls attention to the need for earlier intervention to prevent the condition in the first place.

Second, a change in prevalence may be due simply to a change in definition. For example, the marked increase in prevalence of high blood pressure is due in part — but not wholly — to an expanded definition of people with high blood pressure that includes people who were told they had high blood pressure on two or more occasions by a health professional regardless of their current blood pressure level or use of antihypertensive medications. Thus the prevalence value for 2005 cannot be compared directly with that for 2000.

For 2008, estimated direct costs of $296.4 billion and indirect costs of $152.1 billion are projected for all forms of CVD. The total cost ($448.5 billion) is nearly $100 billion greater than the costs only 5 years earlier ($90 billion of the increase is due to the costs of care, and $10 billion is due to lost productivity because of death or disability among people of working age). Some portion of these increases is due to improved methods of estimating, which suggests underestimation in earlier years.[6]

Additional CDC vital statistics data not in Table 1 show further the favorable changes in mortality:[6] trends in age-adjusted rates and numbers of deaths from CVD from 1990 to 2000 indicated a 17.0% decrease in the death rate, although the number of deaths increased by 2.5%. Corresponding data for a more recent interval, 1994–2004, indicated a 24.7% decrease in the death rate and an accompanying 8% decrease in number of deaths. For stroke, the corresponding changes during 1990–2000 were similar: a 12.3% decline in the death rate and a 9.9% increase in number of deaths; during 1994–2004 the death rate declined more sharply, by 24.2%, and the number of deaths decreased by 6.8%. These data indicate that age-standardized mortality rates do not necessarily indicate disease burden, which is better measured by actual numbers of deaths.

Taken together, these data for the United States population as a whole mean that declining mortality is accompanied by increasing morbidity due to CVD and sharply increasing costs.

Disparities by Race or Ethnicity

Tables 2 contains the 2004 death rates for heart disease and Table 3, the rates for stroke. They show disparities in heart disease and stroke deaths by race or ethnicity and by sex for 2004,[7] the most recent year for which completed mortality data are available. Data are shown for men and women in each of five racial or ethnic groups, age-adjusted to the standard population of the United States in 2000.[7] The relative rates among population subgroups continue to demonstrate marked disparities.

In 2004, blacks had the highest reported rates of both heart disease and stroke deaths for women and men. Relative to non-Hispanic whites, the excess of heart disease deaths among black women was 35% and among black men was 28%; the excess of stroke deaths was 37% for women and 55% for men. The greatest contrast in rates of heart disease deaths among women was 236.5 to 96.1 per 100,000 for blacks versus Asians and Pacific Islanders (a ratio of 2.5:1); for men it was 342.1 to 146.5 per 100,000 for the same groups (a ratio of 2.3:1). The corresponding ratio for stroke for women was 65.5 to 35.1 per 100,000 for blacks versus American Indians or Alaska Natives (a ratio of 1.9:1); for men it was 74.9 to 35.0 per 100,000 for the same groups (a ratio of 2.1). Similar findings were described

in the original publication of the *Action Plan*. Table 4 has further evidence regarding disparities in years of life lost, risk factors, health care coverage, and poverty. In comparison with the original data provided in "Time for Action," the effect of death from heart disease, stroke, or diabetes on years of potential life lost appears to have diminished for all groups. Risk factor improvement is limited to reduced prevalence of high cholesterol (≥240 mg/dL), which decreased slightly for men and more sharply for women in each of the three groups for whom data were available. Prevalence of hypertension and obesity increased, especially among women, as did the proportion of most groups in poverty; tobacco use changed little. Lack of health care coverage improved only slightly. Regarding disparities, it is striking first that health data were not reported on any indicator for Native Hawaiians or Pacific Islanders; and risk factor data, except for tobacco use, were unavailable for American Indians, Alaska Natives, or Asians. The lack of data for these groups is one indication of the inadequacy of current health data systems. Estimates from the National Health and Nutrition Examination Survey (NHANES), the source of the risk factor data, were not reliable for these groups because of small sample sizes.

Table 2: Age-Adjusted Death Rates (per 100,000) for Heart Disease, by Sex and Race or Ethnicity, United States, 2004

	Race or Ethnicity				
Sex	American Indian or Alaska Native	Asian or Pacific Islander	Black	Hispanic	Non-Hispanic White
Women	119.0	96.1	236.5	130.0	175.1
Men	182.7	146.5	342.1	193.9	268.7

Note: Death rates are age-adjusted to the 2000 U.S. standard population.
Source: CDC, NCHS, *Health, United States, 2006* (Table 36). (Reference 7)

Table 3: Age-Adjusted Death Rates (per 100,000) for Stroke, by Sex and Race or Ethnicity, United States, 2004

	Race or Ethnicity				
Sex	American Indian or Alaska Native	Asian or Pacific Islander	Black	Hispanic	Non-Hispanic White
Women	35.1	38.9	65.5	35.4	47.7
Men	35.0	44.2	74.9	41.5	48.2

Note: Death rates are age-adjusted to the 2000 U.S. standard population.
Source: CDC, NCHS, *Health, United States, 2006* (Table 37). (Reference 7)

Potential years of life lost remained exceptionally high for African Americans relative to all other groups, for all three causes of death. For heart disease and stroke, these findings are consistent with those in Tables 2 and 3. Tobacco use was notably high for American Indians and Alaska Natives relative to all other groups. Hypertension was highest for African Americans, especially for African American women. Prevalence of high cholesterol differed little among the groups, and the same was true, among men, for obesity. But for African American women, the prevalence of obesity was exceptionally high.

These patterns were similar, although in some respects more pronounced, in the recent data than in the previously published data.[1] Lack of health care coverage changed little during this period, remaining especially frequent among American Indians, Alaska Natives, and Hispanics. Poverty was most frequent for these groups and also for African Americans.

Table 4. Update on Disparities in Selected Health Indicators, by Race or Ethnicity, United States.

	Race or Ethnicity					
Health Indicators	American Indian or Alaska Native	Asian	Black or African American	Hispanic[1]	Native Hawaiian or Pacific Islander	Non-Hispanic White
Years of potential life lost[2] before age 75 from heart disease[4] (2004 data)	975.8	474.93	2090.5	733.1	N/A	1064.9
Years of potential life lost[2] before age 75 from stroke[5] (2004 data)	171.4	167.53	452.0	187.9	N/A	161.1
Years of potential life lost[2] before age 75 from diabetes mellitus[6] (2004 data)	323.5	78.33	378.8	192.3	N/A	152.0
Tobacco use (cigarettes) during the previous month among persons aged >12 (2006 data)	38.1%	14.6%	24.4%	22.4%	N/A	26.1%
Hypertension[7] among men aged 20-74 (2001-2004 data)	N/A	N/A	37.8%	22.1%	N/A	26.0%
Hypertension[7] among women aged 20-74[8] (2001-2004 data)	N/A	N/A	40.3%	25.1%	N/A	24.1%
Total cholesterol (>240 mg/dL) among men (2001-2004 data)	N/A	N/A	14.4%	17.0%	N/A	16.5%
Total cholesterol (>240 mg/dL) among women (2001-2004 data)	N/A	N/A	14.3%	12.8%	N/A	16.7%
Body mass index >30 kg/m^2 among men aged 20-74 (2001-2004 data)	N/A	N/A	31.2%	30.5%	N/A	31.0%
Body mass index >30 kg/m^2 among women aged 20-74[8] (2001-2004 data)	N/A	N/A	51.6%	40.3%	N/A	31.5%
No health care coverage among persons aged <65 (2005 data)	32.2%	17.1%	18.4%9	33.0%	N/A	15.9%
Poverty[10] (2006 data)	26.6%	10.7%	25.3%	21.5%	16.1%	9.3%

Healthy People 2010: Midcourse Review

Focus Area 12 in *Healthy People 2010* addresses heart disease and stroke with a goal that has several components: 1) prevention of risk factors; 2) detection and treatment of risk factors; 3) early identification and treatment of heart attacks and strokes; and 4) prevention of recurrent cardiovascular events.[2] Within this area, 16 objectives are specified. Nine other focus areas together have 48 additional objectives relevant to heart disease and stroke; all are cross-tabulated in accordance with the four goals in Appendix B of the *Action Plan*.

The *Midcourse Review* is a report of progress toward each of the *Healthy People 2010* objectives for which baseline and interim data are available. The report on heart disease and stroke addresses 10 of the 16 objectives specific to these conditions. Staff of the Centers for Disease Control and Prevention and the National Institutes of Health, co-lead U.S. public health agencies for heart disease and stroke, collaborated on this report, which is summarized in the Figure. For each objective and subobjective, a "progress quotient" is calculated. This quotient is the observed proportion of change from baseline toward the target value of an objective and is calculated as follows:

$$\text{Progress Quotient} = \text{Percentage of targeted change achieved} = \frac{(\text{Most recent value} - \text{baseline value}) \times 100}{(\text{Year 2010 target} - \text{baseline value})}$$

Table 4. Notes, footnotes, and sources

Notes

Prevalences of hypertension, total cholesterol, and body mass index (BMI) are age-standardized to the U.S. 2000 standard population.

N/A indicates data are not available or they do not meet the criteria for statistical reliability, data quality, or confidentiality.

NSDUH: National Survey on Drug Use and Health

NHANES: National Health and Nutrition Examination Survey

NHIS: National Health Interview Survey

Footnotes

1. The NHANES provides reliable estimates for the Mexican American subgroup of Hispanics, but not all Hispanics. Therefore, data are shown for Mexican Americans rather than all Hispanics.
2. Years of potential life lost (YPLL) rates per 100,000 are age standardized to the 2000 U.S standard population..
3. Includes data for Native Hawaiians or other Pacific Islanders.
4. Includes all heart disease deaths coded according to the International Statistical Classification of Diseases and Related Health Problems (ICD-10) (Geneva, Switzerland: World Health Organization)
5. Includes all cerebrovascular accident deaths (stroke) coded according to the ICD-10.
6. Includes all diabetes deaths coded according to the ICD-10.
7. Defined as having blood pressure >140/90 mm Hg or reporting current antihypertensive therapy.
8. Excludes pregnant women.
9. Non-Hispanic black racial/ethnic categories used in NHIS data.
10. Defined as living in a household with income below the poverty level within the previous 12 months.

Sources

Years of potential life lost: Centers for Disease Control and Prevention (CDC), (Health, United States, 2007.

Tobacco use: Substance Abuse and Mental Health Services Administration. NSDUH http://www.oas.samhsa.gov/NSDUH/2k6NSDUH/2k6results.cfm#Ch4)

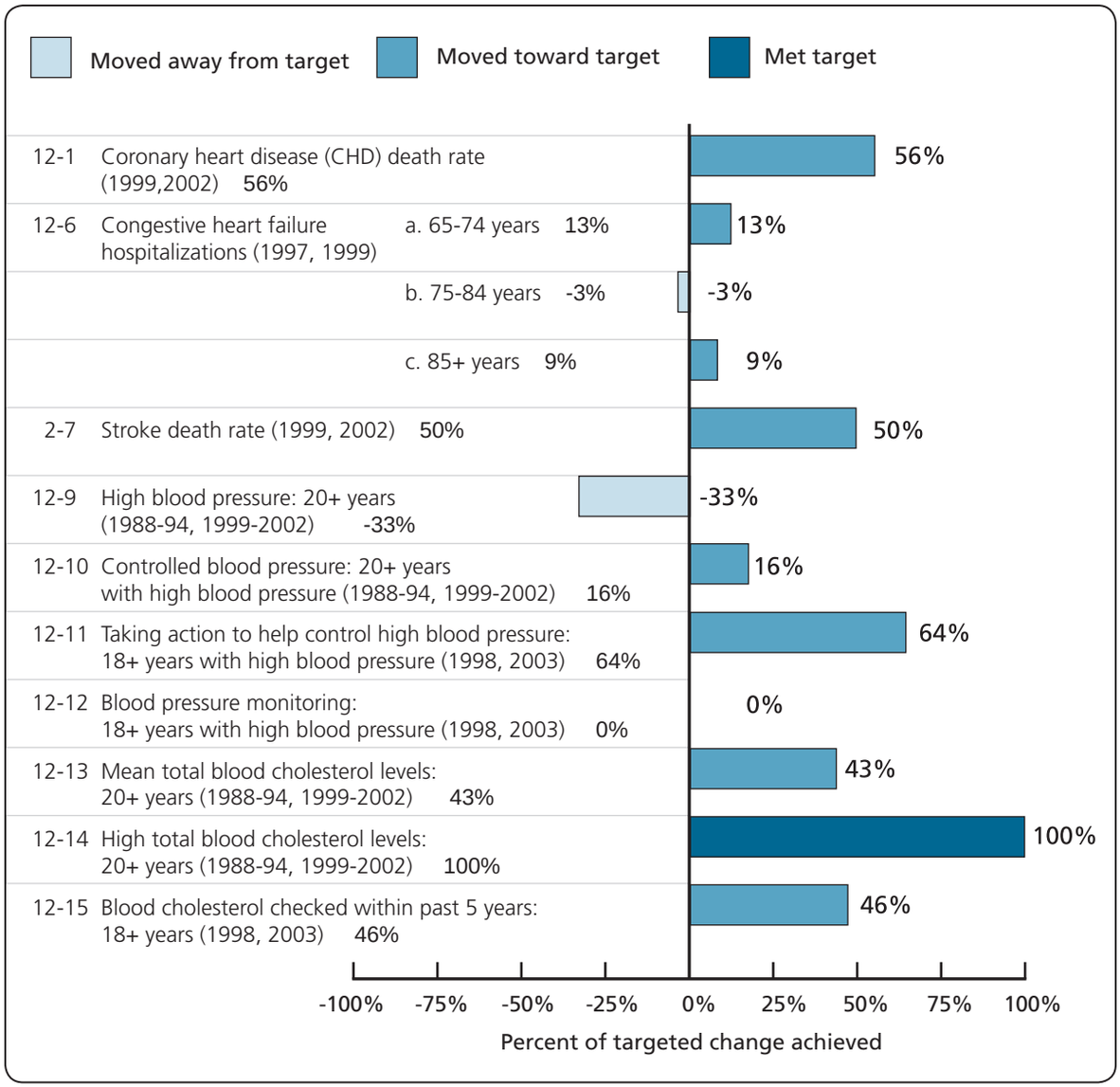
Hypertension, total cholesterol, and body mass index: CDC, NHANES

No health insurance: CDC, NHIS

Poverty: U.S. Census Bureau. 2006 American Community Survey and Census 2000 (http://factfinder.census.gov/)

For example, prevalence of high total cholesterol values (objective 12–14) was to be reduced from 21% at baseline to 17% by 2010, an absolute difference of 4%. For this objective, the baseline value was from NHANES of 1988–1994 and the most recent value was from NHANES survey of 1999–2002. The observed difference of 4% is 100% of the targeted change, and at midcourse the target had been met, as shown in the Figure.

Figure
Progress Quotient Chart for Focus *Healthy People 2010* Area 12: Heart Disease and Stroke



Notes: Tracking data for objectives 12-2, 12-3a and b, 12-4, 12-5, 12-8, and 12-16 are unavailable. Years in parentheses are the baseline data year and the most recent data year used to compute the percentage of the *Healthy People 2010* target achieved.

For eight other objectives, movement toward the targeted changes ranged from 9% to 64%. Death rates for coronary heart disease and stroke and for taking action to help control high blood pressure were more than half way to their targets at midcourse. Mean total blood cholesterol levels and blood cholesterol checked within the previous 5 years were nearly half-way to the targets. Little or no change was found for congestive heart failure hospitalization or controlled high blood pressure. Overall, good progress has been made in several respects.

The contrary finding for prevalence of high blood pressure is cause for serious concern. The baseline level was 26% and the target is 14%. On the basis of the same NHANES sources as cholesterol levels, prevalence of high blood pressure increased by 33% of the target change as of 1999–2002, a change in prevalence from 26% to approximately 30% among adults aged 20 years or older. This change, coupled with the striking increase in prevalence of diabetes and obesity, adds to the total cardiovascular disease burden and threatens to slow progress toward the goals for heart disease and stroke mortality through the remainder of the decade.

Adding to concern about the nation's course with respect to high blood pressure is the report of increasing blood pressure among children and adolescents from 1988–1994 to 1999–2000.[8] During this period, the national population mean levels of systolic and diastolic blood pressure increased for each of two age groups, 8–12 and 13–17 years. Increases were greatest for non-Hispanic blacks and Mexican Americans and reached +4.8 mm/Hg overall for those aged 8–12 years. These increases were only partially accounted for by the concurrent increase in body mass index.

Progress Toward the American Heart Association's Impact Goal

The American Heart Association's impact goal for 2010, as approved in February 2004, is as follows: [3]

> By 2010, to reduce coronary heart disease, stroke, and risk by 25% by —
>
> - Reducing the death rate from coronary heart disease and stroke by 25%.
> - Reducing the prevalence of smoking, high blood cholesterol, and physical inactivity by 25%.
> - Reducing the rate of uncontrolled high blood pressure by 25%.
> - Eliminating the growth of obesity and diabetes.

As of June 2007, the AHA indicators were reported as follows:

Indicator	2010 Impact Goal	June 2007 Status
Coronary heart disease death rate	25% reduction	22.8% reduction
Stroke death rate	25% reduction	18.8% reduction
Uncontrolled high blood pressure	25% reduction	16.0% reduction
High cholesterol prevalence	15.6% reduction	19.2% reduction
Tobacco prevalence	18.5% reduction	13.0% reduction
Physical inactivity prevalence	25% reduction	2.5% reduction
Obesity rate of growth	0%	1.39% annual rate of growth
Diabetes rate of growth	0%	No new data

Congruent with other findings, AHA saw progress in several key indicators. In January 2008, AHA reported on CDC's new release of 2005 mortality data showing decreases of 25.8% in coronary heart disease mortality and 24.4% in stroke mortality.[6] Favorable changes in high cholesterol prevalence, reductions in tobacco use, and increases in high blood pressure control were also striking. But rates of physical inactivity and obesity continued to lag or worsen; no new data were reported for diabetes prevalence.

A Global Perspective

The global dimensions of epidemic heart disease and stroke are acknowledged more widely and addressed more forcefully today than when *A Public Health Action Plan to Prevent Heart Disease and Stroke* was first published in 2003. *Global Strategy on Diet, Physical Activity and Health*,[9] published by the World Health Organization (WHO) in 2004, calls attention to the urgent need for widespread action to address these fundamental causes of cardiovascular and other chronic or noncommunicable diseases.

According to WHO, 30% of deaths worldwide are due to heart disease or stroke.[4] Global health experts continue to raise the alarm that chronic diseases are increasing worldwide, particularly in low- and middle-income countries. Beyond the private burden borne by victims and their families, these diseases are a serious threat to the economic well-being of the countries in which the affected people live because many who suffer disease and death are of working age.

A Race Against Time,[10] which also appeared in 2004, demonstrates the potentially crippling effect of cardiovascular disease on developing countries unless action is taken now to protect those who comprise the productive labor force — the economic engine — of these countries. The WHO report of 2005 *Preventing Chronic Diseases: A Vital Investment*[4] provides an overview of the risk factors and burden of chronic disease (including CVD) worldwide, reviews evidence-based interventions for populations and individuals, and outlines a public health approach to reducing chronic disease. WHO proposes a new global goal to reduce the projected trend of death rates due to chronic disease by 2% each year until 2015.

WHO's *Framework Convention on Tobacco Control*,[11] published in 2003, became effective 27 February 2005 and, as of January 2008, had 168 signatories and 151 ratifying parties among the nations of the world. This first global treaty on health offers hope of limiting the ravages of the epidemic of tobacco use, including its contribution to the toll of death and disability from cardiovascular diseases.

Global Burden of Disease and Risk Factors,[12] published in 2006, greatly extends the resources for policy development by estimating the attributable burden of disease related to major risk factors on a regional and subregional basis worldwide. And *Disease Control Priorities in Developing Countries (2nd Edition)*,[5] a 2006 product of the Disease Control Priorities Project of the World Bank, outlines in detail the outcome of cost-effectiveness assessments of the most promising population-level interventions to prevent cardiovascular diseases and other major public health burdens throughout the developing world.

Conclusions

The summary of "Time for Action" in 2003 concluded as follows:

> An unprecedented opportunity exists today to develop and implement an effective public health strategy to prevent heart disease and stroke. Three major factors have contributed to this opportunity:
> - More cumulative knowledge and experience in CVD prevention exists today than ever before.

- Major national partnerships have been established to support heart disease and stroke prevention.
- Health professionals increasingly recognize the continuing CVD epidemic, unfavorable recent trends, and forecasts of a mounting burden of heart disease and stroke, nationally and worldwide. This recognition has increased their awareness of the need for immediate action.

Despite this opportunity, the public health investment in preventing heart disease and stroke remains far below what is needed for fully effective intervention. Serious shortcomings also exist in the delivery of established treatments for these conditions in clinical practice. These facts demonstrate that the vast body of current knowledge and experience in CVD prevention has yet to be adequately applied to realize the full potential benefit to the public's health. The most critical need today is for public health action that is guided by the knowledge and experience already at hand.

These elements of the rationale for public health action are strongly reinforced by current data and by the interim developments that include, prominently, establishment of the National Forum for Heart Disease and Stroke Prevention as the principal vehicle for implementing the *Action Plan*.

Three strategic imperatives remain critical to successful implementation:

We must —

- Strike a new balance in our investment in health by putting prevention first.
- Transform our public health agencies into effective instruments for leading policy and environmental change and for supporting the entire range of public health approaches to heart disease and stroke prevention.
- Prevent the causes themselves of heart disease and stroke (i.e., not wait to treat the causes or the consequences of disease when their prevention is possible).

A Public Health Action Plan to Prevent Heart Disease and Stroke continues to chart a course whose pursuit during the remainder of this decade and through the next is vital to the present and future health of this nation and the world.

References

1. U.S. Department of Health and Human Services. A public health action plan to prevent heart disease and stroke Atlanta, GA: Centers for Disease Control and Prevention; 2003.
2. U.S. Department of Health and Human Services. Healthy people 2010: midcourse review. Washington, DC: Government Printing Office; 2006. Available at: http://www.healthypeople.gov/data/midcourse/html/focusareas/FA12ProgressHP.htm
3. American Heart Association. American Heart Association impact goal progress. Dallas, TX: AHA; 2007. Available at: http://www.americanheart.org/presenter.jhtml?identifier=3050838
4. World Health Organization (WHO). Preventing chronic diseases: a vital investment. Geneva, Switzerland: WHO; 2005. Available at: http://www.who.int/chp/chronic_disease_report/en/index.html.
5. Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, et al., Editors. Disease control priorities in developing countries, 2nd edition. Washington, DC: International Bank for Reconstruction and Development/The World Bank; 2006.
6. Rosamond W, Flegal K, Furie K, Go A, Greenlund K, Haase N, et al. Heart disease and stroke statistics: 2008 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Circulation 2008;115:e69-e171.
7. Centers for Disease Control and Prevention (CDC). National Center for Health Statistics. Health, United States. Atlanta, GA: CDC; 2006
8. Muntner P, He J, Cutler JA, Wildman RP, Whelton PK. Trends in blood pressure among children and adolescents. JAMA 2004;291:2107-13.
9. World Health Organization (WHO). Global strategy on diet, physical activity and health. Geneva, Switzerland: WHO; 2004.
10. Leeder S, Raymond S, Greenberg H. A race against time: the challenge of cardiovascular disease in developing countries. New York, NY: Columbia University; 2004.
11. World Health Organization (WHO). WHO framework convention on tobacco control. Geneva, Switzerland: WHO; 2003.
12. Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJL, editors. Global burden of disease and risk factors. Washington, DC: The International Bank for Reconstruction and Development/The World Bank; 2006.

Making Connections: The Conceptual Basis of Effective Action

Betty Sue Flowers, PhD
Director, Lyndon Baines Johnson Library and Musuem

In 2002, I was a participant in the early planning meetings and content reviews for *A Public Health Action Plan to Prevent Heart Disease and Stroke*. It is inspiring to see how much has been accomplished since then. And it is interesting to see the emphasis on the importance of the economics of prevention, since one of the key points I raised briefly in 2002 was the need to speak from within the economic myth or story that we all share.

As a humanist approaching this work, I have been contemplating two central questions.

First, what if we stepped outside the economic myth within which we lived when we addressed the economic aspects of heart disease and stroke prevention?

The question I am posing is not the same as this question: why should we address the economic aspects of heart disease and stroke prevention? The answer to that question is self-evident simply because everything comes with a price tag. And price tags raise the question: if we pay for X or Y, what can we now not afford? I am not talking about the kind of cost-benefit analysis that leads us to choose to do some things before others. I am talking about a fundamental viewpoint from which certain arguments about public policy can be made.

In addition to our personal stories, we also have big cultural stories that shape us. These cultural stories I call *myths*, not because they aren't true — they are all true in their own way — but because we live with them unconsciously. In the west, we have four of these myths, although one is always ascendant. These are the hero myth, the religious myth — I remind you that by *myth* I do not mean *untrue* — the science myth, and the economic myth, which is the myth we are in now.

Our medical practice works within the science myth — or the science culture of today, if you prefer. Anyone wanting to be a doctor gets a science education. The medium for this myth — or culture — is numbers, which is why it is an international story, although an elite one and therefore not the dominant myth of our culture.

Originally, medicine — the art of healing — came out of the religious myth, not the scientific myth. In ancient days, medicine was in the realm of the sacred. *The Iliad* begins with Achilles sulking in his tent. But he is sulking because his prize has been taken away from him in order to appease Apollo who is raining his arrows of sickness on the Greek army. Of all the professions, medicine is still closest to the religious domain — at least, I often see chaplains in hospital corridors and never in an active role in the law firms or banks.

Now we are in the economic myth, whose ideal is growth. More. Health care is a commodity — like almost everything else — competing in

the marketplace with other commodities. An argument for good public health, if made as a "should" argument — we should care for our fellow human beings — falls within the realm of the religious myth and therefore outside the range of what many people can hear in our present global culture. This is not to say that, as individuals, we are not good or caring; it is to say that because public policy is made from within the economic myth, an argument based on goodness (the religious myth) or charismatic personalities (the hero myth), or even scientific evidence (the scientific myth), will not have much traction. Clearly, I am not talking here about the good people who make donations to hospitals, or the scientific advances that help us provide better treatment, or the changes we adopt within our own hospitals and treatment centers. I am talking about large-scale public policy action.

What is the argument that has trumped all others in public conversation about universal health insurance, for example? Not "we shouldn't do it" or "it can't be done." It is that "we cannot afford it."

Why is the economic myth so powerful?

- It seems to explain everything. Self-interest.
- It seems natural because many people are sold on the idea that growth and competition are good.
- It is the first truly global myth, with numbers and pictures as its mode of communication.
- It connects powerfully to the bottom of Maslow's hierarchy of human needs. It connects to security, survival, and fear.

For success in our campaign to reduce heart disease and stroke, we need two factors:

- An economic view of the entire system we want to change, with a cost-benefit analysis for the preventive measures that would make a difference. I think you are well on your way to creating this.
- An image or slogan that is immediately comprehensible to the public — and through the public, to public policymakers — if changing public policy is the aim. For each separate campaign designed to change behavior, we need a separate slogan. The reason is two-fold: the economic myth works with numbers behind the scenes and works with images when communicating with the public. An example of an effective campaign slogan is *Don't mess with Texas*. It is effective because it goes with the macho flow of a cultural self-image in a way that *Please don't litter our highways* does not.

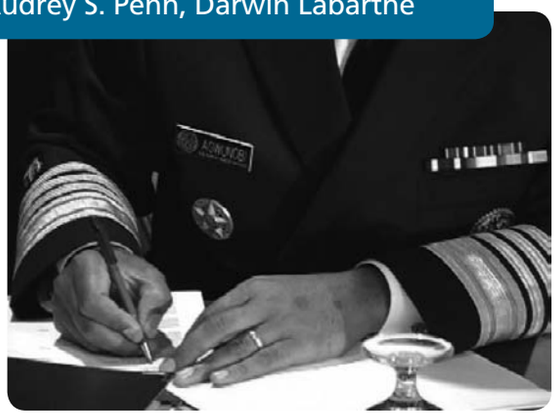
The second question I am posing is this: when we know the science, what stops us from making the needed changes at every level, from government policies to individual behavior?

I could answer with one word—inertia—but that would not be helpful.

- We need the structures for change. We know, for example, that structured exercise programs with buddies work better than solitary will power. When it comes to public policy, we need to create a structure for rewarding investment in prevention. Our incentive structure sometimes works against prevention — unlike the system in ancient China, where doctors were paid as long as their patients stayed well.
- We need different analogies. Whatever you think of mandated individual health insurance, it was sold as a public policy through an analogy to mandated individual car insurance.
- We need to involve people in seeing as well as in the action part of the plan. And we need to help them see their economic self-interest, not just their health interest.
- We need different stories of possibility. It is possible. We can do it.

Adapted from remarks made at the 5th National Forum

Signing of the Memorandum of Understanding, Healthy People 2010 Partnership, 2006 National Forum.
Susan B. Shurin, John O. Agwunobi, David C. Rutstein, Janet Collins, Mark Schoeberl, Douglas G. Peter, Audrey S. Penn, Darwin Labarthe



Mission Statements and Strategies of the Implementation Groups

NATIONAL FORUM'S VISION
Working together for a heart-healthy and stroke-free world.

NATIONAL FORUM'S MISSION
To provide leadership and encourage collaboration among organizations committed to heart disease and stroke prevention.

IMPLEMENTATION GROUPS

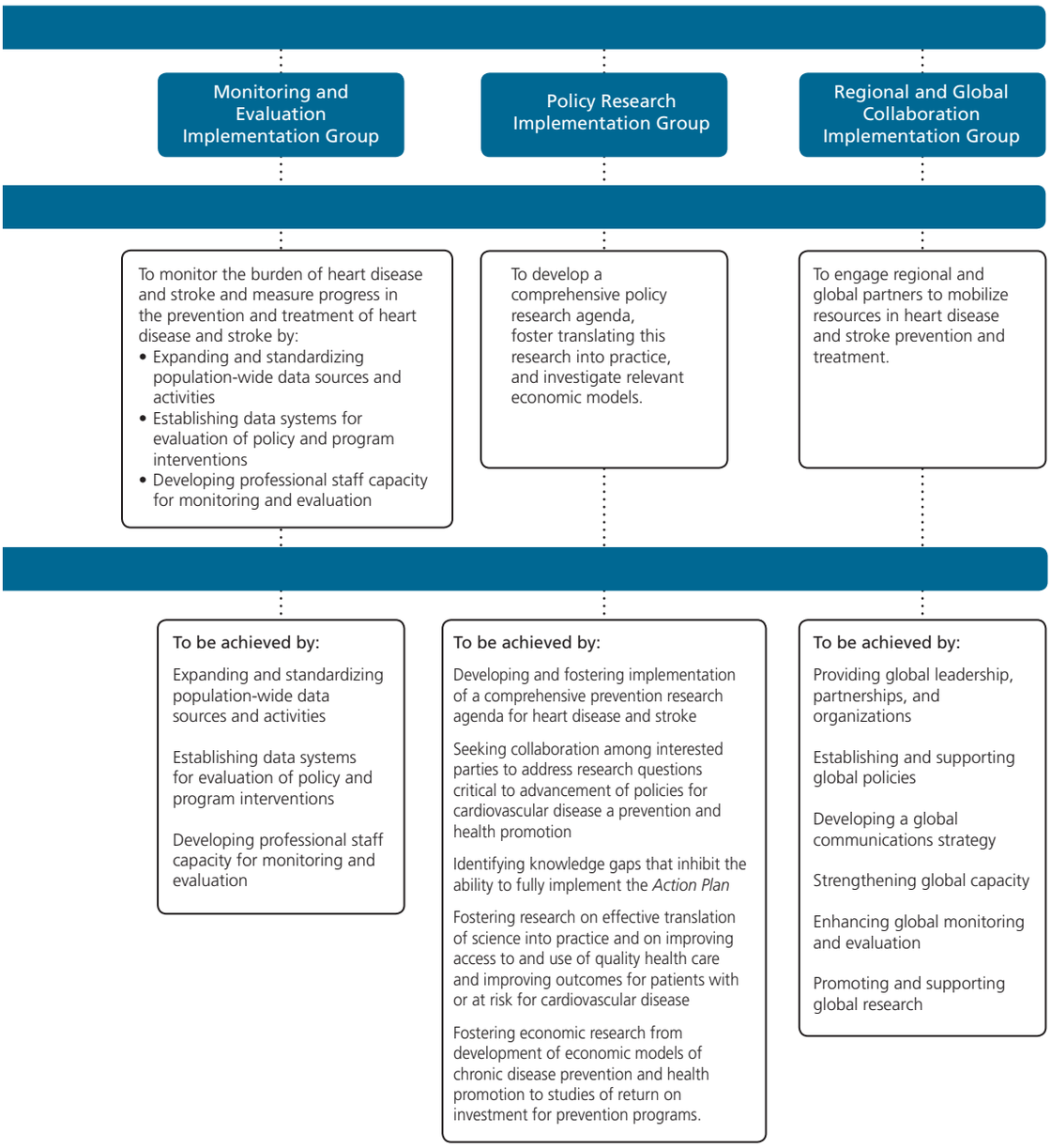
Communications Implementation Group	Public Health Leadership and Partnership Implementation Group	Action Priorities Implementation Group	Organizational Capacity Implementation Group

IMPLEMENTATION GROUP MISSIONS

Communications Implementation Group	Public Health Leadership and Partnership Implementation Group	Action Priorities Implementation Group	Organizational Capacity Implementation Group
To effectively communicate the urgency and importance of preventing heart disease and stroke through a longterm strategy of public information and education.	To foster effective leadership and partnership for preventing heart disease and stroke.	To identify effective policies in cardiovascular health (CVH) promotion and cardiovascular disease prevention at the national, state, and local levels to ensure effective public health action against heart disease and stroke.	To build capacity of federal, state, and local public health agencies, including laboratories, to address heart disease and stroke as a priority within a strong chronic disease prevention effort and to develop the needed competencies and resources.

CORE STRATEGIES FOR ACHIEVING MISSIONS

Communications Implementation Group	Public Health Leadership and Partnership Implementation Group	Action Priorities Implementation Group	Organizational Capacity Implementation Group
To be achieved by: Developing a communications plan Implementing strategies for educating decision makers and other stakeholders Identifying and working with key communication partners to achieve goals Evaluating communication strategies and adjusting activities as needed.	To be achieved by: Broadening, strengthening, and sustaining multi-sector public health partnerships and coalitions to implement and institutionalize the *Action Plan* Helping to develop implementation plans at national, state, and local levels Fostering collaboration within state health departments among complementary CVH-related programs	To be achieved by: Implementing the most promising public health programs and policies Emphasizing promotion of desirable social and environmental conditions and favorable behavioral partners Addressing all opportunities for prevention	To be achieved by: Establishing definable entities with responsibility and accountability for heart disease and stroke prevention Creating a training system to develop and maintain appropriately trained public health workforces Developing and disseminating model performance standards and core competencies in heart disease and stroke prevention and cardiovascular health promotion Providing ongoing access to technical assistance and consultation for agencies and partners in heart disease and stroke prevention Integrating and collaborating with all relevant programs and partners


Monitoring and Evaluation Implementation Group
Policy Research Implementation Group
Regional and Global Collaboration Implementation Group
To monitor the burden of heart disease and stroke and measure progress in the prevention and treatment of heart disease and stroke by:
• Expanding and standardizing population-wide data sources and activities
• Establishing data systems for evaluation of policy and program interventions
• Developing professional staff capacity for monitoring and evaluation
To develop a comprehensive policy research agenda, foster translating this research into practice, and investigate relevant economic models.
To engage regional and global partners to mobilize resources in heart disease and stroke prevention and treatment.
To be achieved by:
Expanding and standardizing population-wide data sources and activities
Establishing data systems for evaluation of policy and program interventions
Developing professional staff capacity for monitoring and evaluation
To be achieved by:
Developing and fostering implementation of a comprehensive prevention research agenda for heart disease and stroke
Seeking collaboration among interested parties to address research questions critical to advancement of policies for cardiovascular disease a prevention and health promotion
Identifying knowledge gaps that inhibit the ability to fully implement the Action Plan
Fostering research on effective translation of science into practice and on improving access to and use of quality health care and improving outcomes for patients with or at risk for cardiovascular disease
Fostering economic research from development of economic models of chronic disease prevention and health promotion to studies of return on investment for prevention programs.
To be achieved by:
Providing global leadership, partnerships, and organizations
Establishing and supporting global policies
Developing a global communications strategy
Strengthening global capacity
Enhancing global monitoring and evaluation
Promoting and supporting global research

A Review of the Essential Components and Recommendations of *A Public Health Action Plan to Prevent Heart Disease and Stroke* by the National Forum's Implementation Groups

This section contains the seven Implementation Groups' suggested updates to *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. Any new recommendation, action step, or expected outcome is indicated by "**(NEW)**."

Each Implementation Group's section concludes with the activities selected by that Group as priorities to be undertaken on behalf of the National Forum in 2008–2009.

The table below explains where material related to each Implementation Group appears in the *Action Plan*. For your convenience, the *Action Plan* is reprinted in Appendix E of this publication.

Implementation Group (formerly Expert Group or Workgroup)	Related Recommendations in *Action Plan* on Pages	Related Action Steps and Expected Outcomes in *Action Plan* on Pages
Communications (Effective Communications)	46	57-58
Public Health Leadership (Strategic Leadership)	46-47	58-59
Action Priorities (Taking Action)	47-49	59-60
Organizational Capacity (Strengthening Capacity)	49-50	61-64
Monitoring and Evaluation (Evaluating Impact)	50-51	65-67
Policy Research (Advancing Policy)	51-53	67-70
Regional and Global Collaboration (Regional and Global Partnerships)	53-54	70-73

1. Communications Implementation Group

Chair: Michael Greenwell
Vice Chair: Brian Bilchik
Members: Kristen Betts; Catherine Coleman; Marian Emr; Diane Mulligan Fairfield; Suzanne Folkes; Crystelle Fogle; James Galloway; Judy Hannan; Angela Hedworth; Marsha Houston

MISSION

To effectively communicate the urgency and importance of preventing heart disease and stroke through a long-term strategy of public information and education.

The following contains the Communications Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendation on page 46 and Action Steps and Expected Outcomes on pages 57-58.

The Communications Implementation Group's priority Recommendation, Action Step, and Expected Outcome to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

RECOMMENDATION

The urgency and promise of preventing heart disease and stroke and their precursors (i.e., atherosclerosis, high blood pressure, and their risk factors and determinants) must be communicated effectively by the public health community through a new long-term strategy of public information and education. This new strategy must engage policy makers and other stakeholders at the global, national, state and local levels. As a matter of emphasis, special consideration must be paid to those most at risk. Communication strategies should utilize the most current forms of available technology as well as those communications devices that are accessible in various communities in the United States and around the world.

Action Step: Assess requirements for effective messages. Set the agenda for a long-term, national public information strategy that conveys the importance and feasibility of prevention. Craft clear and compelling messages that capture public attention, help people understand cardiovascular health (CVH) and its risks, and support healthy behavioral changes. Include a social marketing strategy to identify audiences, develop effective national

messages, and determine media avenues (e.g., peer-reviewed journals, CDC's *Morbidity and Mortality Weekly Report*, community report cards). Communicate consistent CVH information and messages to the public, health professionals, and policy makers.

Expected Outcome: Communication needs and opportunities are assessed and used to guide initial development of the long-term public information strategy anticipated by the *Action Plan*. Key messages for the National Forum are refined and are being incorporated into all communications vehicles.

Action Step: Communicate effectively at global, national, and state levels to gain consensus on messages and create public demand for heart-healthy options to prevent heart disease and stroke. Work with partners whose roles include education of key stakeholders. Engage local, state, national, and international policy makers, including new stakeholders.

Expected Outcome: Multiple audiences are identified and reached with consistent CVH information and messages. Exposures are targeted and repetitive. Reach and maintain critical intensity, neutralize negative messages from special interests, and include expression in popular humor as a measure of public awareness and interest. An effective and sustained communication program exists and is developing appropriate public messages about CVH.

Action Step: Collect information and monitor research systematically from global, national, state, and local levels to facilitate sharing of knowledge and experience in developing educational campaigns as part of this continuing strategy.

Expected Outcome: Public health agencies are promoting continuing development of appropriate educational materials.

Action Step (NEW): Develop communication strategies to effectively communicate with those populations most at risk and address inequities in access to health care.

Expected Outcome (NEW): Information and messages are tailored specifically to impact populations most at risk by creating public health materials in different languages and identifying and utilizing communications channels in at-risk communities.

Action Step (NEW): Identify communication materials that have been created by other partners, and determine whether these materials can be modified for national or global usage.

Expected Outcome (NEW): The National Forum for Heart Disease and Stroke Prevention is established as a credible clearinghouse for CVH information.

Action Step (NEW): Understand the changing dynamics of communication and the increasingly interactive nature of communications. Incorporate electronic (Web-based) forms of communication in strategies. In outreach to different international communities, identify and use communications devices that are accessible in a particular community.

Expected Outcome (NEW): A digital communications strategy has been developed for the National Forum that includes the launch of a Web site, socializing the Web site usage among the National Forum membership, and using the Web site to promote National Forum priorities.

Action Step (NEW): Constitute the Communications Implementation Group of the National Forum to represent organizations and individuals from all aspects of communications practice and technology.

Expected Outcome (NEW): A well-staffed Communications Implementation Group has been built that represents organizations and individuals from all aspects of communications practice and technology.

2008–2009 PRIORITY

RECOMMENDATION

The urgency and promise of preventing heart disease and stroke and their precursors (i.e., atherosclerosis, high blood pressure, and their risk factors and determinants) must be communicated effectively by the public health community through a new long-term strategy of public information and education. This new strategy must engage policy makers and other stakeholders at the global, national, state and local levels. As a matter of emphasis, special consideration must be paid to those most at risk. Communication strategies should utilize the most current forms of available technology as well as those communications devices that are accessible in various communities in the U.S and globally.

Action Step: Assess requirements for effective messages. Set the agenda for a long-term, national public information strategy that conveys the importance and feasibility of prevention. Craft clear and compelling messages that capture public attention, help people understand cardiovascular health (CVH) and its risks, and support healthy behavioral changes. Include a social marketing strategy to identify audiences, develop effective national messages, and determine media avenues (e.g., peer-reviewed journals, CDC's *Morbidity and Mortality Weekly Report*, community report cards). Communicate consistent CVH information and messages to the public, health professionals, and policy makers.

Expected Outcome: Key messages for the National Forum are refined and are being incorporated into all communications vehicles.

2. Public Health Leadership Implementation Group

Chair: James Baranksi
Vice Chair: B. Waine Kong
Members: Erin McDonald Bicknell; Ivonne Fuller-Bertrand; Margaret Casey; Jay Glasser; Dyann Matson-Koffman; Tim LaPier; Debra Wigand

MISSION

To foster effective leadership and partnership for preventing heart disease and stroke.

The following contains the Public Health Leadership Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendation on page 46–47 and Action Steps and Expected Outcomes on pages 58–59.

The Public Health Leadership Implementation Group's priority Recommendation, Action Steps, and Expected Outcomes to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

RECOMMENDATION

The nation's public health agencies, their partners, and the public must provide the necessary leadership for a comprehensive public health strategy to prevent heart disease and stroke.

Action Step: Broaden, strengthen, and sustain public health partnerships as an essential force for implementing and institutionalizing the plan. Include public health agencies at all levels (national, state, and local) and a range of other federal, state, and local agencies (e.g., education, agriculture, transportation, housing, environment, tribal organizations); private organizations (e.g., faith–based organizations, business, labor, media, foundations); and academia (e.g., schools of public health, departments of preventive and community medicine, family practice, pediatrics, internal medicine, geriatrics).

Expected Outcome: Partnerships supporting the plan are strengthened or established, forming an inclusive array of interests representing all relevant sectors of society.

Action Step: Convene agencies at all levels to help develop implementation plans at state and local levels.

Expected Outcome: National, state and local public health officials, federal health care systems, and tribal organizations are convened to help implement the plan.

Action Step: Continue to encourage state health departments to foster internal and external partnerships and collaborations with complementary CVH–related programs. Allow flexible use of state and federal funding to facilitate these important links.

Expected Outcome: Support for CVH partnership activities is strengthened and technical assistance in partnership development and management is available to state and local public health agencies and other interested constituencies. Agencies have expanded the number and diversity of internal and external CVH collaborations Available funds are used effectively to support coordination among programs.

Action Step: Explore and enhance the relationships public health agencies have with existing CVH policy coalitions and consider the need for additional partners to support the goals of the plan.

Expected Outcome: Existing CVH policy coalitions are strengthened.

Action Step (NEW): Establish and improve partnerships to develop, implement, and evaluate plans to address heart disease and stroke.

Expected Outcome (NEW): There is adequate representation of partners on planning groups; guidance is being provided for development and implementation of comprehensive state plans; partners are committing resources and sharing accountability for the state plan; the state plan is evaluated.

Action Step (NEW): Educate key decision makers to support heart disease and stroke prevention policies and programs.

Expected Outcome (NEW): The State Plan Index for Heart Disease and Stroke Prevention is finalized; the Resource Tool is finalized; marketing strategy to promote or enhance state partnerships and leadership is developed, and a training curriculum for persons to utilize the State Plan Index and Resource Tool to foster effective collaborations is developed; training is presented to select states and their partners on the State Plan Index and Resource Tool.

2008–2009 PRIORITY

RECOMMENDATION

The nation's public health agencies, their partners, and the public must provide the necessary leadership for a comprehensive public health strategy to prevent heart disease and stroke.

Action Step: Establish and improve partnerships to develop, implement, and evaluate plans to address heart disease and stroke.

Expected Outcome: There is adequate representation of partners on planning groups; guidance is being provided for development and implementation of comprehensive state plans; partners are committing resources and sharing accountability for the state plan; the state plan is evaluated.

Action Step: Educate key decision makers to support heart disease and stroke prevention policies and programs.

Expected Outcome: The State Plan Index for Heart Disease and Stroke Prevention is finalized; the Resource Tool is finalized; marketing strategy to promote or enhance state partnerships and leadership is developed, and a training curriculum for persons to utilize the State Plan Index and Resource Tool to foster effective collaborations is developed; training is presented to select states and their partners on the State Plan Index and Resource Tool.

3. Action Priorities Implementation Group

Chair: William Caplan
Vice Chair: Jennifer Smith
Members: Katie Clark Adamson; Calvo Ahmed; Erin McDonald Bicknell; Jill Birnbaum; Mara Krouse Donahue; Ron Finch; Bernadette Ford Lattimore; Kathy Gallagher; Jason Hsieh; Ken LaBresh; Rian Landers; Debra Lightsey; Julia Pekarsky; Mark Schoeberl; Ron Todd

MISSION

To identify effective policies in cardiovascular health (CVH) promotion and cardiovascular disease prevention at the national, state, and local levels to ensure effective public health action against heart disease and stroke.

The following contains the Action Priorities Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendations on page 46 and Action Steps and Expected Outcomes on pages 57–58.

The Action Priorities Implementation Group's priority Recommendation, Action Step, and Expected Outcome to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

1. RECOMMENDATION

Initiate policy development in CVH promotion and CVD prevention at national, state, and local levels to assure effective public health action against heart disease and stroke. In addition, evaluate policies in non-health sectors (e.g., education, agriculture, transportation, community planning) for their potential impact on health, especially with respect to CVD.

Action Step: Establish active collaboration among public health agencies, clinical preventive service providers, and other partners at all levels (e.g., purchasers of health care insurance, insurers, providers of care, health counselors, patient groups) to implement effective policies and programs that address CVH promotion and primary and secondary prevention of cardiovascular disease (CVD).

Expected Outcome: Through technical assistance, consultation, and cooperative arrangements, partners who deliver CVH promotion and CVD prevention programs

and services at all levels are receiving active support and incentives. These partners are developing and implementing more effective policies that address the full spectrum of intervention approaches represented in the action framework in Section 2 and reflect current knowledge of the efficacy and safety of therapeutic interventions.

Action Step: Develop and regularly update simulation models to address the expected health and economic benefits to society from investing in heart disease and stroke prevention.

Expected Outcome: Comprehensive economic modeling of the CVD burden and the potential impact of preventive policies and programs is ongoing and supports policy development and implementation.

Action Step: Advocate for health impact assessments of national policies and provide a framework to states to conduct these assessments at the state level.

Expected Outcome: National, state, and local policies are regularly identified and subject to health impact assessments with specific attention to their potential effects on CVH and other chronic diseases of public health concern.

Action Step (NEW): Develop, implement, and update annually an advocacy plan for our priority policy areas (prevention of risk factors, chain of survival, quality-of-care, disparities, heart disease and stroke prevention programs in all 50 states).

Expected Outcome (NEW): Policies have been selected; actions are being taken on behalf of policies in accordance with an advocacy plan; policies are being passed or implemented

2. RECOMMENDATION

Act now to implement the most promising public health programs and practices for achieving the four goals for preventing heart disease and stroke, as distinguished by the Healthy People 2010 Heart and Stroke Partnership based on the different intervention approaches that apply. These goals are prevention of risk factors, detection and treatment of risk factors, early identification and treatment of heart attacks and strokes, and prevention of recurrent cardiovascular events. Public health agencies and their partners must provide continuous leadership to identify and recommend new and effective interventions that are based on advances in program evaluation and prevention research and a growing inventory of "best practices."

Action Step: Review, revise if appropriate, and rigorously apply criteria for identifying model programs. In the meantime, implement current programs and evaluate them against these criteria.

Expected Outcome: Criteria appropriate for identifying best practices in CVH promotion and CVD prevention are established and are being used. Programs considered the most promising are implemented as expeditiously as possible, with adequate provision for rigorously evaluating these programs in accordance with accepted criteria.

Action Step: Identify and disseminate information about model programs that include all elements of best practices for a population–based approach to CVH.

Expected Outcome: These criteria are applied continually to identify model CVH/CVD programs, especially those in which multiple components are coordinated and integrated for maximum impact. These model programs are being disseminated.

Action Step: Generate and test new intervention models by funding new demonstration projects. Share materials and experiences in order to continually develop, implement, and evaluate best practices.

Expected Outcome: Innovative demonstration programs are being funded and rigorously evaluated. The resulting experiences are communicated rapidly and effectively to facilitate program replication and dissemination.

3. RECOMMENDATION

Address all opportunities for prevention to achieve the full potential of preventive strategies. Such opportunities include major settings (schools, work sites, health care settings, communities, and families), all age groups (from conception through the life span), whole populations — particularly priority populations (based on race/ethnicity, sex, disability, economic condition, or place of residence), and integration of chronic disease programs, conditions and risk factors.

Action Step: Develop, implement, and evaluate programs to address opportunities for CVH promotion and CVD prevention in the full array of multiple settings (e.g., schools, work sites, health care settings, other community sites) during all life stages (gestation; infancy and childhood; adolescence; and early, middle, and late adulthood), and among all priority populations (as defined by excessive health burdens or needs).

Expected Outcome: A matrix of settings, life stages, and at–risk populations is developed and disseminated as a tool for identifying policy and program needs and opportunities. Model policies and programs to address the demonstrated needs and opportunities are identified (or developed) and evaluated. These model policies and programs are disseminated for implementation at national, state, and local levels.

4. RECOMMENDATION

Emphasize promotion of desirable social and environmental conditions and favorable behavior patterns in order to prevent the major CVD risk factors and assure the fullest attainable accessibility and use of quality health services for people with risk factors or CVD. These actions are integral to a comprehensive public health strategy for CVH promotion and CVD prevention.

Action Step: Foster accountability of public health agencies for collaboration with their partners and engagement with society as a whole for addressing the full spectrum of opportunities to prevent heart disease and stroke as part of a comprehensive public health strategy.

Expected Outcome: CVH programs are recognized as having responsibility and accountability for a comprehensive public health strategy that addresses the full array of approaches to CVH promotion and CVD prevention, to help achieve the four Healthy People 2010 Heart and Stroke Partnership goals for preventing heart disease and stroke.

Action Step: Collaborate with partners in related fields (e.g., nutrition, physical activity, tobacco control, substance abuse), including those working to detect and treat risk factors (e.g., hyperlipidemia, high blood pressure, smoking, diabetes, obesity). Support programmatic activities in schools, worksites, health care settings, and community sites for priority populations.

Expected Outcome: The needed partnerships and collaborations are in place at national, state, and local levels to support these activities.

Action Step: Establish or strengthen collaborations with the Centers for Medicare and Medicaid Services, the National Committee for Quality Assurance, and other partners positioned to improve access to and use of high-quality care for patients with or at risk for CVD.

Expected Outcome: Partnerships are strengthened or established with the full array of organizations and agencies committed to effectively delivering high-quality health services (including preventive services) as part of a comprehensive public health strategy.

2008–2009 PRIORITY

1. RECOMMENDATION

Initiate policy development in CVH promotion and CVD prevention at national, state, and local levels to assure effective public health action against heart disease and stroke. In addition, evaluate policies in non-health sectors (e.g., education, agriculture, transportation, community planning) for their potential impact on health, especially with respect to CVD.

Action Step: Develop, implement, and update annually an advocacy plan for the APIG priority policies (Prevention of Risk Factors, Chain of survival, Quality-of-Care, Disparities, Heart Disease and Stroke Prevention programs in all 50 states).

Expected Outcome: Policies have been selected; actions are being taken on behalf of policies in accordance with an advocacy plan; policies are being passed or implemented

4. Organizational Capacity Implementation Group

Chair: Joan Ware
Vice Chair: Libby Puckett
Members: J. Nell Brownstein; Linda Faulkner; Gary Myers; Marcus Plescia; Linda Redman

MISSION

To build the capacity of federal, state, and local public health agencies, including laboratories, to address heart disease and stroke as a priority within a strong chronic disease prevention effort and to develop the needed competencies and resources.

The following contains the Organizational Capacity Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendations 5–8, Action Steps, and Expected Outcomes on pages 61–64.

The Organizational Capacity Implementation Group's priority Recommendations, Action Steps, and Expected Outcomes to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

5. RECOMMENDATION

Advocate for and assure public health infrastructure that supports and is accountable for chronic disease prevention and control programs at the federal, state and local levels, including laboratory components.

Action Step: Transform public health agencies at all levels so they can effectively prevent heart disease and stroke.

Expected Outcome: Public health agencies throughout the nation are undergoing the changes needed to expand their roles and meet the new challenges and opportunities of preventing heart disease and stroke and other chronic conditions of public health concern.

Action Step: Establish or strengthen identifiable heart disease and stroke prevention (HDSP) units in public health agencies at all levels. These units should be able to effectively reach all communities and have all necessary capacities for preventing heart disease and stroke, including new competencies in policy, environmental, and systems-level change. They should support population-wide health promotion and behavioral change for risk factor prevention and detection and management of risk factors.

Expected Outcome: Every state and territorial health agency has an identifiable unit or locus of responsibility for HDSP policy and programs. These agencies are able to provide support and assistance in HDSP activities to all local health agencies within their jurisdictions. Through increased and creative collaborations, public health agencies and their partners are strengthening their efforts to promote CVH and prevent risk factors and first or recurrent CVD events.

Action Step (NEW): Assist public health agencies in developing public-private partnerships with laboratory-related organizations and professional societies to support public health efforts to reduce the burden of heart disease and stroke through identification and monitoring of those persons at greatest risk.

Expected Outcome (NEW): Laboratory-related organizations and professional societies are collaborating with public health agencies in support of efforts to reduce the burden of heart disease and stroke through monitoring and identification of those most at risk.

6. RECOMMENDATION

Facilitate and promote training resources to develop and maintain appropriately trained public health workforces at national, state, and local levels. These workforces should have all necessary competencies to bring about policy, environmental, and systems changes and implement programs to improve CVH and decrease the heart disease and stroke burden, including laboratory requirements.

Action Step: Assure the development of training resources, including technical assistance and materials, to enable states to train staff in state and local health departments and in partner organizations and agencies, assuring that they have core competencies and meet performance standards for HDSP. These include changes in organizational structure, skills in incorporating best practices, and assurance of partnership effectiveness.

Expected Outcome: A comprehensive HDSP training function is developed and coordinated among all interested parties, providing a resource for state and local health agencies.

Action Step: Assure training in the following set of skills, which are essential to an effective public health workforce:

- Developing and maintaining partnerships and coalitions.
- Promoting community mobilization for effective action.
- Using health communications effectively.
- Defining and identifying the burden and status of chronic diseases.
- Preventing and managing risk factors.
- Formulating and executing policy, environmental, and systems approaches to intervention.
- Implementing, managing, and evaluating effective prevention programs.
- Leading diverse community organizations.
- Conducting culturally appropriate interventions targeted to priority populations.
- Using sound business practices and strategic planning (NEW).
- Strengthening knowledge and skills for laboratory testing of cardiovascular disease biomarkers (NEW).

Expected Outcome: Model curricula and educational programs (e.g., Web–based, video training packages) are available, including those needed for developing nontraditional skills. Trainees are meeting established goals.

Action Step: Consider a variety of options for training personnel. Possibilities include the following:

- Schools of public health and other professional schools in health fields.
- Train-the-trainer programs (e.g., in the use of data for health planning, health promotion, primary and secondary prevention, program planning, and evaluation, including population based interventions).
- A certificate program in HDSP
- HDSP training at Prevention Research Centers.
- HDSP training programs with standard curricula.
- An expanded year-round program implemented with state and local health agencies.
- Joint school health/public health courses.
- Regional networks for education and training.
- Internet training programs.
- Continuing education, including training in information technology.
- A certificate program for lipidology offered by the National Lipid Association.
- Audio conferences and web training in laboratory issues offered by laboratory organizations and professional societies (NEW).

Expected Outcome: Training programs for HDSP public health personnel are identified. State and regional networks for HDSP training and education are established to coordinate training needs with available resources.

Action Step: Involve numerous partners, such as directors of state chronic disease programs, voluntary associations, and academic institutions, in the development of training programs. Examples of such activities include the following:

- Allow all state and local health agencies access to training and development opportunities, information, and materials regardless of their funding status.
- Provide state and local health personnel and partners access to professional development opportunities.
- Tailor training programs to the concerns, interests, and needs of local, state, and national constituents, and to the requirements of funders.
- Provide training in chronic disease prevention to personnel from diverse organizations, including governmental agencies, public health, schools of public health, and non-governmental health organizations.

Expected Outcome: Model education and training programs are being developed and disseminated to state and local health agencies and partners.

Action Step (NEW): Utilize the National Forum's Web site and links to other appropriate Web sites to establish a clearinghouse for training opportunities and other resources related to the assessment and improvement of program capacity and competencies, and voluntary accreditation related to heart disease and stroke prevention. This will include the identification and sharing of best practices and state success stories.

Expected Outcome (NEW): The National Forum Web site is a prime resource for building public health capacity to prevent heart disease and stroke. The Web site is used by National Forum members and partners to disseminate current information, research, promote evidence-based practices and share training opportunities.

7. RECOMMENDATION
Identify, develop and disseminate model performance standards and core competencies in HDSP for national, state, and local public health agencies, including their laboratories.

Action Step: Facilitate development and dissemination of performance standards and core competencies for public health agencies and partners. Promote ongoing access to technical assistance, laboratory and clinical practice guidelines and performance standards for laboratory testing and standardization, and consultation to state and local health agencies, laboratories and partners for HDSP. Share performance standards and cultural competency guidelines with schools of public health and other educational sources for health professionals and encourage their adoption in curricula.

Expected Outcome: Performance standards and cultural competency guidelines for HDSP programs are established to help public health agencies transcend "business as usual" and undertake new directions in public health practice. Existing mandates are maintained, and efforts are expanded in early intervention (i.e., policy and environmental change; behavioral change; and prevention, detection, and control of risk factors). Laboratory capacity to address emerging issues is enhanced. Public health agencies are communicating with schools of public health and other training programs regarding training and curriculum requirements for public health personnel working in HDSP and related program areas.

Action Step: Identify mechanisms (e.g., technical assistance, dedicated funding and staff) that enable local and state health departments to meet standards.

Expected Outcome: Public health agencies are receiving technical assistance in monitoring and improving cultural competency in HDSP and related program areas.

Action Step (NEW): Promote and disseminate the competencies assessment tool developed by the National Association of Chronic Disease Directors to state-based heart disease and stroke prevention programs for use in assessing current competencies among their chronic disease/heart disease and stroke prevention staff, and identifying training needs in that area.

Expected Outcome (NEW): The competency assessment tool is recommended by the National Forum and available through the National Forum Web site. Use of the tool is promoted not only to state programs, but also to National Forum members and partners. Links are provided to training resources addressing the competencies.

Action Step (NEW): Promote existing guidelines and resources related to the enhancement of chronic disease epidemiology capacity to support the planning and evaluation of state and local heart disease and stroke prevention activities.

Expected Outcome (NEW): Existing resources related to chronic disease epidemiology capacity are promoted in support of planning and evaluation of state and local HDSP activities.

8. RECOMMENDATION
Provide ongoing access to technical assistance and consultation to state and local health agencies and partners for CVD prevention.

Action Step: Develop and maintain a cadre of educated practitioners and technical experts who can support intervention needs

in heart disease and stroke prevention (e.g., surveillance and trend analysis; community development and behavior change; health care systems change and quality improvement; emergency response; disease management; program management and evaluation). Draw these practitioners and experts from local, state, and national public health agencies, as well as from voluntary health associations, academia, foundations, and a variety of industries. Assure the means for keeping their skills up-to-date (e.g., through meetings and Web-based curricula).

Expected Outcome: A register of recognized experts willing to provide technical and policy assistance to local, state and federal health agencies and other HDSP partners is established and maintained. Use of the registry is supported and monitored. Training and educational opportunities are provided, and the registered experts use them.

Action Step: Develop materials and tools to promote HDSP at local and state levels.

Expected Outcome: State and local health agency needs for HDSP promotional materials and an educational toolbox are being met.

Action Step: Strengthen the internal communications infrastructure of public health agencies for chronic disease programs as they make other general infrastructure improvements.

Expected Outcome: A public health communications infrastructure supportive of heart disease and stroke prevention (and other chronic disease) activities are in place and are continually adopting newer, more effective communications technology.

RECOMMENDATION (NEW)
Public health agencies, through their HDSP units, should be accountable for fulfilling their assurance function regarding quality of care in heart disease and stroke prevention and should be supported in this role through periodic conference calls, training opportunities, conferences, and other appropriate means.

Action Step (NEW): Work in collaboration with partners such as the state QIO's, laboratory organizations and CHCC's to monitor changing medical technology and care practices to assist in defining the public health role in improving systems of care.

Expected Outcome (NEW): Changing medical technology and care practices are being monitored to assist in defining public health's role in systems change for HDSP.

Action Step (NEW): Provision of training and technical assistance for states on pay for performance, access to care, and quality of care issues.

Expected Outcome (NEW): State HDSP programs are receiving training and technical assistance on topics such as pay for performance, access to care, and quality of care.

Action Step (NEW): Foster effective systems for health care delivery (e.g., utilizing the chronic care model with emphasis on patient self-management and community resources).

Expected Outcome (NEW): Systems improvement is being fostered through state program efforts such as implementation of the chronic care model in outpatient clinical settings.

RECOMMENDATION (NEW)
Public health agencies should call for, and to the fullest extent possible conduct, both research and program evaluation relevant to

public health practice and should maintain currency of knowledge in order to apply and disseminate it effectively.

Action Step (NEW): Develop and maintain sufficient capacity in chronic disease epidemiology and in program evaluation to assure timely awareness, application, and dissemination of knowledge relevant to HDSP programs.

Expected Outcome (NEW): State HDSP program capacity in chronic disease epidemiology and evaluation is being developed and maintained.

2008–2009 PRIORITIES

6. RECOMMENDATION

Facilitate and promote training resources to develop and maintain appropriately trained public health workforces at national, state, and local levels. These workforces should have all necessary competencies to bring about policy, environmental, and systems changes and implement programs to improve CVH and decrease the heart disease and stroke burden, including laboratory requirements.

Action Step: Utilize the National Forum's Web site and links to other appropriate Web sites to establish a clearinghouse for training opportunities and other resources related to the assessment and improvement of program capacity and competencies, and voluntary accreditation related to heart disease and stroke prevention. This will include the identification and sharing of best practices and state success stories.

Expected Outcome: The National Forum Web site is a prime resource for building public health capacity to prevent heart disease and stroke. The Web site is used by National Forum members and partners to disseminate current information, research, promote evidence-based practices and share training opportunities.

7. RECOMMENDATION

Identify, develop and disseminate model performance standards and core competencies in HDSP for national, state, and local public health agencies, including their laboratories.

Action Step: Facilitate development and dissemination of performance standards and core competencies for public health agencies and partners. Promote ongoing access to technical assistance, laboratory and clinical practice guidelines and performance standards for laboratory testing and standardization, and consultation to state and local health agencies, laboratories and partners for HDSP. Share performance standards and cultural competency guidelines with schools of public health and other educational sources for health professionals and encourage their adoption in curricula.

Expected Outcome: Performance standards and cultural competency guidelines for HDSP programs are established to help public health agencies transcend "business as usual" and undertake new directions in public health practice. Existing mandates are maintained, and efforts are expanded in early intervention (i.e., policy and environmental change; behavioral change; and prevention, detection, and control of risk factors). Laboratory capacity to address emerging issues is enhanced. Public health agencies are communicating with schools of public health and other training programs regarding training and curriculum requirements for public health personnel working in HDSP and related program areas.

5. Monitoring And Evaluation Implementation Group

Chair: David C. Goff, Jr. (Team A Chair)
Vice Chair: Wayne Rosamond (Team B Chair)
Team A Members: Christine Albert; Lynne Braun; Janet Croft; Judd Flesch; Frances G.R. Fowkes; Yuling Hong; Virginia Howard; Sara Huston; Russell Leupker; Teri Manolio; John Marler; Karen Modesitt; Christopher O'Donnell; Rose Marie Robertson; John Rumsfeld; Stephen Sidney; Sylvie Stachenko; Mark Veazie; Zhi Jie Zheng
Team B Members: Alice Ammerman; Semra Aytur; Kelly Evenson; Jan Jernigan; Laura Linnan; Albert Tsai; Abha Varma

MISSION

To monitor the burden of heart disease and stroke and measure progress in the prevention and treatment of heart disease and stroke by —

- Expanding and standardizing population data sources and activities.
- Establishing frameworks, methods, and core indicators for evaluation of policy, environmental, and systems change interventions.
- Developing professional staff capacity for monitoring and evaluation.

The following contains the Monitoring and Evaluation Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)* These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendations on pages 50–51 and Action Steps and Expected Outcomes on pages 65–67.

The Monitoring and Evaluation Implementation Group's priority Recommendation, Action Steps, and Expected Outcomes to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

9. RECOMMENDATION

Expand and standardize population-wide surveillance data sources and activities to assure adequate assessment of CVD indicators and change in the nation's CVD burden. Examples include mortality, incidence, prevalence, disability, selected biomarkers, risk factors and risk behaviors, economic burden, community and environmental characteristics, current policies and programs, and socio-demographic factors (e.g., age, race/ethnicity, sex, and zip code).

Action Step: Define the characteristics of surveillance systems at minimal, desirable, and optimal levels. Establish an inclusive framework and set of indicators on the basis of 1) a review of existing surveillance and evaluation frameworks (e.g., the World Health Organization's STEPwise approach, Canada's recent development of surveillance priorities); 2) the new requirements for monitoring policy and environmental change; behavioral change; biomarkers of CVD risk; and risk factor prevention, detection, and control; and 3) input from national, state, and local stakeholders and partner organizations. Include social and environmental science and policy experts and those who collect, analyze, or use relevant data.

Expected Outcome: A framework is reviewed and established for assessing data requirements for monitoring and evaluating the comprehensive public health strategy. It includes a mechanism for periodic updates and reassessments.

Action Step: Assess the adequacy of current systems on the basis of these characteristics and the need for dynamic, interactive data access and use. Include the experts and stakeholders described in the previous action step.

Expected Outcome: An initial inventory of health indicators (including applicable leading health indicators from *Healthy People 2010*) and relevant surveillance and evaluation data sources is completed and disseminated to appropriate agencies and organizations for review and comment.

Action Step: Convene public health agencies and partners to determine the mechanisms and costs needed to fill identified information gaps. Improve existing data sets and develop new ones as needed, with attention to timeliness, sustainability, and standardization. Address standardization of data systems across states, approaches to active or passive data collection, ongoing versus episodic data collection requirements, availability of data from health care insurers, and the paramount importance of incidence data for monitoring progress in preventing heart disease and stroke. Devise common data formats, data management policies and practices, and methods for controlling interconnected data systems.

Expected Outcome: A group has convened and formulated a detailed implementation plan for developing the monitoring data systems needed to support the *Action Plan*.

Action Step: Use data to plan health programs and to communicate consistent messages about the urgency of preventing heart disease and stroke. Enhance the incorporation of current CVH data into broader social indicator reports, using model programs and tested tools, formats, and templates for communicating and disseminating this information.

Expected Outcome: As the available data are used to communicate CVH messages, their strengths and limitations and the current systems for managing and coordinating these data are continuously monitored. System development is advanced and adapted to changing needs.

10. RECOMMENDATION

Establish frameworks, methods and core indicators for evaluation of policy, environmental and systems change interventions. Embrace the importance of appropriate evaluation practices to guide future intervention development. Investigate evaluation processes and practices that are innovative or promising to improve the scientific basis for recommendations pertaining to policies and programs for heart disease and stroke prevention.

Action Step: Assure that resources are allocated when projects or model programs are first funded by public health agencies and partners (e.g., personnel or financial set-asides) to permit adequate evaluation of outcomes and costs.

Expected Outcome: Evaluation is an expected component of every public health program aimed at preventing heart disease and stroke. No program proceeds without commitment to support this component.

Action Step: Develop guidelines for public health agencies and partners for content and format of such evaluations, especially in the new areas of policy and environmental change; behavioral change; and risk factor prevention, detection, and control.

Expected Outcome: Tools are widely available to support evaluations and the timely communication of their findings. This allows the most effective interventions to be replicated quickly. Mechanisms for disseminating and reviewing evaluation results are strengthened to assure that the knowledge and experience gained are applied in future policies and programs.

Action Step (NEW): Enhance the state HDSP Program Management Information System with standard program goals reflecting the priority areas, objectives (short-term, intermediate, and long-term) falling under each goal, and standard process and outcome indicators to better measure and illustrate progress toward program objectives and goals.

Expected Outcome (NEW): Each state HDSP Program has in place an information system that matches its program goals within priority areas in environment and policy interventions with recommended guidelines for content and format for evaluation. The information system in place allows for the tracking of progress of policy and environmental interventions along the lines of the recommended parameters and format.

Action Step (NEW): Develop key outcome indicators for evaluating comprehensive heart disease and stroke programs.

Expected Outcome (NEW): Indicators useful in evaluating the impact on policy and environment change are widely disseminated, understood and used by the wide variety of groups involved in designing and implementing (and funding) systems level interventions. The key outcome indicators connect with the guidelines established for content and format of systems level evaluation.

11. RECOMMENDATION

Enhance the public health infrastructure, build personnel competencies, and facilitate the development and effective use of communication mechanisms so that federal, state, and local public health agencies can disseminate and use surveillance and evaluation results in a timely and effective manner.

Action Step: Strengthen the surveillance and program evaluation functions of public health agencies through enhanced staffing and

resources, especially for monitoring policy and environmental change; behavioral change; and risk factor prevention, detection, and control.

Expected Outcome: Professional staff development for monitoring and evaluation, especially in the new areas required by the plan, is a priority for all public health agencies, which have expanded their capacity for advancing methods and practices in heart disease and stroke prevention surveillance and program evaluation.

Action Step: Provide guidance to state and local health agencies and partners regarding capacity requirements for surveillance and evaluation activities.

Expected Outcome: State and local public health agencies are receiving help in determining what capacities they need to conduct surveillance/monitoring and to evaluate their programs.

Action Step: Establish resources to support program evaluation and surveillance through training, consultation, technical assistance, and partnerships to develop logic models, methodology, data collection, and reporting.

Expected Outcome: A plan for meeting these requirements is developed and implemented.

2008–2009 PRIORITY

11. RECOMMENDATION

Enhance the public health infrastructure, build personnel competencies, and facilitate the development and effective use of communication mechanisms so that federal, state, and local public health agencies can disseminate and use surveillance and evaluation results in a timely and effective manner.

Action Step: Provide guidance to state and local health agencies and partners regarding capacity requirements for surveillance and evaluation activities.

Expected Outcome: State and local public health agencies are receiving help in determining what capacities they need to conduct surveillance/monitoring and to evaluate their programs.

Action Step: Establish resources to support program evaluation and surveillance through training, consultation, technical assistance, and partnerships to develop logic models, methodology, data collection, and reporting.

Expected Outcome: A plan for meeting these requirements is developed and implemented.

6. Policy Research Implementation Group

Chair: Gregory Burke
Vice Chair: George Howard
Members: Rosanne Farris; Erick Finkelstein; Thomas T. Fogg; Meredith Kilgore, Max Michael; Javier Nieto; Diane Orenstein; Matt Schnellbaecher; Nancy Watkins, Alexander White, Armineh Zohrabian

MISSION

To develop a comprehensive policy research agenda, foster translating this research into practice, and investigate relevant economic models.

The following contains the Policy Research Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendations on pages 51–53 and Action Steps and Expected Outcomes on pages 67–70.

The Policy Research Implementation Group's priority Recommendation, Action Step, and Expected Outcome to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

12. RECOMMENDATION

Conduct and facilitate research with partners to identify new policy, environmental, social, and economic priorities for CVH promotion; determine the appropriate methods for translation and dissemination of knowledge; and, fund research to identify best practices for effective interventions to translate science into practice.

Action Step: Focus on preventing CVD risk factors. Develop and support a collaborative, detailed, and interdisciplinary research agenda and a new framework for policy, environmental, and behavioral research to determine which interventions (separately or in combination) will best affect CVD risk factors and their contribution to the burden of heart disease and stroke. Support both targeted and investigator-initiated research.

> ***Expected Outcome:*** A research agenda specific to the major focus of preventing CVD risk factors is developed and implemented.

Action Step: Support research to determine the best ways to implement and disseminate the most effective policy, environmental,

systems, or behavioral change interventions to prevent heart disease and stroke. Identify social and cultural factors that promote or inhibit the sustainability of interventions, especially among populations affected by disparities in CVD risk (based on race/ethnicity, income, or place of residence).

Expected Outcome: A detailed research agenda is developed and supported, in alignment with the Research Themes and Research Priority Areas of the U.S. Department of Health and Human Services, with special emphasis on policy and environmental change related to CVH promotion and CVD prevention.

Action Step: Conduct research to answer questions such as the following: What are the social and structural factors in various settings and sectors that affect CVH status more than individual characteristics? What are specific antecedent factors associated with specific components of risk (e.g., food intake, physical activity, adherence to preventive medical care)? What are the social and cultural determinants of food consumption and physical activity among children and families? How do these factors differ by characteristics such as age, income, or race? What is the public health importance of currently available genetic and other biomarkers of risk or disease?

Expected Outcome: A broad array of relevant research questions is developed and prioritized to balance the research agenda.

Action Step: Develop and support a collaborative research agenda that focuses on health outcomes. Establish effective interventions to overcome barriers and improve access to and use of high-quality medical services for patients with or at risk for heart disease and stroke.

Expected Outcome: The research agenda includes studies to identify potential points of intervention to improve preventive services and access to and use of these services. This agenda supports the four goals for preventing heart disease and stroke as distinguished by the Healthy People 2010 Heart and Stroke Partnership. These goals are prevention of risk factors, detection and treatment of risk factors, early detection and treatment of heart attacks and strokes, and prevention of recurrent cardiovascular events.

Action Step: Support prevention effectiveness research to determine what combinations of effective interventions (e.g., policy, environment, individual) at what doses, in what settings (e.g., family, school, work site, health care, community), at what life stages, and among which priority populations are most effective in preventing, detecting, and controlling CVD risk factors.

Expected Outcome: The research agenda includes studies involving the proposed matrix of settings, life stages, and priority populations to determine the most effective interventions within and across populations (including populationwide approaches and those aimed specific subgroups).

Action Step: Express strong support for this new research agenda with the help of partners positioned to educate key stakeholders, to help policy makers recognize its value, and to assure its implementation and the continual advancement of resulting policies and programs.

Expected Outcome: The research agenda is supported by education to assure that funding is a national priority.

Action Step (NEW): Develop an expert workshop on economics of heart disease and stroke prevention in order to develop

an economics and policy research agenda to inform public health and systems change in prevention, detection, and management of cardiovascular risk factors. Include experts in health economics, health policy research, heart disease and stroke, and public health.

Expected Outcome (NEW): The workshop has been convened, criteria for developing priorities have been developed and applied in prioritizing recommendations, and a dissemination strategy is in place regarding publication, advocacy, and funding.

13. RECOMMENDATION

Design, plan, implement and evaluate interventions in priority settings across the age-span and continuum of heart disease and stroke prevention risk factors and conditions.

Action Step: Develop and support detailed research agendas that specifically address prevention across the age span. Include studies that assess the impact of known interventions in preventing risk factors for heart disease and stroke.

Expected Outcome: A detailed research agenda is developed and supported to design, implement, and evaluate intervention programs to prevent CVD risk factors, especially addressing atherosclerosis and high blood pressure, beginning in childhood.

Action Step: Identify subclinical indicators of CVD and potentially useful genetic and other biomarkers that can be applied in population studies and prevention programs. Work with appropriate health service and industry partners.

Expected Outcome: The research agenda includes research to develop assessment methods to evaluate new candidate biomarkers in population studies across the age span.

Action Step: Identify other outstanding concerns in preventing risk factors.

Expected Outcome: The research agenda includes research on underlying determinants of CVD risk factors.

14. RECOMMENDATION

Conduct and facilitate research on improvements in surveillance methods and data collection and management methods for policy development, environmental change, performance monitoring, identification of key indicators, and capacity development. Address population subgroups in various settings (schools, work sites, health care, and communities) at local, state and national levels Identify new technologies and regulations affecting surveillance systems including approaches to monitor environmental and policy characteristics at the local level.

Action Step: Support monitoring and evaluation research to determine how best to measure policy and environmental change interventions.

Expected Outcome: The research agenda includes studies of methods and data requirements for monitoring and evaluating approaches to policy and environmental change.

Action Step: Incorporate these measures into surveillance systems.

Expected Outcome: Surveillance methods that incorporate the relevant data elements are developed and implemented.

Action Step: Respond to technological developments and regulations that restrict access to personal health information to assure the appropriate levels of participation and representation in surveillance activities.

Expected Outcome: Methods that assure adequate participation rates and representative population samples are continuously investigated, addressing technical and policy concerns about access to health information.

15. RECOMMENDATION
Conduct and support research to determine the most effective marketing messages and educational campaigns to create demand for heart-healthy options, change behavior, and prevent heart disease and stroke for specific target groups and settings. Create and evaluate economically viable CVD prevention ventures (e.g., in food production, manufacturing, marketing).

Action Step: Support marketing research on how to inform the public effectively and bring about health behavioral change.

Expected Outcome: The research agenda includes studies of what influences the way people respond to populationwide and individual media and educational interventions to prevent heart disease and stroke in the community at large, in specific cultural communities, and in specific organizational settings.

Action Step: Support research to demonstrate the economic feasibility of and appropriate business models for private sector investment in prevention (e.g., in food production, manufacturing, or marketing).

Expected Outcome: The research agenda includes studies of how consumer products could be changed to support policies and programs to reduce risk for heart disease and stroke and still be viable commercially. This research includes partners in business and industry.

16. RECOMMENDATION
Initiate and strengthen training grants and other approaches, such as training workshops and supervised research opportunities, to build the competencies needed to implement the CVD prevention research agenda.

Action Step: Inventory current prevention research training programs and research opportunities in view of the expanding need for new health research skills.

Expected Outcome: Workforce requirements for establishing and maintaining broad-based CVD prevention research programs are documented. Training programs to meet current and future requirements are identified and evaluated.

Action Step: Emphasize policy and environmental change, health behavioral change, and risk factor prevention when seeking to identify training needs and develop responsive plans.

Expected Outcome: Gaps in training resources are identified, and detailed plans for filling them are developed. Resources are identified and committed to support the needed training in CVH prevention research.

2008–2009 PRIORITY

12. RECOMMENDATION
Conduct and facilitate research with partners to identify new policy, environmental, social, and economic priorities for CVH promotion; determine the appropriate methods for translation and dissemination of knowledge; and, fund research to identify best practices for effective interventions to translate science into practice.

Action Step: Develop an expert workshop on economics of heart disease and stroke

prevention in order to develop an economics and policy research agenda to inform public health and systems change in prevention, detection, and management of cardiovascular risk factors. Include experts in health economics, health policy research, heart disease and stroke, and public health.

Expected Outcome: The workshop has been convened, criteria for developing priorities have been developed and applied in prioritizing recommendations, and a dissemination strategy is in place regarding publication, advocacy, and funding.

7. Regional and Global Collaboration Implementation Group

Chair: Thomas Pearson
Vice Chair: Beatriz Marcel Champagne
Members: Gladys Branic; Amy Carte; Arun Chockalingham; Catherine Coleman; Bruce Coull; Linnea Evans; Jill Farrington; Ivonne Fuller; James Galloway; James Hospedales; Marsha Houston; Randy Kirkendall; David MacLean; David McQueen; Belinda Minta; Sania Nishtar; Gilles Paradis; Philip Poole-Wilson; Iraj Poureslami; Jim Toole

MISSION

To engage regional and global partners to mobilize resources in heart disease and stroke prevention and treatment.

The following contains the Regional and Global Collaboration Implementation Group's suggested updates to recommendations in *A Public Health Action Plan to Prevent Heart Disease and Stroke (Action Plan)*. These suggestions are based on the current environment for heart disease and stroke prevention activities around the world. New recommendations, action steps, and expected outcomes are indicated by "**(NEW)**." Please refer to the *Action Plan* for the original Recommendations on pages 53–54 and Action Steps and Expected Outcomes on pages 70–73.

The Regional and Global Collaboration Implementation Group's priority Recommendations, Action Steps, and Expected Outcomes to be undertaken on behalf of the National Forum in 2008–2009 are given at the end of the Group's list of updates.

17.1 RECOMMENDATION

Engage with regional and global partners to mobilize resources in CVH promotion and CVD prevention an d establish or strengthen liaison with partners identified in these recommendations.

Action Step: Inventory existing and potential partners for global CVD collaboration, with support from public health agencies and other partners. Include governmental agencies, nongovernmental organizations, and foundations (e.g., especially the World Health Organization, World Heart Federation, and World Bank).

Expected Outcome: Inventories of existing regional and global CVH partnerships, potential nontraditional CVH partnerships, and foundations that support international activities for medical and public health training are established and maintained.

Action Step: Assess the potential for collaboration and cooperation in current CVH research and training programs of

these potential partners. Evaluate their interest in receiving information and technical support from public health agencies to enhance these programs and in planning joint projects or programs.

Expected Outcome: An inventory of current agendas for integrated CVH programs, linked with other chronic conditions of public health importance, is established and maintained. Joint projects with regional and global partners are planned and implemented.

Action Step (NEW): Include entities with policy roles that might conflict with CVH priorities, but who could become effective partners (e.g., the food and agriculture sector).

Expected Outcome (NEW): An inclusive partnership on global CVH strategy is established.

17.2 RECOMMENDATION

Develop and implement global CVH policies with regional and global partners.

Action Step: Develop and effectively support a global mission and vision of the United States for CVH.

Expected Outcome: A statement of the U.S. position, role, and interest regarding global CVH needs and opportunities has been published and serves as a point of reference for partnership development in this area.

Action Step: Work with national and global partners to assess the impact of globalization and trade policies on national and international trends in CVD and suggest policy modifications that could favorably affect CVH.

Expected Outcome: Study results are published on the impact of globalization and trade policies (especially those related to tobacco, food, and pharmaceuticals) on CVH, as well as the opportunities to use these policies to promote CVH nationally and globally.

Action Step (NEW): Develop and effectively support evidence-based CVH policies globally, and assess and monitor global policy strategies.

Expected Outcome (NEW): A partnership on global CVH strategy and evidence-based CVH policies is established. Its implementation plan is guided by a commitment to work toward eliminating inequalities in CVH.

18. RECOMMENDATION

Address inequalities in CVH among developed and developing countries, rich and poor people within countries, and men and women of all ages. Work with national and global partners to assess the impact of globalization and trade policies on global CVH.

Action Step: Identify priorities to assess progress in eliminating inequalities in CVH in the United States and globally, and assess the contribution of this country's global strategy in reducing CVH inequalities worldwide.

Expected Outcome: A framework to assess progress on equity in national and global CVH programs is being used.

19. RECOMMENDATION

Develop diverse communication channels to promote and support CVH globally.

Action Step: Draw on relationships between appropriate communication channels and public health agencies and partners to share knowledge and identify models of collaboration that can help improve media

content and coverage on the need for global CVH promotion and CVD prevention.

Expected Outcome: Consensus development meetings are conducted among CVH partners and communication representatives. Better CVH messages are communicated.

Action Step: Effectively communicate to health professionals and policy makers throughout the world that they should promote best practices for CVH by supporting effective policies and by serving as role models for positive behavioral patterns.

Expected Outcome: Programs are undertaken by local partners to reach health professionals throughout the world with effective messages about their role in preventing heart disease and stroke.

Action Step (NEW): Promote the use of innovative communication technologies (e.g., youtube.com, allafrica.com).

Expected Outcome (NEW): Innovative communication technologies are being used and examples are disseminated and evaluated for their reach and impact.

Action Step (NEW): Promote cardiovascular health literacy.

Expected Outcome (NEW): Evidence regarding cardiovascular health literacy in targeted audiences or populations indicates improvements responsive to promotional activities.

20. RECOMMENDATION

Strengthen global capacity to develop, implement, and evaluate policy and program interventions to prevent and control heart disease and stroke. Involve all relevant parties—governmental and nongovernmental, public and private, and traditional and nontraditional partners—in a systematic and strategic approach.

Action Step: Develop tailored programs to disseminate evidence-based and promising programs and models that 1) assist and support decision makers interested in developing and implementing effective national policies, 2) develop methodology and tools to analyze the health impact of policy interventions, and 3) analyze the social and economic costs of heart disease and stroke and the benefits of preventing them.

Expected Outcome: Development of capacity for heart disease and stroke prevention is recognized as a long-term requirement for transforming public health agencies. Culturally sensitive and resource specific (NEW) training programs and workshops are available and being used. International conferences are conducted on the economics of heart disease and stroke prevention and the links between economic conditions and CVH.

Action Step: Promote the exchange of information and experiences in policies that promote CVH.

Expected Outcome: Information and experience related to CVH promotion are effectively disseminated and applied.

Action Step: Make methods and tools available and assist partners in their adaptation to analyze policy and environmental change.

Expected Outcome: Tools for analyzing how policies affect the global dimensions of CVH are developed and disseminated.

Action Step: Develop and implement strategies and resources to assure that changes that support the *Action Plan* are institutionalized.

Expected Outcome: Capacity is developed in a way that assures institutionalization of change.

21. RECOMMENDATION
Strengthen global focus and increase partnerships intended to develop and implement standards for adequate monitoring of health, social and economic indicators on a regional and global level.

Action Step: Inventory existing surveys, programs, and agreements relevant to global monitoring and evaluation activities in heart disease and stroke prevention and control.

Expected Outcome: A Web-based inventory is available and routinely updated.

Action Step: Identify existing monitor programs that could be expanded and areas where new collaborations could be created.

Expected Outcome: New regional and global collaborative activities are established, and new opportunities are being identified.

Action Step: Support monitoring of heart disease and stroke globally by working with existing and new partners (especially WHO) to develop standard data elements. Assure effective dissemination of the resulting information and its translation into action.

Expected Outcome: Guidelines for standard data collection and methods for planning and evaluating heart disease and stroke prevention and control programs are developed and being used. Training programs for technical assistance/collaboration on CVD projects are receiving needed financial support.

22. RECOMMENDATION
Promote and support research on implementing and evaluating CVH policy and program interventions in diverse settings where different social and economic development and health transition experiences offer contrasting conditions for testing new policy and program intervention approaches.

Action Step: Collaborate in developing a research agenda on CVH policy and program interventions. Identify appropriate international partners to design research and mobilize resources.

Expected Outcome: Public health agencies are actively designing and conducting policy and research programs to identify best practices for preventing heart disease and stroke in diverse socioeconomic settings, both nationally and globally.

2008–2009 PRIORITIES

17.1 RECOMMENDATION
Engage with regional and global partners to mobilize resources in CVH promotion and CVD prevention and establish or strengthen liaison with partners identified in these recommendations.

Action Step: Inventory existing and potential partners for global CVH collaboration, with support from public health agencies and other partners. Include governmental agencies, nongovernmental organizations, and foundations (e.g., especially the World Health Organization, World Heart Federation, and World Bank).

Expected Outcome: Inventories of existing regional and global CVH partnerships,

potential nontraditional CVH partnerships, and foundations that support international activities for medical and public health training are established and maintained.

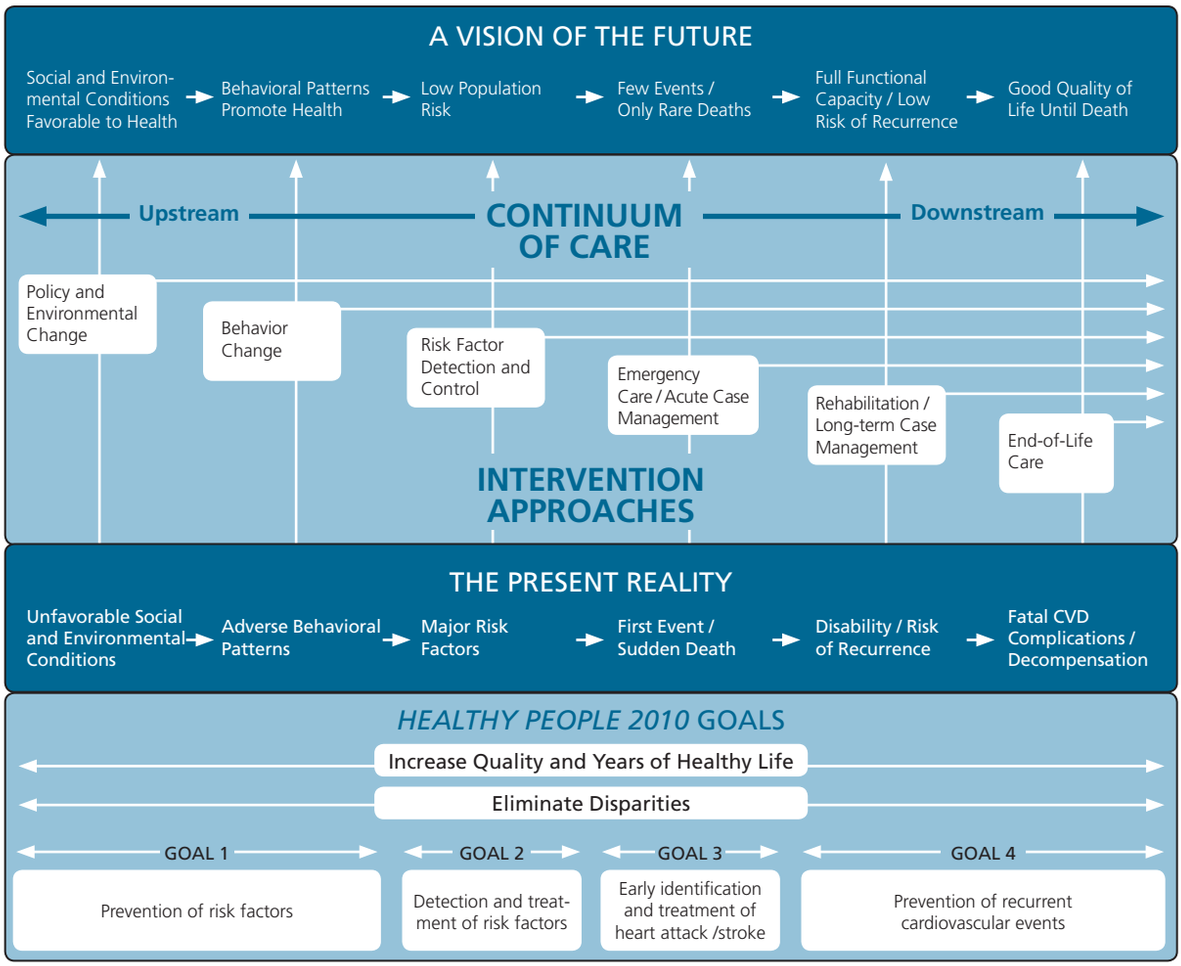
20. RECOMMENDATION

Strengthen global capacity to develop, implement, and evaluate policy and program interventions to prevent and control heart disease and stroke. Involve all relevant parties—governmental and nongovernmental, public and private, and traditional and nontraditional partners—in a systematic and strategic approach.

Action Step: Develop tailored programs to disseminate evidence-based and promising programs and models that 1) assist and support decision makers interested in developing and implementing effective national policies, 2) develop methodology and tools to analyze the health impact of policy interventions, and 3) analyze the social and economic costs of heart disease and stroke and the benefits of preventing them.

Expected Outcome: Development of capacity for heart disease and stroke prevention is recognized as a long-term requirement for transforming public health agencies. Culturally sensitive and resource specific training programs and workshops are available and being used. International conferences are conducted on the economics of heart disease and stroke prevention and the links between economic conditions and CVH.

Action Framework for a Comprehensive Public Health Strategy to Prevent Heart Disease and Stroke



CVD = Cardiovascular Disease

Implementation Groups' Selected Priority Actions 2008–2009

During the National Forum's review and update of *A Public Health Action Plan to Prevent Heart Disease and Stroke*, each of the seven Implementation Groups proposed priorities for 2008–2009. These priorities are listed at the end of each Group's recommendations and action steps (please refer to pages 43 through 73). Below is a summary of these priorities.

Next year, the National Forum will move forward with a number of activities based on the priorities proposed by the Implementation Groups. In addition, the National Forum will also explore ways to address selected policy issues and the impact of sodium intake on cardiovascular disease.

1. Communications Implementation Group

MISSION

To effectively communicate the urgency and importance of preventing heart disease and stroke through a long-term strategy of public information and education.

RECOMMENDATION

The urgency and promise of preventing heart disease and stroke and their precursors (i.e., atherosclerosis, high blood pressure, and their risk factors and determinants) must be communicated effectively by the public health community through a new long-term strategy of public information and education. This new strategy must engage policy makers and other stakeholders at the global, national, state and local levels. As a matter of emphasis, special consideration must be paid to those most at risk. Communication strategies should utilize the most current forms of available technology as well as those communications devices that are accessible in various communities in the U.S and globally.

Action Step: Assess requirements for effective messages. Set the agenda for a long-term, national public information strategy that conveys the importance and feasibility of prevention. Craft clear and compelling messages that capture public attention, help people understand cardiovascular health (CVH) and its risks, and support healthy behavioral changes. Include a social marketing strategy to identify audiences, develop effective national messages, and determine media avenues (e.g., peer-reviewed journals, CDC's *Morbidity and Mortality Weekly Report*, community report cards). Communicate consistent CVH information and messages to the public, health professionals, and policy makers.

Expected Outcome: Key messages for the National Forum are refined and are being incorporated into all communications vehicles.

2. Public Health Leadership and Partnership Implementation Group

MISSION
To foster effective leadership and partnership for preventing heart disease and stroke.

RECOMMENDATION The nation's public health agencies, their partners, and the public must provide the necessary leadership for a comprehensive public health strategy to prevent heart disease and stroke.

Action Step: Establish and improve partnerships to develop, implement, and evaluate plans to address heart disease and stroke:

Expected Outcome: There is adequate representation of partners on planning groups; guidance is being provided for development and implementation of comprehensive state plans; partners are committing resources and sharing accountability for the state plan; the state plan is evaluated.

Action Step: Educate key decision makers to support heart disease and stroke prevention policies and programs.

Expected Outcome: The State Plan Index for Heart Disease and Stroke Prevention is finalized; the Resource Tool is finalized; marketing strategy to promote or enhance state partnerships and leadership is developed, and a training curriculum for persons to utilize the State Plan Index and Resource Tool to foster effective collaborations is developed; training is presented to select states and their partners on the State Plan Index and Resource Tool.

3. Action Priorities Implementation Group

MISSION
To identify effective policies in cardiovascular health (CVH) promotion and cardiovascular disease prevention at the national, state, and local levels to ensure effective public health action against heart disease and stroke.

1. RECOMMENDATION Initiate policy development in CVH promotion and CVD prevention at national, state, and local levels to assure effective public health action against heart disease and stroke. In addition, evaluate policies in non-health sectors (e.g., education, agriculture, transportation, community planning) for their potential impact on health, especially with respect to CVD.

Action Step: Develop, implement, and update annually an advocacy plan for the APIG priority policies (Prevention of Risk Factors, Chain of survival, Quality-of-Care, Disparities, Heart Disease and Stroke Prevention programs in all 50 states).

Expected Outcome: Policies have been selected; actions are being taken on behalf of policies in accordance with an advocacy plan; policies are being passed or implemented

4. Organizational Capacity Implementation Group

MISSION

To build the capacity of federal, state, and local public health agencies, including laboratories, to address heart disease and stroke as a priority within a strong chronic disease prevention effort and to develop the needed competencies and resources.

6. RECOMMENDATION

Facilitate and promote training resources to develop and maintain appropriately trained public health workforces at national, state, and local levels. These workforces should have all necessary competencies to bring about policy, environmental, and systems changes and implement programs to improve CVH and decrease the heart disease and stroke burden, including laboratory requirements.

Action Step: Utilize the National Forum's Web site and links to other appropriate Web sites to establish a clearinghouse for training opportunities and other resources related to the assessment and improvement of program capacity and competencies, and voluntary accreditation related to heart disease and stroke prevention. This will include the identification and sharing of best practices and state success stories.

Expected Outcome: The National Forum Web site is a prime resource for building public health capacity to prevent heart disease and stroke. The Web site is used by National Forum members and partners to disseminate current information, research, promote evidence-based practices and share training opportunities.

7. RECOMMENDATION

Identify, develop and disseminate model performance standards and core competencies in HDSP for national, state, and local public health agencies, including their laboratories.

Action Step: Facilitate development and dissemination of performance standards and core competencies for public health agencies and partners. Promote ongoing access to technical assistance, laboratory and clinical practice guidelines and performance standards for laboratory testing and standardization, and consultation to state and local health agencies, laboratories and partners for HDSP. Share performance standards and cultural competency guidelines with schools of public health and other educational sources for health professionals and encourage their adoption in curricula.

Expected Outcome: Performance standards and cultural competency guidelines for HDSP programs are established to help public health agencies transcend "business as usual" and undertake new directions in public health practice. Existing mandates are maintained, and efforts are expanded in early intervention (i.e., policy and environmental change; behavioral change; and prevention, detection, and control of risk factors). Laboratory capacity to address emerging issues is enhanced. Public health agencies are communicating with schools of public health and other training programs regarding training and curriculum requirements for public health personnel working in HDSP and related program areas.

5. Monitoring and Evaluation Implementation Group

MISSION

To monitor the burden of heart disease and stroke and measure progress in the prevention and treatment of heart disease and stroke by —

- Expanding and standardizing population data sources and activities.
- Establishing frameworks, methods, and core indicators for evaluation of policy, environmental, and systems change interventions.
- Developing professional staff capacity for monitoring and evaluation.

11. RECOMMENDATION

Enhance the public health infrastructure, build personnel competencies, and facilitate the development and effective use of communication mechanisms so that federal, state, and local public health agencies can disseminate and use surveillance and evaluation results in a timely and effective manner.

Action Step: Provide guidance to state and local health agencies and partners regarding capacity requirements for surveillance and evaluation activities.

Expected Outcome: State and local public health agencies are receiving help in determining what capacities they need to conduct surveillance/monitoring and to evaluate their programs.

Action Step: Establish resources to support program evaluation and surveillance through training, consultation, technical assistance, and partnerships to develop logic models, methodology, data collection, and reporting.

Expected Outcome: A plan for meeting these requirements is developed and implemented.

6. Policy Research Implementation Group

MISSION

To develop a comprehensive policy research agenda, foster translating this research into practice, and investigate relevant economic models.

12. RECOMMENDATION

Conduct and facilitate research with partners to identify new policy, environmental, social, and economic priorities for CVH promotion; determine the appropriate methods for translation and dissemination of knowledge; and, fund research to identify best practices for effective interventions to translate science into practice.

Action Step: Develop an expert workshop on economics of heart disease and stroke prevention in order to develop an economics and policy research agenda to inform public health and systems change in prevention, detection, and management of cardiovascular risk factors. Include experts in health economics, health policy research, heart disease and stroke, and public health.

Expected Outcome: The workshop has been convened, criteria for developing priorities have been developed and applied in prioritizing recommendations, and a dissemination strategy is in place regarding publication, advocacy, and funding.

7. Regional and Global Collaboration Implementation Group

MISSION
To engage regional and global partners to mobilize resources in heart disease and stroke prevention and treatment.

17.1 RECOMMENDATION
Engage with regional and global partners to mobilize resources in CVH promotion and CVD prevention and establish or strengthen liaison with partners identified in these recommendations.

Action Step: Inventory existing and potential partners for global CVH collaboration, with support from public health agencies and other partners. Include governmental agencies, nongovernmental organizations, and foundations (e.g., especially the World Health Organization, World Heart Federation, and World Bank).

Expected Outcome: Inventories of existing regional and global CVH partnerships, potential nontraditional CVH partnerships, and foundations that support international activities for medical and public health training are established and maintained.

20. RECOMMENDATION
Strengthen global capacity to develop, implement, and evaluate policy and program interventions to prevent and control heart disease and stroke. Involve all relevant parties—governmental and nongovernmental, public and private, and traditional and nontraditional partners—in a systematic and strategic approach.

Action Step: Develop tailored programs to disseminate evidence-based and promising programs and models that 1) assist and support decision makers interested in developing and implementing effective national policies, 2) develop methodology and tools to analyze the health impact of policy interventions, and 3) analyze the social and economic costs of heart disease and stroke and the benefits of preventing them.

Expected Outcome: Development of capacity for heart disease and stroke prevention is recognized as a long-term requirement for transforming public health agencies. Culturally sensitive and resource specific training programs and workshops are available and being used. International conferences are conducted on the economics of heart disease and stroke prevention and the links between economic conditions and CVH.

Appendix A—
Organizational Profiles of Co-Lead Agencies

American Heart Association / American Stroke Association

Dallas, Texas
www.americanheart.org and www.strokeassociation.org

Founded in 1924, the American Heart Association (AHA) is the nation's oldest and largest voluntary health organization dedicated to reducing disability and death from cardiovascular disease and stroke. The American Stroke Association (ASA) was established in 1998 to focus exclusively on stroke. In FY 2005-2006, AHA/ASA invested more than $534 million in research, public and professional education, advocacy, and community service programs to help Americans of all ages, races, and ethnicities live longer, healthier lives. AHA is second only to the U.S. federal government in the amount of cardiovascular research it supports. Five researchers won Nobel Prizes for AHA-funded work. Public education activities include spearheading national movements to raise awareness and understanding about cardiovascular disease and stroke among women and African Americans, increasing physical activity in the workplace, and reducing childhood obesity. Professional education activities include holding an annual scientific meeting that includes science sessions; this meeting is the largest annual cardiovascular research meeting in the world. AHA also publishes journals and has programs to improve the quality of care in hospitals. Advocacy at the federal, state, and local levels focuses on increasing funds for research, fighting tobacco, and improving the cardiovascular health and fitness of children. Headquartered in Dallas, Texas, AHA has 10 regional affiliates and more than 2,000 local offices throughout the United States. Each year more than 22 million volunteers and supporters help advance AHA's mission.

Association of State and Territorial Health Officials

Washington, D.C.
www.astho.org

The Association of State and Territorial Health Officials is a national non-profit organization that represents the public health agencies of the United States, the U.S. Territories, and the District of Columbia. The organization's mission is to formulate and influence sound public health policy and to assist state health departments in developing and implementing programs and policies to promote health and prevent disease.

Centers for Disease Control and Prevention

Atlanta, Georgia
www.cdc.gov

The Centers for Disease Control and Prevention (CDC) is one of the 13 major operating components of the U.S. Department of Health and Human Services (HHS). HHS is the principal agency in the U.S. government for protecting the health and safety of all Americans and for providing essential human services, especially for those people who are least able to help themselves. CDC includes the Coordinating Center for Infectious Diseases; the Coordinating Center for Health Promotion; the Office of Global Health; the Coordinating Center for Environmental Health, Injury Prevention, and Occupational Health; and the Office of Terrorism Preparedness and Emergency Response.

Appendix B—
Leadership of the National Forum

This year, 2008, marks the first transition of leadership for the National Forum for Heart Disease and Stroke Prevention. About half the members have completed their two-year terms of office and will leave the National Forum Coordinating Board, as called for in the operating policies of the organization.

Newly elected members are designated by an asterisk in the 2008–2009 lists of Executive Officers and Coordinating Board members. They will begin their terms of office at the 2008 National Forum Meeting in Washington, D.C. The National Forum is gratefully acknowledges the expertise, wisdom, and commitment of all who provided leadership during 2007–2008.

EXECUTIVE OFFICERS 2007-2008

Darwin R. Labarthe, MD, MPH, PhD
Centers for Disease Control and Prevention
Chair, National Forum

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association
Chair-Elect, National Forum

B. Waine Kong, PhD, JD
Association of Black Cardiologists
Secretary, National Forum

EXECUTIVE COMMITTEE MEMBERS 2007-2008

Christine M. Albert, MD, MPH
Heart Rhythm Society
At-Large Member

Jay Glasser, PhD, MS, FFPH, FRIPH
University of Texas at Houston
Chair, Membership Committee

Mara Krause Donohue, MPP
Association of State and Territorial Health Officials (ASTHO)
ASTHO Delegate

B. Waine Kong, PhD, JD
Association of Black Cardiologists
Secretary, National Forum

Darwin R. Labarthe, MD, MPH, PhD
Centers for Disease Control and Prevention
Chair, National Forum

Miriam M. Patanian, MPH
Cardiovascular Health Council
Washington State Delegate

Mark Alan Schoeberl, MPA
American Heart Association/
American Stroke Association
Chair-Elect, National Forum

Jennifer Smith, MSHP
National Association of Chronic Disease Directors (NACCD)
NACDD Delegate

Sylvie Stachenko, MD, MPH
Public Health Agency of Canada
At-Large Member

COORDINATING BOARD MEMBERS 2007-2008

Christine M. Albert, MD, MPH
Heart Rhythm Society
At-Large Member

James Baranski, CPA
National Stroke Association
Chair, Public Health Leadership and Partnership Implementation Group

Gregory Burke, MD, MS
Wake Forest University School of Medicine
Chair, Policy Research Implementation Group

William Caplan, MD
Kaiser Permanente
Chair, Action Priorities Implementation Group

Mara Krause Donohue, MPP
Association of State and Territorial Health Officials (ASTHO)
ASTHO Delegate

James Galloway, MD, FAC P, FACC
U.S. Department of Health and Human Services
Healthy People 2010 Partnership Delegate

Jay Glasser, PhD, MS, FFPH, FRIPH
University of Texas at Houston
Chair, Membership Committee

David C. Goff, Jr., MD, PhD
Wake Forest University School of Medicine
Chair, Monitoring and Evaluation Implementation Group

Michael Greenwell
Fleishman-Hillard International Communications
Chair, Communications Implementation Group

B. Waine Kong, PhD, JD
Association of Black Cardiologists
Secretary, National Forum

Darwin R. Labarthe, MD, MPH, PhD
Centers for Disease Control and Prevention
Chair, National Forum

Miriam M. Patanian, MPH
Cardiovascular Health Council
Washington State Delegate

Thomas Pearson, MD, MPH, PhD
University of Rochester Medical Center
Chair, Regional and Global Collaboration Implementation Group

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association
Chair-Elect, National Forum

Jennifer Smith, MSHP
National Association of Chronic Disease Directors (NACDD)
NACDD Delegate

Sylvie Stachenko, MD, MPH
Public Health Agency of Canada
At-Large Member

Joan Ware, MSPH
National Association of Chronic Disease Directors
Chair, Organizational Capacity Implementation Group

Two committees support the infrastructure of the National Forum: the Membership Committee and the Resource Committee.

MEMBERSHIP COMMITTEE 2007–2008

Jay H. Glasser, PhD, MS, FFPH, FRIPH
University of Texas at Houston
Chair

Miriam Patanian, MPH
Cardiovascular Health Council
Vice Chair

Tim Hutchinson, MSW, RSW, MPA
Public Health Agency of Canada
International Lead

David C. Goff, Jr., MD, PhD
Wake Forest University School of Medicine

Judy Hannan RN, MPH
Centers for Disease Control and Prevention

Tammy Reasoner
National Association of Chronic Disease Directors

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association

RESOURCE COMMITTEE 2007–2008

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association
Chair

John Robitscher, MPH
National Association of Chronic Disease Directors
Acting Vice Chair

Mara Krause Donohue, MPP
Association of State and Territorial Health Officials

Julie Rodgers
CDC Foundation

EXECUTIVE OFFICERS 2008-2009

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association
Chair, National Forum

David C. Goff, Jr., MD, PhD
Wake Forest University School of Medicine
Chair-Elect, National Forum

Darwin R. Labarthe, MD, MPH, PhD
Centers for Disease Control and Prevention
Past Chair, National Forum

Gladys Branic, MD*
National Association of County and City Health Officials (NACCHO)
Secretary/Treasurer, National Forum

COORDINATING BOARD MEMBERS 2008-2009

James Baranski, CPA
National Stroke Association
Chair, Public Health Leadership and Partnership Implementation Group

William Caplan, MD
Consultant
Chair, Action Priorities Implementation Group

Linda Faulkner*
Cardiovascular Health Council
Arkansas Delegate

Jay Glasser, PhD, MS, FFPH, FRIPH
University of Texas at Houston
Chair, Membership Committee

David C. Goff, Jr., MD, PhD
Wake Forest University School of Medicine
Chair-Elect National Forum

Michael Greenwell
Fleishman-Hillard International Communications
Chair, Communications Implementation Group

Mara Krause Donohue, MPP
Association of State and Territorial Health Officials (ASTHO)
ASTHO Delegate

Darwin R. Labarthe, MD, MPH, PhD
Centers for Disease Control and Prevention
Past Chair, National Forum

Michael S. Lauer, MD, FACC, FAHA*
National Heart, Lung, and Blood Institute
At-Large Member

Elizabeth (Libby) Puckett, PT*
Chair, Organizational Capacity Implementation Group

Thomas Pearson, MD, MPH, PhD
University of Rochester Medical Center
Chair, Regional and Global Collaboration Implementation Group

Wayne Rosamond, PhD*
University of North Carolina at Chapel Hill
Chair, Monitoring and Evaluation Implementation Group

Mark Alan Schoeberl, MPA
American Heart Association/American Stroke Association
Chair, National Forum

Jennifer Smith, MSHP
National Association of Chronic Disease Directors (NACDD)
NACDD Delegate

Sylvie Stachenko, MD, MPH
Public Health Agency of Canada
At-Large Member

Healthy People 2010 Delegate*
Confirmation pending

Chair, Policy Research Implementation Group*
Confirmation pending

Chair, Resource Committee*
Confirmation pending

Appendix C—
Roster of Participants 1999–2007

Cindy Abbott RN
Somerset County Health Department
Westover, MD

Katie Clarke Adamson
YMCA of the USA
Washington, DC

John Agwunobi MD
U.S. Department of Health and Human Services
Washington, DC

Calvo Ahmed MD, MPH, FAAFP
Health Resources and Services Administration
Washington, DC

Mohammad Akhter
American Public Health Association
Washington, DC

Mareila Alarcon-Yohe MPH
Directors of Health Promotion and Education
Alexandria, VA

Christine M. Albert MD
Heart Rhythm Society
Washington, DC

Alice Ammerman DrPH, RD
University of North Carolina
Chapel Hill, NC

Lynne Anderson
Northrop Grumman Corporation
Atlanta, GA

Brenda Andujar
Somerset County Health Department
Westover, MD

Lenna Aoki JD
National Indian Health Board
Washington, DC

Tom Arend JD
American College of Cardiology
Washington, DC

Lisa Ashley RN, BScN, MEd
Public Health Agency of Canada
Ottawa, Ontario

Semra Aytur PhD
University of North Carolina
Chapel Hill, NC

Stephanie Bailey MD, MSHSA
Centers for Disease Control and Prevention
Atlanta, GA

Alan Balch PhD
American Cancer Society
Decatur, GA

James Baranski
National Stroke Association
Centennial, CO

Scott Becker MS
Association of Public Health Laboratories
Silver Spring, MD

Kathy Berkowitz RN, CS, FNP, CDE
American Association of Diabetes Educators
Marietta, GA

Kristen Betts BHS
Centers for Disease Control and Prevention
Atlanta, GA

Erin McDonald Bicknell
American Heart Association
Albuquerque, NM

Alana Biggers MPH
Centers for Disease Control and Prevention
Atlanta, GA

Brian Bilchik MD
ProCOR
Brookline, MA

Jill Birnbaum JD
American Heart Association
Dallas, TX

Richard Bohrer
Health Resources and Services Administration
Washington, DC

Sara Bonam MS, RD
New York State Department of Health
Albany, NY

Sonya E. Bowen MSW
Centers for Medicare and Medicaid Services
Baltimore, MD

Marcia Brand PhD
Health Resources and Services Administration
Washington, DC

Gladys Branic MD
National Association of County and City Officials
Bradenton, FL

Lawrence Brass MD
Yale University School of Medicine
New Haven, CT

Lynne Braun ES, RN, CNP, FAAN, FAHA
Rush University Medical Center
Chicago, IL

Patricia Bray PhD
St. Luke's Episcopal Health Charities
Houston, TX

Fred Breukelman CHES
Directors of Health Promotion and Education
Washington, DC

Michael Britt
Washington Business Group on Health
Washington, DC

Sally Brown
Heart and Stroke Foundation of Canada
Ottawa, Ontario

J. Nell Brownstein PhD
Centers for Disease Control and Prevention
Atlanta, GA

William Bruning JD, MBA
Mid-America Coalition on Health Care
Kansas City, MO

Lucinda L. Bryant PhD, MSHA
University of Colorado at Denver
and Heath Sciences Center
Denver, CO

Deedy Buric
National Stroke Association
Centennial, CO

Gregory Burke MD, MSC
Wake Forest University School of Medicine
Winston-Salem, NC

Tamara Burnette
Association of Schools of Public Health
Washington, DC

David Bush MD
Johns Hopkins Bayview Medical Center
Baltimore, MD

Cia Byrnes MSM, MPA
Alliance of Community Health Plans
Washington, DC

Jeff Caballero MPH
Association of Asian Pacific Community
Health Organizations
Oakland, CA

Laura Caisley MPH, RN
Centers for Disease Control and Prevention
Atlanta, GA

Ned Calonge MD
Colorado Department of Public
Health and Environment
Denver, CO

Diane Canova
American Heart Association
Dallas, TX

Simon Capewell MB BS
University of Liverpool
Liverpool, England

William Caplan MD
Kaiser Permanente Consultant
Lafayette, CA

Connie Carmack
Centers for Disease Control and Prevention
Atlanta, GA

Amy Carte RNC, MS
Cardiovascular Health Council
Delegate West Virginia
Charleston, WV

Margaret Casey RN, MPH
Cardiovascular Health Council
Hoosick Falls, NY

Maria Teresa Cerqueira PhD
Pan American Health Organization
Washington, DC

Beatriz Champagne PhD
InterAmerican Heart Foundation
Dallas, TX

Don Chen MS
Smart Growth America
Washington, DC

Arun Chockalingam PhD, MS
Simon Fraser University
Burnaby, British Columbia

Juanita Chukwura
Centers for Disease Control and Prevention
Atlanta, GA

Nathaniel Clark MD, MS, RD
American Diabetes Association
Alexandria, Virginia

John Clymer
Partnership for Prevention
Washington, DC

Nat Cobb MD
Indian Health Service
Albuquerque, NM

Alwyn Cohall MD
Columbia University
New York, NY

Catherine Coleman
ProCOR
Brookline, MA

Janet Collins PhD
Centers for Disease Control and Prevention
Atlanta, GA

Carla Cooper PhD
St. Luke's Episcopal Health Charities
Houston, TX

Gerald Cooper MD, PhD
Centers for Disease Control and Prevention
Atlanta, GA

Adolfo Correa MD, MPH, PhD
Centers for Disease Control and Prevention
Atlanta, GA

Bruce Coull MD
University of Arizona
Tucson, AZ

Christopher Cox MPH
Centers for Disease Control and Prevention
Atlanta, GA

Christy Crimmins
Association of Schools of Public Health
Washington, DC

Janet Croft PhD
Centers for Disease Control and Prevention
Atlanta, GA

Nick Curry MD, MPH
Association of State and Territorial Health Officials
Austin, TX

Anne Curtis MD
Heart Rhythm Society
Washington, DC

Isabella Danel MD, MS
World Bank
Washington, DC

Judy Dausch PhD, RD
American Dietetic Association
Washington, DC

Barbara Dennison, MD
New York State Department of Health
Albany, NY

Ada Determan MPH
Health Resources and Services Administration
Washington, DC

William Dietz MD, PhD
Centers for Disease Control and Prevention
Atlanta, GA

Jennifer Dillaha MD
Arkansas Department of Health
Little Rock, AR

Susan Dimock PhD
Jacobs Institute of Women's Health
Washington, DC

Mara Krause Donohue MPP
Association of State and Territorial Health Officials
Washington, DC

Jessica Donze Black MPH, RD
American Heart Association
Washington, DC

Jeffrey Dunlap MSPH
Health Resources and Services Administration
Washington, DC

David Eddy MD, PhD
Archimedes, Inc.
San Francisco, CA

Dan Ehlman MPH
Centers for Disease Control and Prevention
Atlanta, GA

Marian Emr
National Institute of Neurologic Disorders and Stroke
Bethesda, MD

Linnea Evans MPH
Centers for Disease and Control Prevention
Atlanta, GA

Kelly Evenson PhD
University of North Carolina
Chapel Hill, NC

Jennifer Farnsworth MPH
Centers for Disease Control and Prevention
Atlanta, GA

Jill Farrington MD, MPH, MRCP
World Health Organization
Copenhagen, Denmark

Rosanne Farris PhD
Centers for Disease Control and Prevention
Atlanta, GA

Linda Faulkner
Cardiovascular Health Council
Little Rock, AK

Suzanne Feetham PhD, RN, FAAN
Health Resources and Services Administration
Washington, DC

Keith Ferdinand MD
Association of Black Cardiologists
Atlanta, GA

Denise Ferris
Association of State and Territorial Public
Health Nutrition Directors
Johnstown, PA

Suzanne Ffolkes
American Heart Association
Washington, DC

Ron Finch EdD
National Business Group on Health
Washington, DC

John Flack MD
International Society for Hypertension in Blacks
Atlanta, GA

Rich Flaherty
American Association of Clinical Chemistry
Washington, DC

Judd Flesch ES
University of Pennsylvania School of Medicine
Philadelphia, PA

Betty Sue Flowers PhD
Lyndon Baines Johnson Library and Museum
Austin, TX

Kathy Foell
Cardiovascular Health Council
Boston, MA

Thomas Fogg MS
University of Rochester Medical Center
Rochester, NY

Crystelle Fogle RD
Cardiovascular Health Council
Helena, MT

Bernadette Ford-Lattimore MPH
Centers for Disease Control and Prevention
Atlanta, GA

Francis G. R. Fowkes ES, MD
The University of Edinburgh
Edinburgh, Scotland

Eugene Freund MD, MSPH
Centers for Medicare and Medicaid Services
Baltimore, MD

Robert Fry
National Conference of State Legislators
Denver, CO

Ivonne Fuller NR, NRPP, MPA
National Medical Association
Washington, DC

Robinson Fulwood PhD, MSPH
National Heart, Lung, and Blood Institute
Bethesda, MD

Patricia Gail Bray
St. Luke's Episcopal Health Charities
Houston, TX

Gauden Galea MD
World Health Organization
Manila, Philippines

Frank M. Galioto, Jr. MD
Child Cardiology Association
Fairfax, VA

Kathy Gallagher
Centers for Disease Control and Prevention
Atlanta, GA

Joanne Gallivan MS, RD
National Institute of Diabetes and
Digestive and Kidney Diseases
Bethesda, MD

James Galloway MD, FACP, FACC, FAHA CAPT.,
U.S. Public Health Service
Flagstaff, AZ

Deborah Galuska PhD
Centers for Disease Control and Prevention
Atlanta, GA

Gabriela Garcia
National Governors Association
Washington, DC

Alejandra Gepp MA
National Council of La Raza
Washington, DC

Julie Gerberding MD, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Wayne Giles MD
Centers for Disease Control and Prevention
Atlanta, GA

Meighan Girgus MBA
American Heart Association
Dallas, TX

Jay Glasser PhD, MS, FFPH, FRIPH
University of Texas
Houston, TX

Maleeka Glover MD, PhD
Centers for Disease Control and Prevention
Atlanta, GA

David C. Goff, Jr. MD, PhD
Wake Forest University School of Medicine
Winston-Salem, NC

Larry Goldstein MD
American Heart Association
Durham, NC

Kim Graber PhD
University of Illinois-Urbana
Urbana, IL

Augustus Grant MD, PhD
Duke University Medical Center
Durham, NC

Jennifer Greaser RN, MSN
Centers for Disease Control and Prevention
Atlanta, GA

Kurt Greenlund PhD
Centers for Disease Control and Prevention
Atlanta, GA

Michael Greenwell
Fleishman-Hillard
Atlanta, GA

Daniela Guccione
Public Health Agency of Canada
Ottawa, Ontario

Matthew Guidry
U.S. Department of Health and Human Services
Washington, DC

Judy Hannan RN, MPH
Centers for Disease Control and Prevention
Atlanta, GA

George E. Hardy, Jr. MD, MPH
Association of State and Territorial Health Officials
Washington, DC

Virginia Bales Harris MPH
Centers for Disease Control and Prevention
Atlanta, GA

Nancy Hart
Brain Attack Coalition
Bethesda, MD

Julie Harvill MPA, MPH
National Association of Chronic Disease Directors
Springfield, IL

Stephen Havas MD, MPH, MS
American Medical Association
Chicago, IL

Lyndon Haviland DrPH
American Legacy Foundation
Washington, DC

Audrey Haynes MSW
YMCA of the United States
Washington, DC

Julie Haynes
National Stroke Association
Centennial, CO

Angela Bray Hedworth MS, CHES, RHEd
Great Lakes Regional Stroke Network
Chicago, IL

Joan Henneberry MS
National Governors Association
Washington, DC

Rosemarie Henson MSSW, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Elissa Hines Reimer
Canadian Institutes of Health Research
Ottawa, Ontario

David Hoffman MEd
New York State Department of Health
Albany, NY

Keesha Holden-White
Somerset County Health Department
Westover, MD

Charity Holley MA
Somerset County Health Department
Westover, MD

Yuling Hong MD, PhD, FAHA
American Heart Association
Dallas, TX

Katie Horton RN, MPH, JD
Health Policy Research and Development
Washington, DC

James Hospedales MD
Pan American Health Organization
Washington, DC

Bonnie Hostrawser
Chronic Disease Prevention Alliance Center
Ottawa, Ontario

Marsha L. Houston
Centers for Disease Control and Prevention
Atlanta, GA

George Howard DrPH
University of Alabama School of Public Health
Birmingham, AL

Virginia Howard FAHA, MSPH
University of Alabama School of Public Health
Birmingham, AL

Jason B. Hsieh
National Governors Association
Rockville, MD

Sara Huston PhD
Cardiovascular Health Council
Raleigh, NC

Tim Hutchinson MSW, RSW, MPA
Public Health Agency of Canada
Ottawa, Ontario

Diane James CAE
Jacobs Institute of Women's Health
Washington, DC

Stephen F. Jencks MD, MPH
Centers for Medicare and Medicaid Services
Baltimore, MD

Jan Jernigan PhD
Centers for Disease Control and
Prevention, Northrop Grumman
Atlanta, GA

Amy Jesaitis
New York State Department of Health
Albany, NY

Jennifer Jimenez
Association of State and Territorial Health Officials
Baltimore, MD

Ellen Jones MS, CHES
Delta Health Alliance
Madison, MS

Aurelia Jones-Taylor
Community Health Services Center
Clarksdale, MS

Martha F. Katz
Centers for Disease Control and Prevention
Atlanta, GA

Melinda Kelley PhD
National Institute of Neurological
Disorders and Stroke
Bethesda, MD

Kristen Keneipp MHS
Association of State and Territorial Health Officials
Washington, DC

Thomas Keyserling MD, MPH
University of North Carolina
Chapel Hill, NC

Meredith Kilgore RN, PHD
University of Alabama
Birmingham, AL

Randy Kirkendall MPH
ETR Associates
Northfield, MN

Phillip Kletke PhD
American Hospital Association
Chicago, IL

Lloyd Kolbe
Centers for Disease Control and Prevention
Atlanta, GA

B. Waine Kong PhD, JD
Association of Black Cardiologists, Inc.
Atlanta, GA

Sue Koob MPA
Preventive Cardiovascular Nurses Association
Madison, WI

Walter J. Koroshetz MD
American Academy of Neurology
Boston, MA

Katherine A. Krause
American Heart Association
Dallas, TX

Lewis A. Kuller MD, DrPH
University of Pittsburgh
Pittsburgh, PA

Darwin Labarthe MD, MPH, PhD
Centers for Disease Control and Prevention
Atlanta, GA

Kenneth LaBresh MD, FAHA, FACC
Mass PRO
Waltham, MA

Dolly Lambdin Ed.D.
National Association for Sport and Physical Education
Austin, TX

Brick Lancaster MA, CHES
Centers for Disease Control and Prevention
Atlanta, GA

Rian Landers
National Association for Sport and Physical Education
Reston, VA
Tim LaPier M.A.
Centers for Disease Control and Prevention
Atlanta, GA

Christopher Laxton
American Association of Diabetes Educators
Chicago, IL

Catherine Le Gales-Camus PhD
World Health Organization
Geneva, Switzerland

Jerzy Leowski
World Health Organization
Geneva, Switzerland

Debra Lightsey MSW
Centers for Disease Control and Prevention
Atlanta, GA

Erik Lindbloom MD, MSPH
American Academy of Family Physicians
Columbia, MO

Laura Linnan ScD, CHES
University of North Carolina
Chapel Hill, NC

Robyn Lipner MA
Jacobs Institute of Women's Health
Washington, DC

Russell Luepker MD, MS
University Of Minnesota
Minneapolis, MN

Jennifer MacInnes
Public Health Agency of Canada
Ottawa, Ontario

David R. MacLean MD
Simon Fraser University
Burnaby, British Columbia

Atiba Madyun
National Black Caucus of State Legislators
Washington, DC

Ellen Magnis MBA
American Stroke Association
Dallas, TX

Elizabeth Majestic MS, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Ann Malarcher
Centers for Disease Control and Prevention
Atlanta, GA

Orkideh Malkoc
Pulmonary Hypertension Association
Silver Springs, MD

Margaret (Mags) Malone
Centers for Disease Control and Prevention
Atlanta, GA

Sual Malozowski MD, PhD, MBA
National Institute of Diabetes and
Digestive and Kidney Disease
Bethesda, MD

Estrella Manio
American Heart Association
San Francisco, CA

Teri Manolio MD, PhD
National Human Genome Research Institute
Bethesda, MD

Mario Fernando Camargo Maranhao
World Heart Federation
Geneva, Switzerland

James S. Marks MD
Centers for Disease Control and Prevention
Atlanta, GA

John Marler MD, FAHA
National Institute of Neurologic Disorders and Stroke
Bethesda, MD

Sue Martone
U.S. Department of Health and Human Services
Washington, DC

Dyann Matson-Koffman DrPH, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Rose Matulionis MSPH
Directors of Health Promotion and Education
Washington, DC

Randall Maxey MD, PhD
National Medical Association
Washington, DC

Chris Maylahn MPH
New York State Department of Health
Albany, NY

Kathy McCauley PhD, RN, FAAN
University of Pennsylvania
Philadelphia, PA

Kristen McCausland
American Legacy Foundation
Washington, DC

Christine McEntee
American College of Cardiology
Bethesda, MD

J. Michael McGinnis MD, MPP
The National Academic
Washington, DC

Daniel McGoldrick MA
Campaign for Tobacco-Free Kids
Washington, DC

Bruce McManus MD, FRCPC, PhD
Canadian Institutes of Health Research Institute
of Circulatory and Respiratory Health
Vancouver, BC

David McQueen MD
Centers for Disease Control and Prevention
Atlanta, GA

Deana McRae
National Black Caucus of State Legislators
Washington, DC

Jennifer Medearis M.Ed
U.S. Department of Education
Washington, DC

Lisa Medellin MSW
Healthcare Georgia Foundation, Inc.
Atlanta, GA

Tom Melnik DrPH
Cardiovascular Health Council
Albany, NY

George A. Mensah MD, FACP, FACC
Centers for Disease Control and Prevention
Atlanta, GA

Max Michael MD
University of Alabama
Birmingham, AL

Daniel Miller MD, MPH
World Bank
Washington, DC

Abby E. Mills
Women In Government
Washington, DC

Brett Miner MPH
Centers for Disease Control and Prevention
Atlanta, GA

Nevena Minor
Heart Rhythm Society
Washington, DC

Belinda O. Minta MPH
Centers for Disease Control and Prevention
Atlanta, GA

Joanne Mitten
Association of State and Territorial Directors
Washington, DC

Karen Modesitt
American Heart Association
Dallas, TX

Stephanie Mohl
American Heart Association
Dallas, TX

Julianne Moore
American Heart Association
Dallas, TX

Greg Morosco PhD, MPH
National Heart, Lung, and Blood Institute
Bethesda, MD

Heather Morris
National Association for Sport and Physical Education
Reston, VA

Marya Morris AICP
American Planning Association
Chicago, IL

Diane Mulligan-Fairfield
National Stroke Association
Centennial, CO

Christopher Murray MD
Harvard Initiative for Global Health
Cambridge, MA

Sharon Murray MHSE, CHES
Society of State Directors of Health
Reston, VA

Gary Myers PhD
Centers for Disease Control and Prevention
Atlanta, GA

Netty Neki
Somerset County Health Department
Westover, MD

Sue Nelson
Centers for Disease Control and Prevention
Atlanta, GA

Jonathan Neyer
Centers for Disease Control and Prevention
Atlanta, GA

F. Javier Nieto MD, PhD
University of Wisconsin
Madison, WI

David S. Nilasena MD, MSPH
Centers for Medicare and Medicaid Services
Baltimore, MD

Sania Nishtar MD
Heartlife
Federal Capital, Pakistan

Kathleen Nolan MPH
National Governors Association
Washington, DC

Emmeline Ochiai JD, MPH
Office of Disease Prevention and Health Promotion
Washington, DC

Drew O'Conner
National Civic League
Denver, CO

Christopher O'Donnell MD, MPH, FAHA
National Institute of Neurological
Disorders and Stroke
Bethesda, MD

Derek P. Okubo
National Civic League
Denver, CO

Diane Orenstein PhD
Centers for Disease Control and Prevention
Atlanta, GA

Deborah Page
Capitol City Cardio
Columbus, OH

Gilles Paradis MD
McGill University
Montreal, Quebec

Miriam Patanian MPH
Cardiovascular Health Council
Olympia, WA

Thomas Pearson MD, MPH, PhD
University of Rochester Medical Center
Rochester, NY

Terry Pechacek PhD
Centers for Disease Control and Prevention
Atlanta, GA

Julia Pekarsky MPH
Association of State and Territorial Health Officials
Washington, DC

Cass Pennington Ed.D.
Delta Health Alliance
Stoneville, MS

Janelle Peralez MPH, RD
Centers for Disease Control and Prevention
Atlanta, GA

Bradley Perkins
Centers for Disease Control and Prevention
Atlanta, GA

Vickie Peters MS
American Heart Association
Dallas, TX

John Petherick
National Indian Health Board
Washington, DC

Karen Pilliod MPH
Centers for Disease Control and Prevention
Atlanta, GA

Donna Pillittere MS
National Committee for Quality Assurance
Washington, DC

Richard Pizzi
Clinical Laboratory News
Washington, DC

Marcus Plescia MD, MPH
Cardiovascular Health Council
Raleigh, NC

Alonzo Plough PhD, MPH
California Endowment
Woodland Hills, CA

Philip Poole-Wilson MD
British Heart Foundation
London, England

Nancy Porteous
Health Canada
Ottawa, Ontario

Iraj M. Poureslami PhD
Simon Fraser University
Burnaby, BC

Niko P. Pronk PhD, FACSM, FAWHP
Health Partners Health Behavior Group
Bloomington, MN

Susan Prows PhD, MPH
Foundation of Accountability
Portland, Oregon

Elizabeth Puckett
Consultant
Raleigh, NC

James Raczynski PhD
University of Alabama
Birmingham, AL

Barbara Radziszewska PhD, MPH
National Institute of Neurological
Disorders and Stroke
Bethesda, MD

Behnoosh Ramji MPH
Centers for Disease Control and Prevention
Atlanta, GA

Linda Redman MPH, MA
Centers for Disease Control and Prevention
Atlanta, GA

Erin B. Reidy
The Urban Institute
Washington, DC

Alan Remaley MD, PhD
American Association of Clinical Chemistry
Bethesda, MD

Marilyn Rice PhD
Pan American Health Organization
Washington, DC

Jordan H. Richland MPH
American College of Preventive Medicine
Washington, DC

Jud Richland MPA
Partnership for Prevention
Washington, DC

Barb Riley PhD
University of Waterloo
Waterloo, Ontario

Julianne Roach
American Heart Association
Dallas, TX

Rose Marie Robertson MD
American Heart Association
Dallas, TX

John W. Robitscher MPH
National Association of Chronic Disease Directors
Atlanta, GA

Wayne Rosamond PhD
University of North Carolina
Chapel Hill, NC

Cara Rozaieski
Somerset County Health Department
Westover, MD

John Rumsfeld MD, PhD
Denver VA Medical Center
Denver, CO

Stephen Samis MS
Heart and Stroke Foundation of Canada
Ottawa, Ontario

Eduardo J. Sanchez MD, MPH
Association of State and Territorial Health Officials
Austin, TX

Matt Schnellbaecher MD
Alaska Native Health Center
Anchorage, AK

Mark Alan Schoeberl MPA
American Heart Association/
American Stroke Association
Dallas, TX

Earl Schurman
National Association of Chronic Disease Directors
Lutherville, MD

Paul A. Scott PhD
National Institutes of Health \ National Institute
of Neurological Disorders and Stroke
Bethesda, MD

Cary Sennett MD, PhD
American College of Cardiology
Washington, DC

Mohamed Ali Seyed
Emory University
Atlanta, GA

Susan Shurin MD
National Heart, Lung, and Blood Institute
Bethesda, MD

Stephen Sidney MD, MSC, FCFP
Kaiser Permanente
Oakland, GA

Lorie Simmons
Pulmonary Hypertension Association
Silver Springs, MD

Jane Sisk PhD
Centers for Disease Control and Prevention
Hyattsville, MD

Eldon Smith
University of Calgary
Alberta, Canada

Jennifer Smith MSHP
National Association of Chronic Disease Directors
Austin, TX

Suzanne Smith
American Heart Association
Dallas, TX

Russell Sniegowski
Centers for Disease Control and Prevention
Atlanta, GA

Kathy J. Spangler CPRP
National Recreation and Park Association
Ashburne, VI

John Spiegel MPH
Alliance of Community Health Plans
Washington, DC

George St. Amand
State of Connecticut Department of Public Health
Hartford, CT

Sylvie Stachenko MD, MSC, FCFP
Public Health Agency of Canada
Ottawa, Ontario

Jeremiah Stamler MD
Northwestern University
Evanston, IL

Darius Stanton
Girls and Boys Club of Greater Washington, DC
Washington, DC

Tom Starcher
McKing Consulting Corporation
Bozeman, MT

Patrick Stieg
Society for Public Health Education
Saint Paul, MN

Jody L. Stones
Virginia Department of Public Health
Richmond, VA

Sarah Strunk MHA
Active Living by Design
Chapel Hill, NC

Eileen Stuart-Shor PhD, APRN
Council on Cardiovascular Nurses
Boston, MA

Greg Taylor MD, CCFP, FRCPC
Health Canada
Ottawa, Ontario

Malcolm Taylor MD
Association of Black Cardiologists
Jackson, MS

Dorothy Teeter MHA
Seattle and King County Health Department
Seattle, WA
Amber Thornton MPH
American Legacy Foundation
Washington, DC

Ron Todd MS, ED
Centers for Disease Control and Prevention
Atlanta, GA

James T. Toole MD, LLB
International Stroke Society
Winston-Salem, NC

Susan Tortolero PhD
University of Texas
Houston, TX

Rachael Tracy MPH, CHES
National Heart, Lung and Blood Institute
Bethesda, MD

Albert W. Tsai PhD, MPH
Cardiovascular Health Council
Saint Paul, MN

Shin-Ping Tu MD, PhD
University of Washington
Seattle, WA

Patricia Turner
National Institute of Neurological Disease and Stroke
Bethesda, MD

Carlos Ugarte MSPH
National Council of La Raza
Washington, DC

Donna Vallone
American Legacy Foundation
Washington, DC

Abha Varma PhD
North Carolina Department of Health
and Human Services
Raleigh, NC

Mark Veazie DrPH
Indian Health Service
Flagstaff, AZ

Frank Vinicor MD
Centers for Disease Control and Prevention
Atlanta, GA

Monica Vinluan MD
National Recreation and Park Association
Washington, DC

Karen Voetsch
Centers for Disease Control and Prevention
Atlanta, GA

Joan Ware MSPH
National Association of Chronic Disease Directors
Salt Lake City, UT

Margo Warren
National Institute of Neurological
Disorders and Stroke
Bethesda, MD

Nancy Watkins MPH
Centers for Disease Control and Prevention
Atlanta, GA

Mary Lee Watts MPH, RD
American Dietetic Association
Washington, DC

Howell Wechsler EdD, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Carol White MS
Cardiovascular Health Council
Juneau, AK

Corey L. White MPA
National Governors Association
Washington, DC

Martin Whiteside
Tennessee Department of Health
Nashville, TN

Tracy Wiedt MPH
YMCA of the USA
Washington, DC

Debra A. Wigand Med, CHES
Cardiovascular Health Council
Augusta, ME

Elinor Wilson RN, PhD
Canadian Public Health Association
Ottawa, Ontario

Amy P. Winterfield JD
National Conference of State Legislatures
Denver, CO

Taylor Wofford
Centers for Disease Control and Prevention
Atlanta, GA

Candice Wong MD, PhD
American Heart Association
San Francisco, CA

Michael Wong MD
American Heart Association
Los Angeles, CA

Gary Wunderlich
Maryland Department of Health
Baltimore, MD

Derek Yach
World Health Organization
Geneva, Switzerland

Stephanie Yun MPH, CHES
Council of Chief State School Officers
Washington, DC

Bonnie Zell MD, MS
Centers for Disease Control and Prevention
Atlanta, GA

Reagan Zephier
National Indian Health Board
Washington, DC

Zhi Jie Zheng MD, PhD
National Heart, Lung and Blood Institute
Bethesda, MD

Stephanie Zier
Centers for Disease Control and Prevention
Atlanta, GA

Armineh Zohrabian PhD
Centers for Disease Control and Prevention
Atlanta, GA

Appendix D—
Charting the Course: Expert Panel Group Photographs and Reprint of *A Public Health Action Plan to Prevent Heart Disease and Stroke*

Expert Panel A: Policy and Programs

Expert Panel D: Research in Cardiovascular Health Promotion and Cardiovascular Disease

Expert Panel E: Global Cardiovascular Health

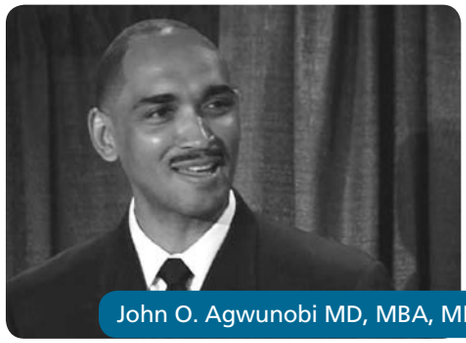
Working Group

2006 National Forum: Building Momentum

Simon Capewell MB, BS

Darwin R. Labarthe MD, PhD, MPH

B. Waine Kong PhD, JD


John O. Agwunobi MD, MBA, MPH

Julie Gerberding MD, MPH

J. Michael McGinnis MD, MPP

Keith Ferdinand MD

2007 National Forum: Making the Connections

David Eddy MD, PhD

Alan Balch PhD

Ned Calonge MD, MPH

Eric Finkelstein PhD, MHA