

SECTION 4.

IMPLEMENTATION: MOBILIZING FOR ACTION

Summary

Section 3 presented two fundamental requirements and 22 specific recommendations for which action can significantly accelerate progress in preventing heart disease and stroke over the next two decades. To have this impact, each recommendation must be linked with concrete action steps for practical implementation. Such action steps were initially proposed by the Expert Panels, and then reviewed by CDC, a Working Group, and a National Forum convened to help develop this *Action Plan*.

This section presents specific action steps as they correspond to the fundamental requirements and recommendations in Section 3. To indicate their potential impact, the steps are followed by brief descriptions of the outcomes expected from their implementation.

Public health agencies must play leading roles in implementing many or most of the proposed action steps. All steps are addressed implicitly, if not explicitly, to these agencies. All will require broad participation by partner organizations and agencies—public and private—as well as the public health community as a whole. All action steps are directed to all interested and potentially contributing parties. Such partners' commitments are not assumed at this stage of development. Interested organizations and agencies can make these decisions after they have reviewed the plan and identified the areas where they can make the greatest contributions.

This section concludes with a discussion of the immediate need for action, including the initial steps required and the issues that must be addressed, as well as the need for ongoing review, periodic evaluation, and adaptation to future conditions.

Fundamental Action Steps

The two fundamental requirements of this plan and their corresponding action steps address the crosscutting aspects of effective communication, as well as strategic leadership, partnerships, and organization.

Effective Communication

- 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.

- Communicate effectively at 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, and national policy makers, including new stakeholders.
- Collect information and monitor research systematically from national, state, and local levels to facilitate sharing of knowledge and experience in developing educational campaigns as part of this continuing strategy.

Expected Outcomes

- Communication needs and opportunities are assessed and used to guide initial development of the long-term public information strategy anticipated by the plan.
- 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.
- Public health agencies are promoting continuing development of appropriate educational materials.

Strategic Leadership, Partnerships, and Organization

- 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).
- Convene public health agencies at all levels to help develop implementation plans at state and local levels.
- Continue to encourage state health departments to foster internal partnerships and collaborations with complementary CVH-related programs. Allow flexible use of funding to facilitate these important links.
- Explore and enhance the relationships public health agencies have with existing CVH policy coalitions and consider the need for new ones to support the goals of the plan.

Expected Outcomes

- Partnerships supporting the plan are strengthened or established, forming an inclusive array of interests representing all relevant sectors of society.
- State and local public health officials, federal health care systems, and tribal organizations are convened to help implement the plan.
- 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.
- Existing CVH policy coalitions are strengthened.

Action Steps for the Five Essential Components

The 22 recommendations presented in Section 3 require specific action steps to guide implementation of the plan. This section outlines action steps proposed by the Expert Panels and synthesized by the Working Group. They are presented in the same order as the plan's five essential components, which are taking action, strengthening capacity, evaluating impact, advancing policy, and engaging in regional and global partnerships. Each group of action steps is followed by expected outcomes that indicate their potential impact.

Taking Action: Putting Present Knowledge to Work**1. Initiate policy development.**

- 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).
- Develop and regularly update simulation models to address the expected health and economic benefits to society from investing in heart disease and stroke prevention.
- Conduct health impact assessments of national policies and provide a framework to states to conduct these assessments at the state level.

Expected Outcomes

- 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.

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

2. Implement best practices.

- Review, revise if appropriate, and rigorously apply criteria for identifying model programs. In the meantime, implement current programs and evaluate them against these criteria.
- Identify and disseminate information about model programs that include all elements of best practices for a population-based approach to CVH. Test the synergistic effects of composite programs.
- 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 Outcomes

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

3. Address prevention in all settings, life stages, and priority populations.

- 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 Outcomes

- 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. Accept the full scope of public health responsibility.

- Accept accountability of public health agencies, their partners, and 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.
- 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, work sites, health care settings, and community sites and for priority populations.
- Establish or strengthen collaborations with the Centers for Medicare & 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 Outcomes

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

Strengthening Capacity: Transforming the Organization and Structure of Public Health Agencies and Partnerships**5. Establish CVH entities within public health agencies.**

- Transform public health agencies at all levels so they can effectively prevent heart disease and stroke.
- Establish or strengthen identifiable CVH 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 and environmental change, population-wide health promotion and behavioral change for risk factor prevention, and early detection and control of risk factors.

Expected Outcomes

- Public health agencies throughout the nation are undergoing the changes needed to expand their roles and meet the new challenges of preventing heart disease and stroke and other chronic conditions of public health concern.
- Every state and territorial health agency has an identifiable unit or locus of responsibility for CVH policy and programs. These agencies are able to provide support and assistance in CVH 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 CVD events.

6. Reinvent innovative training resources and opportunities.

- Develop 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 in CVH. These include changes in organizational structure, skills in incorporating best practices, and assurance of partnership effectiveness.
- Establish 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 and environmental approaches to intervention.
 - Organizing effective prevention programs.
 - Leading diverse community organizations.
 - Conducting culturally appropriate interventions targeted to priority populations.
 - Using sound business practices and strategic planning to improve public health.
- 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 CVH.
 - CVH training at Prevention Research Centers.

- CVH 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.
- Involve numerous partners, such as directors of state chronic disease programs, voluntary associations, and academic institutions, in the development of training programs. Sample 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.
 - Provide training in chronic disease prevention to personnel from diverse organizations, including governmental agencies, public health and education, schools of public health, and nongovernmental health organizations.

Expected Outcomes

- A comprehensive CVH training function is developed and coordinated among all interested parties, providing a resource for state and local health agencies.
- Model curricula and educational programs (e.g., Web-based, video training packages) are available, including those needed for developing nontraditional skills. Trainees in target areas are meeting established goals.
- Training programs for CVH public health personnel are identified. State and regional networks for CVH training and education are established to coordinate training needs with available resources.
- Model education and training programs are being developed and disseminated to state and local health agencies and partners.

7. Develop and disseminate standards.

- Develop performance standards and cultural competency guidelines for public health agencies and partners. Include maintenance of laboratory capacity and standardizations. Share these with schools of public health and other educational sources for health professionals and encourage their adoption in curricula.
- Identify mechanisms (e.g., technical assistance, dedicated funding and staff) that enable local and state health departments to meet standards.

Expected Outcomes

- Performance standards and cultural competency guidelines for CVH 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 CVH and related program areas.
- Public health agencies are receiving technical assistance in monitoring and improving cultural competency in CVH and related program areas.

8. Provide technical support.

- Develop and maintain a cadre of educated practitioners and technical experts who can support intervention needs in CVH promotion and CVD prevention (i.e., surveillance, trend analysis, behavior change, community development). 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).
- Develop materials and tools to promote CVH at local and state levels.
- Strengthen the internal communications infrastructure of public health agencies for chronic disease programs as they make other general infrastructure improvements.

Expected Outcomes

- A register of recognized experts willing to provide technical and policy assistance to local, state, and federal health agencies and other CVH 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.
- State and local health agency needs for CVH promotional materials and an educational “toolbox” are being met.
- A public health communications infrastructure supportive of CVH (and other chronic disease) activities is in place and is continually adopting newer, more effective communications technology.

Evaluating Impact: Monitoring the Burden, Measuring Progress, and Communicating Urgency

9. Expand and standardize population-wide data sources and activities.

- Define the characteristics of surveillance and evaluation 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.
- 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.
- 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.
- 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 Outcomes

- 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.
- 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.

- A group has convened and formulated a detailed implementation plan for developing the monitoring and evaluation data systems needed to support the *Action Plan*.
- 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. Establish data systems for evaluation of policy and program interventions.

- 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.
- 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 Outcomes

- 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.
- 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.

11. Develop professional staff capacity for monitoring and evaluation.

- 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.
- Provide guidance to state and local health agencies and partners regarding capacity requirements for surveillance and evaluation activities.
- Establish resources to support program evaluation through training, consultation, technical assistance, and partnerships to develop logic models, methodology, data collection, and reporting.

Expected Outcomes

- 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 CVH program evaluation.

- State and local public health agencies are receiving help in determining what capacities they need to evaluate their programs.
- A plan for meeting these requirements is developed and implemented.

Advancing Policy: Defining the Issues and Finding the Needed Solutions

12. Conduct and facilitate policy and environmental research.

- Focus on preventing atherosclerosis and high blood pressure. 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 atherosclerosis and high blood pressure and their contribution to the burden of heart disease and stroke. Support both targeted and investigator-initiated research.
- Support research to determine the best ways to implement and disseminate the most effective policy, environmental, 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).
- 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?
- 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.
- 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.

- 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 Outcomes

- A research agenda specific to the major focus of preventing atherosclerosis and high blood pressure is developed and implemented.
- 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.
- A broad array of relevant research questions is developed and prioritized to balance the research agenda.
- 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.
- 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 population-wide approaches and those aimed a specific subgroups).
- The research agenda is supported by education to assure that funding is a national priority.

13. Prevent risk factors in youth and beyond.

- Develop and support detailed research agendas that specifically address prevention in youth and early adulthood. Include studies that assess the impact of known interventions in preventing risk factors, atherosclerosis, and high blood pressure.
- 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.
- Identify other outstanding concerns in preventing risk factors.

Expected Outcomes

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

- This agenda includes research to develop assessment methods for subclinical atherosclerosis and to evaluate new candidate biomarkers in population studies, especially during adolescence and early adulthood.
- The agenda includes research on underlying determinants of CVD risk factors. Examples include how fetal development affects later risk and how nutrition and physical activity affect obesity, blood lipids, and blood pressure.

14. Conduct and facilitate monitoring and evaluation research.

- Support monitoring and evaluation research to determine how best to measure policy and environmental change interventions.
- Incorporate these measures into surveillance systems.
- 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 Outcomes

- The research agenda includes studies of methods and data requirements for monitoring and evaluating approaches to policy and environmental change.
- Surveillance methods that incorporate the relevant data elements are developed and implemented.
- Methods that assure adequate participation rates and representative population samples are continuously investigated, addressing technical and policy concerns about access to health information.

15. Conduct and support marketing research.

- Support marketing research on how to inform the public effectively and bring about health behavioral change.
- 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 Outcomes

- The research agenda includes studies of what influences the way people respond to population-wide and individual interventions to prevent heart disease and stroke in the community at large, in specific cultural communities, and in specific organizational settings.
- 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. Strengthen the prevention research workforce.

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

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

Expected Outcomes

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

Engaging in Regional and Global Partnerships: Multiplying Resources and Capitalizing on Shared Experience

17. Provide global leadership, partnerships, and organization.

- Develop and effectively support a global mission and vision of the United States for CVH.
- 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).
- Evaluate 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. 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 Outcomes

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

18. Establish and support global policies.

- Establish a partnership for global heart disease and stroke that develops, monitors, and evaluates global CVH strategy.
- Focus on 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.
- Assess the impact of globalization and trade policies (e.g., related to tobacco, food and agriculture, and pharmaceuticals) on national and international trends in CVD and suggest improvements that could favorably affect CVH.

Expected Outcomes

- A partnership on global CVH strategy is established. Its implementation plan is guided by a commitment to work toward eliminating inequalities in CVH.
- A framework to assess progress on equity in national and global CVH programs is being used.
- 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 harness these policies to promote CVH nationally and globally.

19. Develop a global communications strategy.

- Establish relationships between transnational media organizations and public health agencies and partners to identify models of collaboration that can help improve media content and coverage on the need for global CVH promotion and CVD prevention.
- Effectively communicate to health professionals throughout the world that they should promote CVH by supporting effective policies and by serving as role models for positive behavioral patterns.

Expected Outcomes

- Consensus development meetings are conducted among CVH partners and media representatives. Better CVH messages are communicated through the media.
- Programs are undertaken to reach health professionals throughout the world with effective messages about their role in preventing heart disease and stroke.

20. Strengthen global capacity.

- Develop tailored programs to 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.
- Promote the exchange of information and experiences on policies that promote CVH.

- Collect existing tools for assessing policy and environmental change and program effectiveness, synthesize an integrated assessment tool, apply this tool to identify best practices, and increase information sharing through technology.
- Develop and implement strategies to assure that changes that support the *Action Plan* are institutionalized.

Expected Outcomes

- Development of capacity for heart disease and stroke prevention is recognized as a long-term requirement for transforming public health agencies. The proposed 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.
- Information and experience related to CVH promotion are effectively disseminated and applied (e.g., the *International Action on Cardiovascular Disease: A Platform for Success*, published by the World Heart Federation and the International Heart Health Society).
- Tools for analyzing how policies affect the global dimensions of CVH are developed and disseminated.
- Capacity is developed in a way that assures institutionalization of change.

21. Strengthen global monitoring and evaluation.

- Inventory existing surveys, programs, and agreements relevant to global activities in heart disease and stroke prevention and control.
- Identify existing programs that could be expanded and areas where new collaborations could be created. This activity could be conducted by organizations such as CDC, the World Health Organization (WHO), the World Heart Federation, the Pan American Health Organization, and the InterAmerican Heart Foundation.
- Support monitoring of heart disease and stroke globally by working with existing and new partners (especially WHO) to develop standard data elements. These elements should include 1) mortality, morbidity, and risk factors; 2) nontraditional elements such as clinical factors (e.g., patterns of diagnosis, treatment, use); 3) preventive and health promotion programs; and 4) social, cultural, environmental, and policy factors. Assure effective dissemination of the resulting information and its translation into action.

Expected Outcomes

- A Web-based inventory is available and routinely updated.
- New regional and global collaborative activities are established, and new opportunities are being identified.
- 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. Promote and support global research.

- Collaborate in developing a research agenda on CVH policy. Identify appropriate international partners to design research and mobilize resources.

Expected Outcomes

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

Steps Toward Implementation

To make the *Action Plan* a reality, action is needed now. Mobilizing this action requires detailed plans of implementation; methods for measuring short-, mid-, and long-term outcomes and impacts; and a process for oversight and evaluation.

Close collaboration with public health agencies at state, territorial, local, and tribal levels is needed. These collaborations can 1) promote development of specific implementation plans; 2) align partnerships to broaden and deepen the base of support for the *Action Plan* and strengthen overall capacity; 3) provide comprehensive, timely, and accurate data to guide policy and decision makers, health professionals, and the public; and 4) provide appropriate interaction among partners in the scientific community to advance prevention effectiveness research to evaluate policies and programs.

Review, Evaluation, and Adaptation to Future Conditions

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.

For this and other reasons, an explicit evaluation process must be designed and implemented. This evaluation plan must include the following elements: 1) a comprehensive logic model as the basis for evaluation; 2) short-, mid-, and long-term evaluation criteria; 3) key indicators and data systems; 4) procedures for evaluation, as well as for reporting and

updating key assumptions and projections; and 5) responsibility and authority for revising the plan. Substantial work remains to be done to develop detailed implementation plans for each of the *Action Plan's* five essential components and to initiate the needed actions. But great progress has been made by bringing the plan to completion at this stage.

The *Action Plan* provides a view of the current reality concerning the nation's burden of heart disease and stroke, a vision of a future in which the epidemic occurrence of these conditions has been controlled, and an understanding of the wide range of intervention approaches that can and must be applied to achieve this vision. The plan also identifies key issues and proposes recommendations and specific action steps in five essential areas. This information is presented in the context of a comprehensive public health strategy to prevent heart disease and stroke in the United States and contribute to similar efforts with global partners. By implementing these recommendations, the nation's public health agencies—strengthened by a broad array of partnerships reflecting society's interest in preventing these diseases—can undergo significant positive transformation in their roles and accomplish major progress in preventing heart disease and stroke. Expanding from traditional roles to embrace new opportunities for health impact, through policy and environmental change and health behavioral change, these agencies can succeed in making sure that the nation is as healthy as possible.