

Lead Agency: *National Institutes of Health*

HEART DISEASE AND STROKE

Over the past 25 years, dramatic improvements have been made in reducing the death toll from heart disease and stroke: death rates for coronary heart disease and stroke have declined by 49 percent and 58 percent, respectively. Much of the success is a result of a dual strategy that includes a high-risk and population approach. Improved high blood pressure control and high blood cholesterol control have been the principal initiatives. Substantial evidence supports that prevention through lifestyle improvements is effective.

The National High Blood Pressure Education Program (NHBPEP) and the National Cholesterol Education Program (NCEP)—both coordinated by the National Heart, Lung, and Blood Institute (NHLBI) in partnership with other organizations concerned about cardiovascular disease across the Nation—have been recognized for improving awareness of the effects of high blood pressure and high blood cholesterol on health and for subsequent behavioral changes. The two committees that guide these programs also serve as the HEALTHY PEOPLE 2000 working groups. More than 40 nonprofit organizations serve on each committee.

Blood lipid levels, specifically total cholesterol, have been reduced as Americans have adopted healthier eating habits. Average blood pressure levels have dropped, and blood pressure control is among the best in any industrialized nation. Cigarette smoking rates have declined over the years with fewer people beginning to smoke. Physicians now are more likely to begin therapy for the management of hypertension at lower diastolic blood pressures; treatment rates have doubled; and control rates have more than tripled. The levels of blood cholesterol have declined steadily, and in 1990 approximated levels recommended by the NCEP. High blood pressure prevalence and cholesterol levels in the United States have declined significantly because of earlier and increased screening, detection, and management, coupled with self- or provider-initiated changes in diet and other lifestyle improvements.

Much more remains to be done. Heart disease and stroke continue to affect more Americans than any other disease: heart disease is the leading cause of death and stroke was the third leading cause of death (1992). The impact of premature morbidity from cardiovascular diseases on the ability of affected individuals to function independently or to participate fully in the activities of daily living is devastating in terms of personal loss, pain, suffering, the effects on families and loved ones, and economic burden. The annual national economic impact of cardiovascular disease is estimated at \$190 billion as measured in health care expenditures, medication, and lost productivity due to disability and death.

Major disparities and gaps exist among population groups and geographic regions, with a disproportionate burden of death and disability in minority and low-income populations. Although deaths from coronary heart disease and stroke have decreased for the total population and for blacks, mortality is higher and the rate of decline is less for both causes among blacks than the total population. Black Americans also suffer appreciably higher rates of hypertension and incidence of end-stage renal

disease (ESRD) than do whites. Stroke mortality and morbidity are particularly concentrated in the southeastern United States with the age-adjusted stroke mortality rate in this “Stroke Belt” more than 10 percent higher than the U.S. average. The rates of decline in this area are faster than elsewhere, but the absolute rate is still much higher, with the highest rates among blacks.

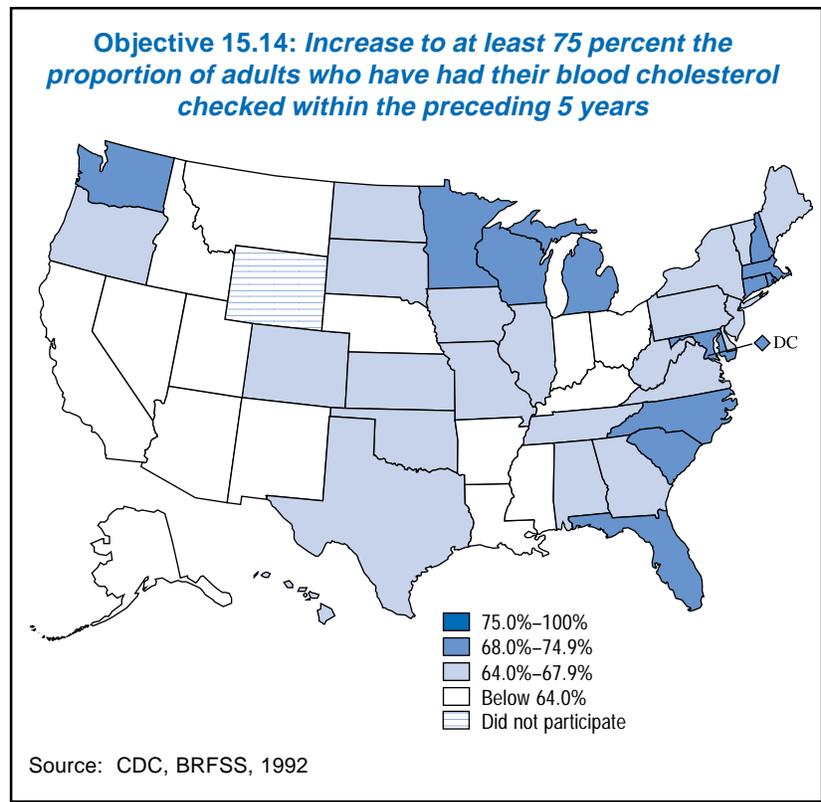
The challenge in this priority area will be to keep prevention in the forefront and to rely less on control and treatment. This strategy includes more attention to bridging the gap between research and people, between science and communities, and to creating incentives that focus limited resources on the prevention and control of chronic diseases.

Review of Progress

The significant progress in this priority area reflects the effectiveness of science-based public health strategies that rely on partnerships among the Federal Government, State and local health departments, and the private sector in combating the barriers to reducing heart disease and stroke. In only two of the 17 objectives—those related to reversing the increase in end-stage renal disease and reducing overweight—do data indicate movement away from the targets.

Several hypotheses have been posed to explain increased rates for ESRD, including that hypertension is not being treated adequately or at low enough levels to protect the kidneys, that diabetes prevalence is increasing, or that an ascertainment bias is at work (i.e., better equipment and diagnoses are available to detect more ESRD).

Progress on increasing the number of adults with high blood cholesterol who are taking action to reduce their cholesterol levels should be measurable by the National Health and Nutrition Examination Survey (NHANES III). For the remaining 14 objectives, appreciable improvements are being made, including success in meeting the year 2000 target for reducing the prevalence of high blood cholesterol.



Healthy People 2000 Midcourse Review and 1995 Revisions

The principal prevention strategy for reducing heart disease and stroke focuses on large-scale public and professional education programs—such as the NHBPEP and the NCEP at the Federal level. Such programs involve the major medical and health organizations, voluntary health organizations, community programs, government agencies, and State health departments.

Within the Public Health Service, as a part of the Food and Drug Administration's mandate to develop a new food label, NHLBI has assisted in the development of specific criteria for the amount of total fat, saturated fat, cholesterol, and sodium listed on the label. NHLBI has incorporated the new food label in a variety of its patient and public education materials. In May 1994, in honor of both National Physical Fitness Month and National High Blood Pressure Month, NHLBI joined with the President's Council on Physical Fitness and Sports as one of its Presidential Fitness Partners to promote "Get Moving, America." NHLBI featured messages on physical activity on its Healthbeat Radio Network and offered a number of educational and community activities, including a toll-free number for the public to learn about ways to prevent hypertension and increase physical activity.

The American Academy of Pediatrics, the American Dietetic Association, and the American Heart Association have been natural allies with NHLBI in the development of educational and training materials such as video tapes and kits for physicians, nurses, and dietitians. In recognition of the faith community as a means of reaching high-risk populations, partnerships have been formed to provide high blood pressure screenings in religious institutions and settings.

1995 Revisions

The midcourse changes in this priority area relate to improvements in data sources and the addition of new subobjectives for special population groups—in particular, Hispanic or Mexican Americans—as new baseline data have become available. New subobjectives for specific population groups were added to objectives related to high blood pressure control, overweight prevalence, moderate physical activity, blood pressure checks, and blood cholesterol checks. Regarding the objective to reduce dietary fat intake, the original target population was changed to people aged 2 and older, based on better data available from the 1976–80 National Health and Nutrition Examination Survey and 1989–91 Continuing Survey of Food Intakes by Individuals.