



*CDC's Prevention Research Centers use multiple strategies to reduce the risks for heart disease and stroke, which cost America millions of lives and billions of dollars each year.*



The Prevention Research Centers are a network of academic health centers, partner communities, and public health practitioners that conduct community-based participatory research to prevent disease and disability.

### FACING THE ISSUES

- *Cardiovascular diseases (heart disease and stroke) account for more than 40% of all deaths in the United States each year.*
- *Approximately 70 million Americans live with some form of cardiovascular disease and suffer from resulting disabilities.*
- *Death and disability due to heart disease and stroke will cost the United States about \$403 billion in health care and lost productivity in 2006.*
- *Losing weight, quitting smoking, and controlling high blood pressure and high cholesterol levels are several ways Americans can help keep themselves from developing cardiovascular diseases.*

### Communities for Heart Health

A healthy lifestyle can prevent cardiovascular disease (CVD) or improve the health of people already affected by heart disease or stroke. Researchers at several Prevention Research Centers (PRCs) are training community members to promote heart health in their neighborhoods. Some residents conduct workshops in tobacco cessation, nutrition, or physical activity, while others lead health fairs, walking clubs, and exercise classes. The training helps improve people's heart health and gives communities the know-how to develop programs and activities that address other health needs.

Researchers at a PRC in California are studying whether a community's social capital (resources that enhance trust, cooperation, and social engagement among residents and organizations) can affect the incidence of CVD. Indicators being measured include membership in religious and civic organizations, crime rates, housing turnover, voter

registration, and number of single-parent families. Researchers in Alabama are also studying social capital in more than 20 communities in a disadvantaged rural region. The PRC will see if social capital affects how well a community can implement a heart-healthy intervention led by community health advisors.

PRCs work to prevent heart disease in people of all backgrounds, tailoring intervention programs to reach specific groups. Centers in Oklahoma, New Mexico, and Washington are working with American Indian and Alaska Native youth. The teaching methods and materials are adapted to the students' learning styles; the curriculum is visual, experiential, holistic, and collaborative and includes traditional storytelling.

In Alabama, another PRC emphasizes African-American communities and families working together to promote nutrition and physical activity. Participants created a cookbook that offers

heart-healthy recipes for traditional Southern soul food. Other PRCs work to prevent heart disease among Hispanics in Southwest border communities and among aging adults.

## Addressing Women's Needs

Researchers at PRCs in California, North Carolina, and West Virginia are addressing the needs of low-income women at risk for heart disease who may not have access to dietary counseling. Little by Little is a low-cost, easy-to-use program on computer disk that helps women assess their diets, learn about nutrition, get personal recommendations, and set goals for improving dietary habits. Of 300 initial participants, 90% said they learned something new and put their dietary goals into practice—even after spending only about 12 minutes using the program. Subsequently, about 500 middle-aged, low-income women participated in a randomized, controlled trial of Little by Little. After just one viewing of the program, women increased the number of fruits and vegetables they eat every day.

## Working Together

Five PRCs constitute the Cardiovascular Health Intervention Research and Translation Network, which coordinates heart disease prevention research among the

centers. The researchers look for gaps in CVD knowledge, synthesize research results, and disseminate

## Spotlight on Success

**In Missouri, PRC-led researchers trained members of 12 community coalitions to promote health and education activities aimed at reducing people's risk for heart disease and other chronic diseases. The trainees helped their coalitions conduct health fairs for more than 10,000 school children and their families, lead aerobics and arthritis exercise classes, organize community sports teams, and build 25 walking trails.**

**Other coalition activities included free cholesterol and blood pressure screenings for more than 2,500 participants, and workshops on tobacco education and healthy eating. The coalitions are working alongside the center to establish local policies to restrict smoking in public places and schools, create and upgrade walking trails to increase physical activity, and make it easier for residents to obtain fruits and vegetables from local grocers.**

proven interventions. Each network member works with local and state partners on individual projects, such as West Virginia University's CARDIAC Project, a risk surveillance and intervention initiative recognized in 2004 as the best rural public health program in the nation by the American Public Health Association. Through collaboration, communication, and setting milestones for evaluation, the researchers strengthen each others' work.

## Improving Care for People with CVD

Stroke is the leading cause of disability for U.S. adults, but rehabilitation can reduce the extent of disability among stroke survivors and help them recover. In California, however, 47% of adults who had a stroke did not receive outpatient rehabilitation services. Researchers are examining the types of services that are provided to various groups and whether race, ethnicity, sex, age, or socioeconomic status are associated with differences in referrals to and enrollments in such services. The researchers are reviewing the records of about 1,000 patients enrolled in Medicare and about 45,000 patients enrolled in a private health-care system and will share results with policy-makers, hospital administrators, and other health-care providers.