FOUR DOMAINS OF CHRONIC DISEASE

Organizing Our Work to Be More Effective

CDC is committed to leading strategic public health efforts to prevent chronic conditions, help people be healthier, and end health disparities. To be more effective, CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) is working to coordinate its efforts in four key areas or domains:

- Epidemiology and Surveillance.
- Environmental Approaches.
- Health System Strategies.
- Community-Clinical Links.

How the Four Domains Define Our Work

Chronic diseases—such as heart disease, stroke, cancer, diabetes, and arthritis—are the leading causes of death and disability in the United States. They account for more than 75 cents of every dollar our nation spends on health care. If Americans lived in healthier environments and received needed prevention services in their communities and health care settings in timely ways, much of this burden of poor health and high costs could be lifted. But resources to prevent and control chronic diseases are limited. By coordinating our efforts, we can be more efficient and reach more people.

The four domains are a new way to think about and organize the work NCCDPHP has been doing for many years. This framework will help us, our grantees, and our partners find new ways to work together and support each other's efforts.

The four domains will help us focus on strategies that

- Collectively address the behaviors and other risk factors that can cause chronic diseases rather than addressing them in piecemeal ways.
- Address multiple diseases and conditions at the same time.
- Reach as many people as possible by promoting health promoting environments, and improving the performance of public health and health care systems.
- Link community and health care efforts to prevent and control disease.

By coordinating our efforts, we can improve the health and quality of life of millions of Americans. We can give people the tools they need to make healthy choices and control their own health. The four domains give CDC and our partners a strong foundation to work together to set priorities, share resources, and make real change.

What Are the Four Domains?

Domain 1: Epidemiology and Surveillance

Epidemiology and surveillance allow us to collect, analyze, and share data to help identify and solve problems and evaluate public health efforts. The data can be used to guide and monitor programs and interventions, research, and policies to improve public health.

By collecting data at all levels—national, state, and local—we can identify gaps in services, develop effective interventions, and track our progress in meeting health goals. This information can be used to educate decision makers and the public about the high rates of death and disability and high health care costs associated with chronic diseases and what CDC is doing to prevent and control them. It can also be used to identify what works and to set priorities, so our efforts will be as effective as possible.

Strategies That Have Been Proven to Work

- Track chronic diseases and their risk factors and share the information in easy-to-use formats. Data are collected now in many ways, including surveys (e.g., the Behavioral Risk Factor Surveillance System), birth and death certificates (National Vital Statistics System records), and health care data (such as Medicare data sets).

- Monitor behavioral risk factors, social and environmental factors that influence health, and policies associated with chronic diseases—for example, those related to smoke-free air, access to healthy foods, and community water fluoridation.

- Use health care data to conduct public health surveillance of key preventive services, such as cancer screening and the "ABCS" of heart disease and stroke prevention (aspirin, blood pressure, cholesterol, and smoking).

Domain 2: Environmental Approaches

Environmental approaches promote health and support and reinforce healthy behaviors in schools and child care settings, work sites, and communities.

Changes to social and physical environments can make it easier for people to make healthy choices and take charge of their health. Approaches that change the environment reach more people, are more cost efficient, and are more likely to have a lasting effect on population health.

Strategies That Have Been Proven to Work

- Promote the use of national nutrition standards in public- and private-sector settings, including work sites, child care programs, schools, and senior centers, to improve the foods and beverages offered to people of all ages.

- Increase access to healthy foods and beverages through policies and programs that expand options in underserved areas, promote farmers' markets, and prompt restaurants to offer healthy menu items.

- Make sure all schools offer high-quality physical education and all child care programs follow national physical activity standards.

- Design streets and communities in ways that make it easier and safer for people to be physically active.
- Support smoke-free policies in work sites, public places, multi-unit housing (such as apartments or condos), and health care settings.
- Support strategies to reduce young people's access to tobacco—for example, by raising the price of tobacco products, and making them less visible in stores.
- Increase the number of people who are served by community water systems that have optimal levels of fluoride to prevent cavities.

Domain 3: Health System Strategies

Health system strategies improve the delivery and use of clinical and other preventive services that are designed to prevent disease or detect it early, reduce risk factors, and manage complications.

By improving health systems, we can improve health care outcomes and make sure as many people as possible are using health care services that improve the health of the population .. Effective strategies include increasing the use of team-based care, electronic health records, and policies that require reporting of key health outcomes (such as control of high blood pressure) and that reward good performance. Health systems can set up systems that remind clinicians to follow up on abnormal test results and give them feedback on how well they are performing. .

Strategies That Have Been Proven to Work

- Encourage medical payers to cover health care services such as disease screenings.
- Strengthen partnerships with state Medicaid programs and insurers to increase coverage for underserved populations.
- Implement health information technology systems to more effectively manage the delivery of health services.
- Increase the use of team-based care in health systems.

Domain 4: Community-Clinical Links

Strategies that link community and clinical services ensure that people with or at high risk of chronic diseases have access to the resources they need to prevent or manage these diseases.

These strategies include making sure people are referred to appropriate medical care, community services, or programs that can help them take charge of their health. Health systems also can develop community outreach programs to promote clinical preventive services so more people will use them. If people get the help they need to prevent or manage chronic diseases, they can improve their quality of life, delay the onset or progression of disease, avoid complications, and reduce the need for more health care.

Strategies That Have Been Proven to Work

- Increase use of community interventions such as chronic disease self-management programs, the National Diabetes Prevention Program, and smoking cessation services by

making effective community programs widely available, ensuring that doctors refer their patients to them, and lining up insurance coverage of these programs.

- Link existing public health systems, such as tobacco quitlines in the states, with health care systems.

- Use electronic health records to link existing public health systems and health care systems.

- Use health care data for public health surveillance, such as cancer registries.

- Encourage more people working in health care positions—such as pharmacists, patient navigators, and community health workers—to get involved in helping people manage their own health.