

STEPS TO A HEALTHIER US:  
A PROGRAM AND POLICY PERSPECTIVE



## Prevention Programs in Action

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2003  
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES



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## FOREWORD

Nothing inspires like success. This reference describes exemplary prevention programs from states and communities across the United States—showing us that prevention is possible in every corner of our country and for all of our citizens. I know you will find something here that inspires your leadership.

To support the President’s *HealthierUS* initiative, I am leading a new department-wide effort—*Steps to a HealthierUS*. The heart of this program is personal responsibility for the choices Americans make and social responsibility to ensure that policy makers support the programs that foster healthy behaviors and prevention.

*Steps* envisions a healthy, strong United States—where diseases are prevented when possible, controlled when necessary, and treated when appropriate. *Steps* is a bold shift in our approach to the health of our citizens, moving us from a *disease* care system to a *health* care system. We can no longer sustain the skyrocketing health care costs that over-reliance on treatment has created, nor can Americans sustain the suffering that preventable diseases cause.

We have initially focused the *Steps* initiative on reducing the major health burden created by obesity, asthma, diabetes, heart disease and stroke, and cancer. *Steps* will also address the related lifestyle choices of poor nutrition, physical inactivity, tobacco use, and risky youth behavior. The examples of successful state prevention programs presented in this document show that we can prevent or control these conditions and the risk factors that cause them.

As American leaders, we are fortunate to have a rich diversity of communities to guide us. I hope this volume moves you to follow others’ good examples, or to find your own steps to a healthier US.

Tommy G. Thompson  
*Secretary of Health and Human Services*  
*U.S. Department of Health and Human Services*



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# **REDUCING THE BURDEN OF DISEASE**



# Asthma





# California

## Controlling Asthma Through Comprehensive State-Based Plans

### Public Health Problem

Nearly 3 million Californians (8.8%) suffer from active asthma. Lifetime asthma prevalence increased 66% between 1984 and 2001. In 2000, more than 37,000 Californians were hospitalized and 555 died because of asthma. California's age-adjusted mortality rate for asthma (16.8) is above the national average (15.4).

### Evidence That Prevention Works

Asthma is controlled through a two-pronged approach: (1) preventing and managing symptoms with medicine and (2) preventing and managing environmental factors that trigger asthma. Effective asthma control can improve quality of life, reduce medical costs, and reduce the number of asthma-related emergency department visits, hospitalizations, school and work days missed, days of restricted activity, and deaths each year.

### Program Example

The California Department of Health Services and a diverse advisory committee consisting of California asthma professionals, coalitions, local public health agencies, educational agencies/schools, and health care plans have developed and are implementing the state's integrated asthma control plan. The plan's major components include surveillance and evaluation, public education, asthma treatment and management, secondary prevention of asthma, and policy. California will support and expand its asthma partnerships, currently consisting of more than 350 partners, and provide technical assistance to local coalitions and public health departments in monitoring and reducing the asthma burden.

### Implications

This plan will help improve the coordination and effectiveness of asthma control activities in the state, resulting in improved health for those with asthma and a decrease in asthma-related medical costs.

### Contact Information



## Controlling Asthma Through Education

### Public Health Problem

In 1999, more than 710,000 adults in Illinois reported that they had asthma, and 26.3 of every 10,000 children under 15 years of age discharged from the hospital had a diagnosis of asthma. That same year, 256 Illinois residents died of asthma.

### Evidence That Prevention Works

Asthma is controlled through a two-pronged approach: (1) preventing and managing symptoms with medicine and (2) preventing and managing environmental factors that trigger asthma. Effective asthma control can improve quality of life, reduce medical costs, and reduce the number of asthma-related emergency department visits, hospitalizations, school and work days missed, days of restricted activity, and deaths each year.

### Program Example

The American Lung Association of Metropolitan Chicago (ALAMC) is implementing the American Lung Association's "Open Airways for Schools (OAS)" intervention in seven Latino communities in Chicago. ALAMC is working collaboratively with community-based organizations to identify and train community members to recruit schools and implement OAS. These partners are working toward implementing OAS in more than 40 schools.

### Implications

The "Open Airways for Schools (OAS)" intervention has been shown, along with other positive outcomes, to increase children's self-management skills and self-efficacy as well as children's influence on parental asthma management decision making. Results also showed a decrease in the annual frequency and average duration of self-reported asthma attacks. During one evaluation of the intervention, the number of symptom days decreased by 43% in one year in the intervention group.





## Implementing a School-Based Asthma Education Program

### Public Health Problem

Eighteen percent of all students attending Detroit public schools have diagnosed asthma. According to the *Kids Count in Michigan 2000 Data Book*, asthma is the leading cause of serious illness among children and the primary cause of hospitalization for children in Michigan. Low-income African American, Hispanic, and male children are at greatest risk. Nationally, asthma causes more school absences than any other chronic childhood disease.

### Evidence That Prevention Works

When children with asthma, their parents, and the school staff receive education on asthma management, the children experience fewer asthma episodes. Also, staff, students, and parents are more aware of asthma triggers and are more likely to take steps to reduce the triggers in the home and school environment, and parents are more likely to adhere to the medical regimen outlined by the physician.

### Program Example

Detroit public schools implemented a 3-year Asthma Education Program in 33 elementary schools targeting 2<sup>nd</sup>–5<sup>th</sup> graders diagnosed as having asthma. The objectives of the program were to educate students, parents, and school staff about asthma management and to control exposure to factors that trigger asthma attacks. A unique component of Detroit's program was the use of student educators to teach the lessons under the supervision of the district school nurses. These student educators were 11<sup>th</sup> and 12<sup>th</sup> graders enrolled in an allied health curriculum. Between January and May 2002, a total of 290 students received asthma management education.

### Implications

As a result of this program, students, staff, and parents in Michigan are able to recognize asthma triggers and to take the necessary steps to reduce or eliminate these triggers at school and at home. In addition, students with asthma better understand that they must take responsibility for managing their asthma by adhering to the written asthma plans developed by their primary care providers.

### Contact Information

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# New York



## Controlling Asthma Through Education

### Public Health Problem

Asthma affects more than 1 million adults and 250,000 children in New York. The state's age-adjusted mortality rate for asthma (18.0) is above the national average (15.4). In 2000, New Yorkers were hospitalized a total of 39,600 times because of asthma. Nationally, people miss 14 million days of school and experience 100 million days of restricted activity because of asthma each year.

### Evidence That Prevention Works

Asthma is controlled through a two-pronged approach: (1) preventing and managing symptoms with medicine and (2) preventing and managing environmental factors that trigger asthma. Effective asthma control can improve quality of life, reduce medical costs, and reduce the number of asthma-related emergency department visits, hospitalizations, school and work days missed, days of restricted activity, and deaths each year.

### Program Example

In collaboration with several community health centers, the Bronx-Lebanon Hospital Center is implementing the Asthma and Allergy Foundation of America's "Asthma Care Training (ACT) for Kids" intervention for children aged 8 to 12 years who have persistent asthma. Approximately 160 children and their parents are expected to complete the ACT program in 2003.

### Implications

The ACT intervention has been shown, along with other positive outcomes, to (1) increase knowledge of asthma triggers, (2) increase self-reported asthma control compliance behaviors, (3) reduce the number of emergency room visits and days of hospitalization for children with asthma, and (4) reduce medical costs.



## Controlling Asthma Through Individualized Plans

### Public Health Problem

It is estimated that more than 1 million Texans have asthma. There were 249 deaths in Texas due to asthma in 1999. Nationally, there are between 400,000 and 500,000 hospitalizations, 14 million school days missed, and 100 million days of restricted activity due to asthma each year.

### Evidence That Prevention Works

Asthma is controlled through a two-pronged approach: (1) preventing and managing symptoms with medicine and (2) preventing and managing environmental factors that trigger asthma. Effective asthma control can improve quality of life, reduce medical costs, and reduce the number of asthma-related emergency department visits, hospitalizations, school and work days missed, days of restricted activity, and deaths each year.

### Program Example

The University of Texas Health Science Center-San Antonio and CHRISTUS Santa Rosa Children's Hospital are implementing CDC's inner-city asthma intervention. The intervention targets high-risk, urban families who often require intensive interventions to improve asthma outcomes and is designed to enhance medical care provided by primary care physicians and specialists. Through group and tailored individual sessions, an asthma counselor (a master's-level social worker) helps families learn to effectively manage their children's asthma.

### Implications

The program puts into practice the findings of the National Institutes of Health's National Cooperative Inner-City Asthma Study, which has been shown to decrease the number of days children suffer from asthma symptoms. By learning to control asthma in individual patients, families will be better able to prevent visits to the emergency department, hospitalizations, and deaths due to asthma.

### Contact Information



## Controlling Asthma in American Cities

### Public Health Problem

In Virginia, 13.7% of African Americans and 10.4% of whites have asthma. In 1999, more than 11,000 people were hospitalized and 108 died because of asthma. Children were hospitalized at rates nearly twice those of adults. In addition, national figures show that 14 million days of school are missed and 100 million days of restricted activity are due to asthma each year.

### Evidence That Prevention Works

Asthma is controlled through a two-pronged approach: (1) preventing and managing symptoms with medicine, and (2) preventing and managing environmental factors that trigger asthma. Effective asthma control can improve quality of life, reduce medical costs, and reduce the number of asthma-related emergency department visits, hospitalizations, school and work days missed, days of restricted activity, and deaths each year.

### Program Example

A collaborative called “Controlling Asthma in the Richmond Metro Area” (CARMA) is working to improve asthma management among urban children up to 18 years of age. To help achieve this goal, the collaborative is developing relationships among school systems, Head Start, local physician groups, medical organizations, and social organizations. The collaborative is designing and, in some cases, pilot-testing interventions aimed at improving the asthma management skills of preschool and elementary school personnel, families, and physicians and developing ways to provide families of children with asthma with support, education, and medical referrals. Because some studies indicate that obesity might be a risk factor for developing asthma, the project is focusing on interventions that can reduce the risk of childhood obesity as a strategy for preventing asthma and asthma symptoms.

### Implications

This project is expected to help improve community and individual capacity to control asthma, thereby improving the health of those with asthma and decreasing asthma-related medical costs.

# Diabetes





## Implementing an Outreach Network and Control Program to Prevent or Delay the Onset of Diabetes

### Public Health Problem

In 2000, the estimated number of adults in Michigan diagnosed with diabetes was 491,000, or 6.7% of Michigan's adult population. In addition, 574,800 Michigan adults aged 40–74 have prediabetes or impaired glucose tolerance (IGT). In 2000, diabetes was the sixth leading cause of death for Michigan residents. Diabetes-related medical care in Michigan exceeded \$2.9 billion, with 60% of these costs attributed to hospitalization.

### Evidence That Prevention Works

Multiple national and international studies have established the effectiveness of diabetes care improvement and patient self-management in reducing and delaying the onset of blindness, the need for foot or lower-extremity amputations, kidney disease, and many other diabetes outcomes. Recent diabetes prevention clinical trials have clearly demonstrated that among those with prediabetes, diabetes onset can be prevented or significantly delayed through modest improvements in nutrition, weight control, and exercise levels.

### Program Example

The Michigan Diabetes Outreach Network (MDON) is composed of six regional Diabetes Outreach Networks. As part of this program, the networks have a Diabetes Care Improvement Project and work with over 150 agencies in the state. The agencies include physician offices, community health centers, home care agencies, state certified diabetes self-management education programs, and a range of other health care providers. The networks collaborate with the agencies to ensure that people with diabetes receive care according to current American Diabetes Association (ADA) clinical practice recommendations. Data are collected during the initial patient visit and follow-up appointments to determine how to improve care. The data through 2001 for A1C monitoring, foot exams, and microalbuminuria (kidney disease) assessments (all done at least once annually) show a significant improvement in the number of people with diabetes who have these tests done. In 2001, A1C tests increased from 14% in 1996 to 78%, and foot exams increased from 58% in 1996 to 77%. Microalbuminuria tests were added to the data system in 2000 and increased from 22% to 28% in the number of people tested between 2000 and 2001. MDON clients also reported significantly improved physical activity levels and nutritional planning.

### Implications

Results from MDON demonstrate that working with health care agencies and providers through a statewide Diabetes Care Improvement Project can improve outcomes for people with diabetes. This program demonstrates that a regional network can play an effective role in helping to assure that all care provided to clients is based on ADA clinical practice recommendations.

### Contact Information



# Minnesota

## Establishing a Community-Based Diabetes Coalition to Reach Rural Populations Through Public-Private Collaboration

### Public Health Problem

An estimated 276,000 Minnesotans have diabetes; however, many people with diabetes do not receive recommended preventive care services and self-management education to help prevent diabetes complications.

### Evidence That Prevention Works

Studies demonstrate that intensive preventive care, controlling blood glucose levels, improved nutrition, and increased drug therapy compliance significantly reduce adverse diabetes outcomes such as premature death, blindness, kidney failure, or lower-extremity amputations.

### Program Example

The Minnesota Diabetes Prevention and Control Program partnered with two community-based coalitions in rural counties to develop and test a public-private collaboration called the Diabetes Community Collaboration Program (DCCP). The DCCP brought together potentially competing groups of diabetes stakeholders, including local public health agencies, private health care organizations, and community groups, to identify and address common goals for diabetes care and education. The coalitions planned, implemented, and evaluated a broad range of activities in their communities for people with diabetes, the general public, health care systems, and health care providers. One coalition developed a community diabetes registry that is used for monitoring diabetes care, providing ongoing diabetes education, and reminding registrants to obtain needed health care services. Both coalitions have expanded educational opportunities for people with diabetes by providing ongoing diabetes education through local media, community events, formal education, and support groups. Each coalition has created opportunities for health care providers to receive updates about the standards of diabetes care through professional education workshops. The coalitions' efforts resulted in diabetes care improvements in the local clinics between 1995 and 2000. Clinic patient chart audit data showed that A1C testing increased by 82% in Rice County and by 300% in northern Koochiching County. Kidney function testing rose by 80% and 400%, respectively; median A1C levels decreased by 9.4% and 17%, respectively. Lipid levels also shifted from higher to lower risk categories.

### Implications

The DCCP diabetes coalitions created community networks, improved diabetes care, increased education among diabetes patients to empower them to advocate for their own care, and improved diabetes education among health care professionals and providers. This program is an example of how the Diabetes Today community model can be implemented within a local health care system to increase coordination, collaboration, and resource sharing to reduce the burden of diabetes.





# Missouri

## Establishing a Diabetes Collaborative to Implement the Chronic Care Model and Monitor Available Health Services

### Public Health Problem

Diabetes-related care for high-risk, medically underserved, and racially/ethnically diverse populations must be improved to decrease health disparities and prevent serious diabetes complications. In 2001, an estimated 6.5% of adult Missourians (about 276,453 persons) reported physician-diagnosed diabetes.

### Evidence That Prevention Works

Studies have shown that by providing better access to preventive care, diabetes-related outcomes such as blindness, kidney failure, and lower-extremity amputation can be prevented or delayed.

### Program Example

The Missouri Diabetes Prevention and Control Program (MDPCP) collaborated with six federally qualified health centers (FQHCs) and one National Health Service site that participated in the Bureau of Primary Health Care's National Health Disparities Diabetes Collaborative. From June 2000 to June 2002, each center implemented the Chronic Care Model in one or more clinics, forming teams of diabetes-related health care specialists. Each center established an initial "population of focus," a registry of patients with diabetes. Additional provider or site registries were added as the project period progressed. The Diabetes Electronic Measurement System (DEMS) was used to monitor indicators of health status, health behaviors, and services received. The MDPCP's second-year evaluation of aggregate data from the combined diabetes registries of the seven Missouri health centers participating in the Diabetes Collaborative found that the number of patients enrolled in the Diabetes Collaborative increased from 1,107 to 3,431, or by 210%. In the aggregate registries, there were significant improvements in the prevalence of 10 key measures: (1) average A1C value (-3%), (2) retinal eye exam (+197%), (3) dental exam or referral (+325%), (4) foot exam (+18%), (5) influenza vaccination or referral (+149%), (6) cholesterol testing (+37%), (7) body mass index calculation (+15%), (8) diabetes education (+78%), (9) self-management goal setting (+24%), and (10) nutrition counseling (+92%).

### Implications

In Missouri, the health centers' participation in the Midwest Cluster of the National Diabetes Collaborative made and sustained substantial improvements in the quality of care for their patients with diabetes. Future efforts should focus on maintaining and improving these gains while extending their benefits to other Missourians with diabetes. This program demonstrates the importance of team delivery of comprehensive health care and increasing patients' participation in the management of their diabetes.

### Contact Information

# Montana

## Forging Partnerships to Reach Disparate Populations: Indian Health Service, Urban, and Tribal Diabetes Programs

### Public Health Problem

The prevalence of diagnosed diabetes is 12% among adult Montana American Indians in Montana, which is approximately two times higher than among non-Indian adults. Indian Health Service, urban, and tribal diabetes programs face many challenges in providing quality care to their diabetes patients as well as in implementing diabetes prevention activities because of the large number of American Indians with diagnosed diabetes and the geographic remoteness of the reservations in Montana.

### Evidence That Prevention Works

Recent primary prevention studies have demonstrated that weight loss and regular physical activity can delay the onset of diabetes among people at high risk of developing the disease. Similarly, the results from secondary prevention trials indicate that intensive management of diabetes can prevent the development of serious diabetes-related complications.

### Program Example

Beginning in 1997, the Montana Diabetes Prevention and Control Program (DPCP), the Billings Area Indian Health Service (IHS) diabetes program, the urban Indian program, and each of the tribal and IHS diabetes programs developed an effective collaborative partnership to identify and reduce the burden of diabetes among American Indians in Montana. Specifically, this partnership has addressed community-based health systems, health communications strategies, and surveillance, including establishing a surveillance system to monitor trends in diabetes prevalence and the quality of care among American Indian youth. Through this partnership, epidemiologic support was provided to assist diabetes coordinators in summarizing information from their ongoing school screening programs to assess diabetes risk among youth and assess trends in preventive services and clinical outcomes. A software system also was developed to support a community-based project between the University of Montana and the Salish and Kootenai tribes to improve physical activity and nutrition among American Indians at risk for diabetes.

### Implications

These unique collaborative efforts combine the resources, expertise, and “people-power” of the tribal and IHS diabetes programs and the state to reduce the burden of diabetes in Montana. The surveillance, community-based health systems, and health communications strategies will enable the tribal and IHS diabetes programs to monitor trends in diabetes among their young people, evaluate the effectiveness of their diabetes prevention activities, and identify opportunities to improve care for their patients with diabetes.

### Contact Information

# North Carolina

## Establishing Self-Management Diabetes Education Programs to Reach Special Populations

### Public Health Problem

Diabetes places a tremendous health burden on the citizens of North Carolina. An estimated 584,000 people have diabetes in North Carolina, and one third of these people probably do not know they have the disease. From 1995 to 2000, the prevalence of diagnosed diabetes in the adult population increased by 42% (from 4.5% to 6.4%); this percentage translates to about 389,000 people with diagnosed diabetes in North Carolina.

### Evidence That Prevention Works

Research, such as the National Institutes of Health's Diabetes Control and Complications Trial, confirms that people with diabetes can drastically reduce their risk for serious complications by controlling their blood glucose levels and following recommended screening guidelines so complications can be detected early. Up to 90% of diabetes-related blindness and over 50% of diabetes-related lower-extremity amputations and kidney failures are preventable.

### Program Example

Project DIRECT (Diabetes Interventions Reaching and Educating Communities Together), focuses on the African American community in Southeast Raleigh. Project DIRECT offers a comprehensive approach to prevention and works to reduce the risk factors for diabetes (by promoting increased physical activity and improved dietary practices) and to increase overall awareness of diabetes and its risk factors and complications. Project DIRECT also works to increase the number of people at high risk who are screened for diabetes and to increase the number of people with diagnosed diabetes who receive regular diabetes care. In its first year, Project DIRECT increased the number of diabetes patients who received foot care counseling and foot exams from approximately 20% to 50%. Patient chart audits also have shown increased numbers of people with diabetes who monitor their blood glucose levels at home; participate in diabetes education; monitor their A1C levels; and get ophthalmology referrals, microalbuminuria (kidney disease) assessments, and vascular exams.

### Implications

Project DIRECT demonstrates that significant changes in the preventive care practices of health care providers can lead to overall improvements in care and can reduce the devastating complications of diabetes. Diabetes self-management education can provide special populations, such as the African American community that was reached through Project DIRECT, with some of the necessary tools to manage their diabetes more effectively.

### Contact Information

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## Working With Health Care Providers to Implement Care Management Strategies to Ensure Appropriate Diabetes Testing

### Public Health Problem

Utah residents with diabetes are not receiving health care services recommended by the American Diabetes Association (ADA), such as A1C tests and eye exams. Data collected from health plans in Utah showed that although 77% of the commercial health plan members with diabetes had received at least one A1C test in the preceding year, only 23% had levels below 7%, and only 42% had levels below 8%. In the Medicaid health plans, the percentages were 78% tested, 26% below 7%, and 44% below 8%.

### Evidence That Prevention Works

Results from the Diabetes Control and Complications Trial and the United Kingdom Prospective Diabetes Study have shown that maintaining near normal blood glucose levels (at or below 7%) could significantly reduce diabetes complications. Other studies have shown that regular eye exams and tests for kidney function can prevent or delay diabetic eye disease and kidney failure.

### Program Example

To help meet the recommended standards of care for people with diabetes, the Utah Diabetes Prevention and Control Program convened a group of nine health plans to develop, implement, and evaluate care management strategies. The health plans matched members with diabetes to their most likely primary care provider and determined whether the members had received the recommended screening tests by using HEDIS measurements. Members received a personal profile of their screening test history and information on the recommended tests and their frequency, their health plan's policy for reimbursement for each test, and an incentive for getting an eye exam (e.g., a 60-minute telephone calling card). After the program was implemented in March 2000, participating health plans collected HEDIS data on diabetes-related screening tests from 3,000 patient charts to evaluate the intervention. The results, although not exclusively attributed to the intervention, were significant. A1C testing for commercial and Medicaid plan members increased 12.5% to 86% and 1.5% to 79%, respectively. Commercial plans increased the percentage of patients with A1C levels below 7% to 33% (a 40% increase); the percentage below 8% increased to 53% (a 25% increase). For the Medicaid plans, there were also improvements in A1C levels among patients (by 19% for those below 7% and by 18% for those below 8%). The percentage of documented eye exams improved for both commercial (by 18% to a level of 47%) and Medicaid (by 5% to a level of 48%) plans.

### Implications

This program demonstrates that testing to detect eye and kidney disease early and monitoring A1C levels can be increased substantially by direct health plan involvement. Preventing severe vision loss and halting the progression of kidney disease alone could significantly improve the quality of life of many people with diabetes and save millions of dollars in medical costs.

# Washington

## Improving Diabetes Care in Community Health Centers Through a Statewide Collaborative

### Public Health Problem

Of the 217,000 Washington residents who are diagnosed with diabetes, 20% to 48% of them have extremely high blood sugar measurements. In 1999, diabetes was associated with 56,485 hospitalizations in Washington at a cost of \$671 million. Many of these hospitalizations could have been prevented through early detection and appropriate diabetes management, including blood sugar control.

### Evidence That Prevention Works

Prevention of elevated blood sugar can dramatically prevent other health problems for people with diabetes and potentially reduce health care costs. A systematic and collaborative approach to shift the medical care delivery system to a chronic care focus can improve blood sugar levels and other diabetes indicators in patients who participate in primary care organizations.

### Program Example

The Washington State Department of Health Diabetes Prevention and Control Program and Qualis Health (a Medicare Quality Improvement Organization) sponsored the Washington State Diabetes Collaboratives (WSDC) I and II. WSDC I and II are quality improvement projects for primary care practices to improve health outcomes for people with diabetes. Seventeen practice teams and 10 health plans participated in WSDC I, and 30 practice teams and 7 health plans participated in WSDC II. Teams established a registry to track their patients with diabetes and test and implement changes in their practice using the Chronic Care Model as a framework. The Washington State Diabetes Prevention and Control Program developed the Diabetes Electronic Management System (DEMS) and provided this tracking system and technical assistance to participating clinics free of charge. After a 13-month intensive phase, the Diabetes Prevention and Control Program and Qualis Health continue to provide services and encouragement to support the clinical practice teams continuing their work. Some of these services include maintaining an active E-mail list for team members to consult their peers, providing aggregate quarterly reporting to give teams a statewide benchmark, providing ongoing DEMS registry support, and training new staff. Among 981 patients, blood sugar levels decreased on average by approximately 10%, and the prevalence of patients who had extremely high blood sugar levels decreased from 24% to 17%.

### Implications

The Washington State Diabetes Collaboratives are producing results and demonstrate that this state Diabetes Prevention and Control Program can play a critical role in improving diabetes care.

### Contact Information



## Establishing Statewide Guidelines and Promoting Provider Collaboration to Reduce the Burden of Diabetes

### Public Health Problem

In 2000, an estimated 326,000 adults in Wisconsin had diabetes. This estimate includes both diagnosed and undiagnosed diabetes. In 2000, there were 78,790 diabetes-related hospitalizations in Wisconsin, costing more than \$1.03 billion.

### Evidence That Prevention Works

National and international studies have shown that improved diabetes care and patient self-management can delay blindness, lower-extremity amputations, kidney disease, and other adverse outcomes in people with diabetes. Recent diabetes prevention clinical trials clearly have demonstrated that, among those with prediabetes, the onset of diabetes can be prevented or delayed significantly through modest improvements in nutrition, weight control, and exercise levels.

### Program Example

In 1998, the Wisconsin Diabetes Advisory Group (DAG) developed and published *Essential Diabetes Mellitus Care Guidelines* as a way of improving diabetes care through health care providers and health systems. Over 70% of Wisconsin's licensed health maintenance organizations (HMOs) adopted or adapted these guidelines. The Wisconsin Diabetes Prevention and Control Program, in partnership with the University of Wisconsin Department of Population Health Sciences, members of DAG, and state HMOs developed the Wisconsin Collaborative Diabetes Quality Improvement Project. Broadly, the Collaborative Project's strategic goals include evaluating the implementation of the *Essential Diabetes Mellitus Care Guidelines*; sharing resources, population-based strategies, and best practices among collaborators; and improving diabetes care through collaborative quality improvement initiatives. Aggregate data from the project's third-year evaluation show that the Wisconsin collaborators performed at a level that exceeded the National Committee on Quality Assurance (NCQA) regional and national averages on each of the six diabetes measures (A1C monitoring, A1C control, LDL-cholesterol screening, LDL-cholesterol control, eye exams, and kidney disease screening). Additionally, the majority of Wisconsin's HMOs currently participate in the project. The collaborators also initiated a statewide quality improvement intervention to increase eye exams and improve reporting of exam results and recommendations.

### Implications

This program demonstrates the importance of promoting collaboration to share best practices and effective strategies that lead to quality interventions to improve diabetes prevention and control measures.

# Cancer





# **Cancer Prevention and Control**





# Alabama

## Using Community Health Advisors to Encourage Women to Obtain Cancer Screening Services

### Public Health Problem

In 2000, nearly 2,700 women were diagnosed with breast cancer in Alabama. In selected counties, there were more breast cancer deaths among African American (30/100,000) than among white (20/100,000) women.

### Evidence That Prevention Works

Mammography is the most effective method for detecting breast cancer early. Timely mammography screening could prevent 15%–30% of all deaths from breast cancer among women aged 40 or older. Additionally, detecting precancerous lesions by a Pap test and treating them can prevent cervical cancer and therefore prevent virtually all cervical cancer deaths.

### Program Example

The University of Alabama at Birmingham Breast and Cervical Cancer Coalition involves a variety of community-based, religious, grassroots, and health care organizations that serve the target population. The community action plan is designed to reduce disparities in breast and cervical cancer screening and outcomes between African American and white women through the use of community advisors. Core working groups of community health advisors, nurses, and church representatives disseminate information to support, encourage, and help women obtain cancer screening services and navigate the health care system. This approach is based on the Multilevel Approach Toward Community Health (MATCH) framework. Using health advisors, MATCH seeks to eliminate barriers that women face when trying to access health services.

### Implications

Using community-based health advisors as agents for behavioral change lends credibility to interventions to reduce the risk for breast and cervical cancer and increases the reach of the program in the community. This approach can extend lifesaving prevention programs and screening services across cultural divides to communities that would not likely be reached by traditional means.

### Contact Information

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# California



## Broadening Access to Asian Populations Through a Breast Cancer Hot Line

### Public Health Problem

In California in 2002, an estimated 19,900 cases of breast cancer were diagnosed, and 3,900 women died of breast cancer. Racial and ethnic minorities are disproportionately affected by cancer. For Asian American women, cancer has been the leading cause of death since 1980. A variety of factors, including cultural differences, language barriers, and logistical barriers such as lack of transportation to and from a clinic, contribute to these women never or rarely having been screened for breast and cervical cancer.

### Evidence That Prevention Works

Interventions based on cultural sensitivity and trust are effective in promoting the early detection of breast cancer in racial and ethnic minority populations. For those populations who speak little to no English, eliminating language barriers is often a first step in successful outreach and education efforts.

### Program Example

The California Department of Health's *Every Woman Counts* program launched the first statewide breast cancer hot line in the United States for Asian American women. As a way of reaching this population, the department broadened its hot line to offer information in Chinese (Mandarin and Cantonese dialects), Korean, and Vietnamese, in addition to the information already offered in English and Spanish. Through its 2000 public awareness campaign, *Every Woman Counts...Every Year*, the department sponsored radio and print ads in Chinese, Korean, and Vietnamese to let Asian American women know about the hot line. Because of the campaign, the number of calls to the hot line increased from 24 in April 2000 to 576 in June 2000. On average, the hot line continues to receive approximately 60 to 80 calls per month, three times the number received prior to the campaign.

### Implications

As a result of the hard work and sensitivity of the outreach workers, access to potentially lifesaving information was improved. Hundreds of women learned about available cancer screening services because of linguistically and culturally appropriate outreach efforts. This program demonstrates the importance of reaching special populations through a targeted public awareness campaign.



# California

## Creating Customized Community Action Plans: Responding to the Needs of the Community

### Public Health Problem

In California, an estimated 20,000 women are diagnosed with breast cancer each year, and, on average, 13 women die of breast cancer each day. The incidence of cervical cancer is more than five times greater among Vietnamese women in the United States than among white women.

### Evidence That Prevention Works

Early detection and appropriate treatment could prevent virtually all cervical cancer deaths and about 15%–30% of breast cancer deaths among women older than age 40. The initial costs for breast cancer care, if diagnosed early before it has spread, may be as much as 32% lower than the initial care costs for breast cancer diagnosed after it has spread.

### Program Example

The California Endowment funds the Special Services for Groups (SSG) Inc.'s Promoting Access to Health (PATH) for Women, a Los Angeles-area collaboration that focuses on reducing disparities in rates of breast and cervical cancer among Asian American and Pacific Islander women. SSG held focus groups and interviewed 2,100 Pacific Islander (Chamorro, Samoan, and Tongan) and Southeast Asian (Cambodian, Laotian, Thai, and Vietnamese) women in Los Angeles and Orange counties. SSG works with seven ethnic populations (Cambodian, Laotian, Thai, Vietnamese, Chamorro, Samoan, and Tongan) and draws on the leadership of its Pacific Islander and Southeast Asian community members and health care providers to develop customized community action plans and materials for each ethnic group. Each ethnic group implements its community action plan at its own level of readiness. The Samoan National Nurses Association is an example of one group that has been executing almost all facets of PATH for Women, including offering community outreach and education services, promoting a cancer ministries program with local Samoan pastors, establishing a cancer support group, and setting up mobile screening programs for community women.

### Implications

Community-based programs that seek community input are responsive in meeting the needs of a particular community. This program demonstrates the importance of giving communities the materials and plans to implement an effective intervention while allowing them to execute these plans in a manner and at a pace that resonates with their own culture and community. This approach can extend lifesaving prevention programs and screening services across a variety of cultures to communities that would not likely be reached by traditional means.

### Contact Information

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# Colorado

## Examining New Partnerships and Innovative Educational Approaches for a Comprehensive Cancer Control Program

### Public Health Problem

Malignant melanoma (the deadliest form of skin cancer) causes more than 75% of all deaths from skin cancer in the United States. Diagnosed at an early stage, malignant melanoma can usually be cured, but if diagnosed at a late stage, it is more likely to spread and cause death. During 1993–1997, Colorado’s incidence rate for melanoma was 31% higher than the overall U.S. rate. The incidence rate for non-Hispanic white males climbed 9% between 1993 and 1997.

### Evidence That Prevention Works

Exposure to the sun’s ultraviolet (UV) rays appears to be the most important risk factor in the development of skin cancer; therefore, when sun protection measures are used consistently, skin cancer is largely preventable.

### Program Example

A public education campaign that included the brochure “Sun Smart Tips” was launched in June 2001. This campaign resulted from a unique partnership between the state health department’s Comprehensive Cancer Prevention and Control Program and Mesa Verde National Park, which has about 600,000 visitors annually. National park officials educated Colorado residents, as well as visitors from all over the world, about the steps they can take to be safer in the sun. The goal of this campaign was to educate park visitors about the need to protect themselves from the damaging rays of the sun and how best to prevent skin cancer. In addition to park staff handing out thousands of brochures at the park entrance gates, the rangers incorporated “Sun Smart Tips” into their regularly scheduled talks, which are held frequently throughout the year.

### Implications

This project was so well received that plans are under way to make the skin cancer brochures and information available at Colorado’s highway visitors’ centers. Thousands of travelers can potentially be reached with important sun safety messages. This effort also underscores the added value of coordinated partnerships to disseminate consumer-oriented information on cancer prevention.

# Connecticut

## Using Peer Communication to Create an Early Detection Program

### Public Health Problem

In 2002, an estimated 2,600 cases of invasive breast cancer and 100 cases of cervical cancer were reported in Connecticut; approximately 500 women died of breast cancer in Connecticut.

### Evidence That Prevention Works

Interpersonal strategies, those that involve communication with a family member or a person in one's social network, are effective in promoting early detection and treatment of breast and cervical cancer. Using peers to encourage women to be screened for cancer may eliminate language barriers and can help a program better address cultural and community factors.

### Program Example

Connecticut's Breast and Cervical Cancer Early Detection Program focuses on providing screening services to the state's uninsured or underinsured older women who are from racial or ethnic minority groups. As of 2001, more than 18,000 of the state's uninsured, low-income women had received services through this program. This number represents 45% of the state's program-eligible population. Nearly 18% of these women are African American, and 20% are Hispanic. At enrollment, women receiving program services were asked how they heard about the program. Twenty-four percent (24%) of these women said that they heard about it through outreach educators who were members of the local community and employed by the Connecticut program to recruit women for screening services.

### Implications

Without this program and the commitment and work of the outreach educators, these Connecticut women may not have received potentially lifesaving early detection services. This program emphasizes the importance of using peer communication as an effective way to reach underserved populations.

### Contact Information



## Creating an Innovative Visual Aid to Help Communicate the Importance of Early Detection

### Public Health Problem

In Idaho in 2002, an estimated 900 women were diagnosed with breast cancer, and approximately 200 women died of breast cancer.

### Evidence That Prevention Works

Studies show that early detection of breast cancer and a comprehensive follow-up program save lives. Timely mammography screening could prevent 15% to 30% of all deaths from breast cancer among women over the age of 40. Studies show that early detection is the best protection against breast cancer deaths. When breast cancer is diagnosed at a local stage, 96% of women are still alive 5 years later. If the cancer spreads regionally, this rate is reduced to 78%, and if diagnosed after spreading to distant sites, the 5-year survival rate is reduced to 21%.

### Program Example

Idaho's Breast and Cervical Cancer Early Detection Program, Women's Health Check, developed an innovative way to teach women about breast cancer using a visual tool. The program is called "Ask Me," and it uses wooden beads to illustrate the various tumor sizes that can be detected by mammography. This visual image helps women understand the importance of getting regular exams and demonstrates how early a tumor can be detected, even when it is very small. A curriculum also was developed for the program. The program was launched in conjunction with McCall Memorial Hospital, the Idaho Breast and Cervical Cancer Alliance, and the American Cancer Society. Sorority groups, cancer centers, Idaho's Hispanic women's group, local jewelry stores, and health insurance companies implemented the program.

### Implications

By using a visual aid to support its early detection message, this program illustrates the importance of early detection and screening and demonstrates the impact that a visual aid can have on promoting prevention.





## Reaching Out to Low-Income Women to Prevent Breast and Cervical Cancer

### Public Health Problem

In the United States, African American women are more likely to die of breast cancer than women of any other racial or ethnic group. Cervical cancer death rates are more than twice the national average among African American women and are higher than average among Hispanic women. In the United States, more than 40,000 women will die of breast cancer, and more than 2,000 of them will be from Illinois. Currently, only about 9% of breast cancers in Illinois are detected at the earliest, most curable stages, and in 1998, Illinois was in the top 25% of states for women aged 50 or older who had not had a mammogram in the last 2 years.

### Evidence That Prevention Works

Timely mammography screening could prevent approximately 15%–30% of all deaths from breast cancer among women over the age of 40. According to the American Cancer Society, between 1955 and 1992, the number of deaths from cervical cancer declined by 74%, and the main reason for that decline was the use of the Pap test to detect cervical cancer early.

### Program Example

Reach Out is a broad-based Chicago-area collaboration that draws on the leadership of local churches to encourage low-income African American and Hispanic women to seek early breast and cervical cancer screening. Reach Out held focus groups of female members of seven African American and two Latino churches and learned that participants wanted relevant information about how breast and cervical cancer could affect them as individuals and as a community. Led by health educators in the community, each church used a standard education intervention in addition to other outreach methods such as incorporating health information and reminders about the importance of screening and early detection in Sunday sermons, developing support groups, and sponsoring health fairs.

### Implications

Community-based programs like Reach Out that seek community input are more likely than other programs to be responsive to the needs and the culture of the community. This approach can extend lifesaving prevention programs and screening services across cultural divides to communities that would not likely be reached by traditional means.



# Indiana

## Screening Underserved Populations Through Collaboration Among Government Agencies and Nonprofit Organizations

### Public Health Problem

In Indiana in 2002, an estimated 4,600 women were diagnosed with breast cancer and 300 with cervical cancer, and 900 women died of breast cancer. Underserved populations include those people who are least likely to be screened for breast and cervical cancer. As a result, these populations also are at the greatest risk of dying of these types of cancer. Many women in correctional facilities are underserved because they often have low incomes, little or no health insurance, and no routine health care. In addition to these socioeconomic factors, free breast and cervical cancer screenings are not readily available in most jails.

### Evidence That Prevention Works

Through collaborative efforts by federal and state government agencies and nonprofit organizations, the disparities that exist in cancer prevention and control for women who are uninsured or underinsured can be reduced. Studies show that early detection of breast and cervical cancer and a comprehensive program, including case management and community collaboration, save lives. Timely mammography screening could prevent 15% to 30% of all deaths from breast cancer among women over the age of 40. Having a Pap test as recommended could prevent nearly all deaths from cervical cancer.

### Program Example

The Indiana State Department of Health Breast and Cervical Cancer Program (BCCP) collaborated with the University of Southern Indiana Nurse Practitioner Program and the Vanderburgh County Jail and Safe House to reach the low-income, uninsured population of incarcerated women and provide them with ongoing access to cancer screenings. BCCP staff members educated women at the Vanderburgh County Jail and Safe House about breast and cervical cancer and enrolled them in the program. A nurse practitioner performed Pap tests on-site for the inmates, and mammography screening was scheduled at a local breast center. Follow-up procedures for abnormal results also were provided. Further partnerships are being pursued with parole offices to help maintain contact and facilitate rescreenings after the women are released from prison.

### Implications

Without this innovative program and the hard work of the outreach workers, this unique population of women would not have received lifesaving early detection services. This program demonstrates the importance of working within special populations to identify both the people and the existing systems that would be most likely to reach them. This program also demonstrates the importance of providing these underserved women with access to routine screening both during and after their incarceration.



# Missouri

## Providing Resources and Support to Breast Cancer Patients Through Community Collaboration

### Public Health Problem

Breast cancer is the second leading cause of cancer death for Missouri women. In Missouri in 2002, an estimated 4,000 women were diagnosed with breast cancer, and 800 died of breast cancer.

### Evidence That Prevention Works

Timely mammography screening could prevent 15% to 30% of all deaths from breast cancer among women over the age of 40. Studies show that early detection is the best protection against breast cancer death. When breast cancer is diagnosed at a local stage, 96% of women still are alive 5 years later. If the cancer has spread regionally, this rate is reduced to 78% of women, and if diagnosed after spreading to distant sites, the 5-year survival rate is reduced to 21%.

### Program Example

The Missouri Department of Health and Senior Services' Breast and Cervical Cancer Control Program (BCCCP) case managers collaborated with community organizations such as the Breast Cancer Foundation of the Ozarks (BCFO) and the American Cancer Society to provide resources and support for women affected by breast cancer and their families. In one case, the BCCCP case manager acted as a liaison for Susan, a woman diagnosed with breast cancer who needed chemotherapy and a mastectomy. Susan was unemployed and depressed. The case manager helped Susan get in touch with the BCFO, who paid her rent and utilities for 3 months. The American Cancer Society provided a wig and other types of support. Susan has now completed her treatment and is doing well in her own home. She continues to express gratitude to the BCCCP for helping to save her life.

### Implications

The Missouri BCCCP case management service enhances the quality of life of women diagnosed with breast cancer. By educating women on the scope of available services from diagnosis through treatment and recovery, the BCCCP helps increase the number of women who use the program and take advantage of the available diagnostic and treatment services.

### Contact Information

# North Carolina

## Addressing Cancer Concerns From a Comprehensive and Family Health-Oriented Perspective

### Public Health Problem

Colorectal cancer is the second leading cause of cancer death among North Carolinians. In 2001, about 1,700 adults in North Carolina died of colorectal cancer. Because people are not participating in routine screenings, only about 35% of colorectal cancers are detected in the curable, early stages.

### Evidence That Prevention Works

The state's 11 years of experience in conducting the Breast and Cervical Cancer Control Program (BCCCP) through local health departments provide a successful model for reducing deaths from cancer by using a comprehensive approach to cancer control. This approach involves integrating and coordinating various cancer control activities at the community level, including public and professional education, early detection services, monitoring, and evaluation.

### Program Example

To address the colorectal cancer control goals included in the state's cancer plan, the North Carolina Division of Public Health's Comprehensive Cancer Unit (CCU) applied "lessons learned" in implementing the BCCCP. The CCU designed a pilot project to conduct colorectal cancer screening in 10 local health departments encompassing 15 counties in diverse regions of the state. The project specifically targeted low-income women with little or no health insurance and raised awareness about the importance of early detection. Already participating in the state's BCCCP, these women were encouraged to participate and to invite their husbands to take advantage of the colorectal cancer screening program. The CCU provided educational materials, an in-service educational program on colorectal cancer for the local staff, fecal occult blood test (FOBT) kits for all participants aged 50 or older, funding for staff time and administrative costs (including transportation), and funds to cover additional diagnostic testing of positive results. Participants received information on colorectal cancer and were offered FOBT kits. A total of 1,478 participants (including more than 240 men) were counseled and offered FOBT kits; 1,226 took the kits home, and 706 (including more than 100 men) completed and returned the test kits. Of these, 148 tests were positive, resulting in 107 successful referrals for follow-up testing. (Some clients declined further testing.) Ten precancerous polyps (three among men) were found, and four cancers (two among men) were diagnosed.

### Implications

This pilot program demonstrates the feasibility of screening in a local health department setting and the potential value of addressing cancer concerns from a comprehensive and family health-oriented perspective. Because of the extensive reach these agencies have in the community, they can be helpful in raising public awareness about the importance of early cancer detection and in encouraging people to use screening programs.

### Contact Information



## Improving Data Collection for a Comprehensive Cancer Control Program

### Public Health Problem

In the process of gathering data for program planning, the Texas Comprehensive Cancer Control Coalition (TCCCC), working with the Texas Department of Health, recognized various gaps and deficiencies in cancer data for the state. In part, these gaps were a result of outdated registry software systems and the lack of specific case reporting requirements in the state registry regulations.

### Evidence That Prevention Works

Data collected by state central cancer registries enable public health professionals to better understand and address the cancer burden. Cancer data are used to determine cancer patterns among various populations, monitor trends over time, and advance research.

### Program Example

The TCCCC facilitated a review of the various cancer data resources for Texas, as well as the processes and systems involved in collecting data. This review resulted in the publication of *Information Management Enhancements to Improve Texas Cancer Data for Comprehensive Cancer Control*. This publication and a companion report (*The Cost of Cancer in Texas*) also produced for the Coalition were critical resources used by the Coalition to document the extent of the data problems. More importantly, the Texas Cancer Council, the Texas Medical Association, the American Cancer Society Texas Division, and other Coalition members used these reports to educate the health commissioner and state legislators about the need for changes in the rules governing cancer-reporting regulations and for improvements in the state's data management systems. The Texas State Legislature subsequently passed a bill (effective September 1, 2001) that updates the state's cancer registry law. This legislation requires reporting of cancer cases to the state central cancer registry by physicians, dentists, and outpatient facilities, including surgical centers. It also strengthens the language that requires hospitals and other reporting facilities to reimburse the Texas Department of Health for the costs of identifying or documenting unreported cancer cases. The Texas Department of Health also asked legislators for increased funding for the cancer registry and other health registries to purchase updated computer software in order to process data more efficiently.

### Implications

Improved coordination of cancer control activities, including monitoring, is a key benefit of comprehensive cancer control planning. Passing this bill is an important first step in addressing the problem of incomplete cancer data. This effort by the TCCCC demonstrates the potential health agencies and organizations have to mobilize collective support for a statewide cancer monitoring system.

### Contact Information



## Providing Vital Cancer Screening Programs to Women Who Face Special Barriers to Accessing Health Services

### Public Health Problem

In 2002, an estimated 400 women were diagnosed with breast cancer, and approximately 100 women died of breast cancer in Vermont. About 40 women in Vermont were diagnosed with cervical cancer in 2002.

### Evidence That Prevention Works

Early detection cancer screening services need to be available and accessible to all women. Studies show that early detection of breast and cervical cancer and a comprehensive follow-up program save lives. Timely mammography screening could prevent 15% to 30% of all deaths from breast cancer among women over the age of 40. Having a Pap test as recommended could prevent nearly all deaths from cervical cancer.

### Program Example

Ladies First is Vermont's Breast and Cervical Cancer Screening Program. This program makes special efforts to reach out to women with special needs (e.g., women who are blind, hearing impaired, in wheelchairs) who face special barriers to accessing health care services. Ladies First has been a big help for Natalie, who is blind. The program helped her fill out the necessary forms to get screened for breast and cervical cancer, helped her choose a doctor, and made certain she got to her appointment. Ladies First also provided Natalie with an audiotape of all the available educational materials on breast and cervical cancer. The program also provides educational materials in alternative formats, including brail and large type print. Ladies First recently purchased wheelchair-accessible examining tables for 10 hospitals throughout the state and for one correctional facility to help ensure that disabled women get thorough exams. Often, the typical exam table is too high and not wheelchair accessible.

### Implications

Through practical steps like these, Ladies First works hard to make sure women like Natalie have access to vital health information and cancer screening services. Since its launch in 1995, the Vermont Department of Health has provided cancer screening and diagnostic services to 6,000 Vermont women through its Ladies First program, many of whom benefitted from special services for women with disabilities. As a result of Ladies First screening efforts, 70 cancers have been detected, most in the earliest, most treatable stage. This program demonstrates the importance of reaching uninsured and underinsured women and women who face physical challenges in a way that addresses their particular needs.



# Washington

## Creating a Native American Women's Wellness Program to Promote Cancer Screening and Education

### Public Health Problem

Cancer is the second leading cause of death for American Indian/Alaska Natives, even though cancer incidence is often lower for this group. Five-year survival rates are significantly lower for racial and ethnic minority populations, in part because of the late stage-at-diagnosis and problems with access to follow-up care. For American Indian/Alaska Native populations in Washington, the age-adjusted breast cancer mortality rate is 28.6 per 100,000, considerably higher than the national rate of 15.0 per 100,000.

### Evidence That Prevention Works

Older women and those from culturally or geographically isolated communities or racial and ethnic minority groups (including Native American/Alaska Native women) are priority populations for the National Breast and Cervical Cancer Early Detection Program. Within these populations, public health providers should involve the community and open the lines of communication to build an environment of trust.

### Program Example

With support from Avon and the Susan G. Komen Foundation, the South Puget Intertribal Planning Agency's Native Women's Wellness Program hired outreach workers in 2000 in the five tribal communities in Washington State. The program has five American Indian outreach workers and five tribal health care providers (one for each tribe) to encourage women to use available health services. Because they are highly respected and well known in their communities, the American Indian outreach workers have built a level of trust with the women in their communities. This rapport has enabled outreach workers to better educate and encourage the women to take advantage of the health services that are offered to them. They also have increased turnout rates by providing incentives, holding special events such as mother and daughter teas, and offering transportation and day care to make it easier for the women to be screened. In 2000, only 136 women were newly enrolled. In 2001, after hiring American Indian outreach workers, the number of newly enrolled women almost doubled to 251. In 2001, the program delivered the highest number of services in its history: 1,218 Pap tests, mammograms, and clinical breast exams combined. Since its inception, the South Puget Intertribal Agency's Native Women's Wellness Program has provided 1,600 mammograms, 2,330 clinical breast exams, and 2,473 Pap tests.

### Implications

Without this program, late diagnoses of breast and cervical cancer would have continued in this population that faces higher than average cancer death rates. This outreach program demonstrates the importance of identifying the right community leaders who can help influence the behaviors within a special population.

### Contact Information





# Cancer Registries





# California

## Surveying Farmworkers to Identify Variations of Cancer Incidence Among Hispanic Populations

### Public Health Problem

Farmworkers are exposed to a variety of potentially toxic substances that are used in agriculture, and many of these farmworkers live near their workplaces or consume the products they help produce. Most studies of farmers have focused on those in the Midwest who work on highly mechanized farms; however, large numbers of Hispanic farmworkers are employed in labor-intensive operations and may experience more direct exposure to agricultural chemicals. Additional information is needed to understand the possible health consequences of such exposures among Hispanic farmworkers—including their potential risks for cancer.

### Evidence That Prevention Works

Information derived from statewide, population-based cancer registries enables public health professionals to understand and address cancer in a more effective way. Specifically, this information helps them identify cancer patterns among various populations and determine whether prevention measures and screening make a difference.

### Program Example

From 1987 to 1999, the California Cancer Registry (CCR) conducted a study to evaluate the incidence of cancer among members of the United Farmworkers of America (UFW), a largely Hispanic farmworkers' labor union in California. In this electronic data linkage project, information from the CCR was linked with a membership roster of the UFW to determine whether risks for specific cancers were higher or lower among UFW members than among the overall California Hispanic population. The results of the study showed that the risk for leukemia, stomach, cervical, and uterine cancers was higher among UFW members. Members of the UFW also were at a later stage of disease at diagnosis than were other California Hispanics for most major cancers except for breast cancer.

### Implications

The use of high-quality cancer registry data has been pivotal in identifying variations in cancer incidence among specific populations. As a follow-up to the UFW study, additional research is planned to examine which pesticides were used and how long farmworkers were exposed to each of them. This study will help determine whether specific occupational exposures are associated with cancer. Similar occupational studies have identified chemical carcinogens and have provided direction for prevention activities to reduce or eliminate cancer-causing exposures in the workplace and elsewhere.

### Contact Information

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# Michigan

## Conducting a Surveillance Program to Understand the Burden of Cancer on the Medicaid Population

### Public Health Problem

In 2002, cancer killed an estimated 19,800 people in Michigan, and another 45,800 new cases of cancer were diagnosed in the state. Many racial and ethnic minority groups, people with low incomes, and those living in rural areas not only suffer disproportionately from cancer, but also must cope with limited access to prevention and treatment services.

### Evidence That Prevention Works

Because the burden of cancer is not the same for all communities, the use of high-quality cancer registry data is critical in identifying variations in cancer incidence among specific populations.

### Program Example

In a Michigan data-linkage project, information from three statewide databases—the Cancer Registry, Medicaid enrollment files, and death certificate files—was examined to identify disparities in cancer deaths among minority and low-income populations. This study was designed to examine the differences in stage-of-disease at the time of diagnosis and the subsequent survival rates of patients considered medically underserved compared with the remaining population of cancer patients in Michigan. The analysis focused on female breast, cervical, lung, prostate, and colon cancers. The study, published by the American Cancer Society, showed that low-income populations have a greater incidence of cancer. It also demonstrated that a greater proportion of low-income people with cancer are African American and that they are more likely to be diagnosed at younger ages (less than 65 years) for both colon and breast cancers but less likely to be diagnosed at older ages (older than 65 years) for cervical cancer. For the five disease sites, low-income people younger than 65 years were more likely to be diagnosed with late-stage disease and were more likely to die of the disease. The Medicaid population younger than 65 years was at greater risk of being diagnosed with late-stage disease than was the non-Medicaid population. For breast and lung cancers, older Medicaid patients also were at greater risk of dying of these diseases compared with non-Medicaid patients.

### Implications

This data linkage project, funded in part by a comprehensive cancer control grant, is the first of a series of reviews of the burden of cancer on the Medicaid population. Findings from this study highlight the need for effective cancer screening efforts among low-income populations. Michigan has established a Medicare-Medicaid Policy Advisory Committee to review the health issues that were raised as result of this study, and county-specific information is being used to identify areas where screening efforts should be increased, especially for breast and colon cancers.

### Contact Information



# Missouri

## Developing a Comprehensive, Web-Based Information Resource to Monitor Cancer Incidence

### Public Health Problem

In 2002, cancer killed an estimated 12,300 people in Missouri, and another 28,600 new cases of cancer were diagnosed in the state. The burden of cancer is not the same for all communities, which means that programs must be tailored to address problems where they exist, using appropriate strategies to target specific communities.

### Evidence That Prevention Works

Complete, timely, and high-quality data are essential for conducting research and responding to public concerns about cancer incidence in their communities. This information helps identify cancer patterns among various populations and determines whether prevention measures and screening make a difference.

### Program Example

The Missouri Cancer Registry, in collaboration with the state's Center for Health Information Management and Evaluation, developed a unique cancer information resource for citizens, health professionals, researchers, and policy makers: Missouri Information for Community Assessment (MICA). MICA is an innovative Web-based system that allows users to access health information, including cancer statistics from the state cancer registry and health risk factor information from the Behavioral Risk Factor Surveillance System. The cancer MICA system allows users to create tables showing cancer incidence by year, age, sex, race, cancer site, cancer stage, cancer grade, and the geographic location of cancer patients at the county level. This user-specific information can then be downloaded to other applications to produce maps, charts, or graphs so people can understand the overall effect that cancer has on the state.

### Implications

The availability of high-quality cancer registry data and information about health behaviors and risk factors is essential to identifying and monitoring trends in cancer incidence and deaths. This type of information also is critical to researching, planning, and evaluating cancer prevention and control efforts. Missouri's MICA is a new way of providing partners and the public with information about cancer and its associated risk factors. The MICA Web-based system can serve as a model for other states as an effective way to provide and encourage the use of data collected through the state's central cancer registry and to integrate cancer-related data into health planning activities.

### Contact Information

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## Using Cancer Registry Data to Identify and Better Serve Diverse Populations

### Public Health Problem

In New Jersey in 2002, an estimated 6,900 women were diagnosed with breast cancer, and an estimated 1,400 women died of breast cancer.

### Evidence That Prevention Works

When breast cancer is diagnosed at a local stage, 97% of women still are alive 5 years later. The 5-year survival rate decreases to 21% when the disease is diagnosed after it has spread to other sites. Routine mammography screening is an especially effective means of detecting breast cancer at the earliest stages.

### Program Example

The New Jersey State Cancer Registry (NJSCR) devised a study to identify, map, and characterize areas of New Jersey with significantly high proportions of advanced-stage breast cancer using a Geographic Information Systems (GIS) analysis and SaTScan (a statistical tool). Two areas in northeastern New Jersey were identified by this method as having unusually high proportions of late-stage breast cancer. Census data provided demographic information that allowed the populations in these two areas to be compared with the rest of the state. Analysis showed that the populations in these two areas were more likely to be black, Hispanic, and foreign-born and to speak a language other than English in the home. Over 90% of the women diagnosed with breast cancer, however, lived within 2 miles of a mammography screening center. Study results were shared with the New Jersey Cancer Education and Early Detection Program, which offers cancer screening services to underserved populations. Additional screening resources that were funded by CDC and the state have been directed to these areas. Particular initiatives include providing culturally sensitive screening information in a variety of languages such as Spanish, Polish, and Arabic.

### Implications

New Jersey has a large and diverse population, and targeting public health resources in that state is a complex task; however, by using registry data and GIS analysis, specific intervention areas were identified. This project is an excellent example of science-driven public health decision making that addresses the problems of cancer prevention and control. The NJSCR plans to use this type of analysis to help guide decision making for disease control for other cancers such as cervical, colorectal, skin, and prostate.

# North Carolina



## Demonstrating Effective Partnership and Collaboration Between Research Institutions and Cancer Registries

### Public Health Problem

Breast cancer is the second most commonly diagnosed cancer and the second leading cause of cancer-related deaths among women in the United States. In 2002, an estimated 1,200 women in the United States died of breast cancer, and approximately 5,900 new cases were diagnosed.

### Evidence That Prevention Works

Since the late 1970s, major advances have occurred in detecting and treating breast cancer; however, there is much that the health community does not know about the different types of breast cancer, the complexities surrounding risk factors, and causes of this disease. To control this disease, lessen its impact on thousands of American women each year, and address differences among racial and ethnic groups in breast cancer incidence and deaths, more research is needed. Information derived from statewide, population-based cancer registries enhances such research efforts.

### Program Example

Data from the North Carolina Central Cancer Registry were used in two special research projects at the University of North Carolina Lineberger Comprehensive Cancer Center. The Carolina Breast Cancer Study (CBCS) and the Carcinoma Study are multiyear, population-based, case-control studies designed to discover new risk factors for breast cancer. As part of the Specialized Program of Research Excellence (SPORE), the National Cancer Institute funds both studies. The CBCS examined invasive breast cancer and enrolled approximately equal numbers of African American and white women; half the women were under age 50, and the other half were aged 50 years or older, which meant that the CBCS had sufficient numbers to examine differences in breast cancer incidence and risk by race and age. Participants in the Carcinoma Study had preinvasive breast cancer, and about 20% were African American. Using data from in-depth interviews and biologic samples, these studies examined environmental, behavioral, and genetic risk factors that influence breast cancer development.

### Implications

Increasing the knowledge base for breast cancer through research studies such as the ones conducted at the University of North Carolina Lineberger Comprehensive Cancer Center is essential in reducing the number of deaths from breast cancer in the United States. High-quality cancer data from state central cancer registries are critical to advancing epidemiologic, clinical, and health services research to reduce the burden of breast cancer among U.S. women. Ongoing data-sharing efforts between cancer registries and research institutions will ensure that progress in this important health arena continues.

### Contact Information





# **Heart Disease and Stroke**





## Implementing Cardiovascular Disease Guidelines for Physicians and Patients to Improve Health Outcomes

### Public Health Problem

Cardiovascular disease (CVD), mainly heart disease and stroke, is the leading cause of death in Arkansas. The state ranks fifth in the country in deaths from heart disease and second in deaths from stroke. The increased burden of disease in Arkansas compared with the rest of the United States may be partially explained by the higher rates of cardiovascular risk factors among state residents. Behavioral Risk Factor Surveillance System (BRFSS) 1999 data indicate that more people in Arkansas than those in the general U.S. population have high blood pressure (28% vs. 24%), smoke cigarettes (25% vs. 22%), and are completely physically inactive (28% vs. 27%).

### Evidence That Prevention Works

Compelling evidence from recent clinical trials supports the merits of aggressive risk reduction therapies for patients with CVD. The American Heart Association and the American College of Cardiology urge all health care settings where CVD patients are treated to develop specific protocols and procedures reminding health care providers to implement the guidelines and assess the success of appropriate treatments.

### Program Example

The Arkansas Wellness Coalition (AWC) is a nonprofit voluntary organization composed of partners interested in improving health outcomes for Arkansans. Member organizations include the American Heart Association (AHA), managed care organizations, the Arkansas Department of Health Diabetes Prevention and Control and Cardiovascular Disease Programs, the Arkansas Quality Improvement Organization, pharmaceutical companies, Arkansas Medicaid, and the University of Arkansas for Medical Sciences. The Coalition's purpose is to improve the health and well-being of all Arkansans through the implementation of nationally recognized peer-reviewed guidelines for physicians and patient self-management. AWC works to coordinate efforts between health care providers and advocacy organizations to improve quality of care and health outcomes in targeted diseases, enhance consistency and efficiency of care by providing common core principles, and implement recognized standards of care. These efforts provide physicians throughout the state with the AHA guidelines and strategies for providing appropriate high blood pressure and high cholesterol treatment and follow-up care.

### Implications

This program demonstrates the importance of disseminating and implementing recognized guidelines for the primary and secondary prevention of CVD by applying health systems. A guidelines-based approach can result in better outcomes for patients by applying recognized prevention and treatment standards, which help ensure improved quality of life and reduced risk for initial and recurrent heart attacks and strokes.

### Contact Information



## Partnering With Community-Based Organizations to Improve Cardiovascular Health Among African Americans

### Public Health Problem

Cardiovascular disease (CVD) is the leading cause of death in Georgia, accounting for more than 23,000 deaths, or nearly 40% of all deaths in 1997. The two most common forms of CVD, heart attack and stroke, account for more deaths in every Georgia county than any other cause of death and is a major cause of costly hospitalization and disability.

### Evidence That Prevention Works

Research has demonstrated that modifying health-related behaviors that contribute markedly to CVD (i.e., tobacco use, lack of physical activity, and poor eating habits) is critical both to preventing and controlling the disease.

### Program Example

The Fulton County Department of Health and Wellness is enhancing efforts to reduce heart disease and stroke among diverse populations, including African Americans. The REACH for Wellness program works with its coalition partners to develop intervention strategies to improve cardiovascular health among African Americans residing in the Atlanta Empowerment Zone (AEZ). Designated by the Department of Housing and Urban Development in 1994, the AEZ consists of 30 neighborhoods occupying 9.29 square miles in central Fulton County. Ninety percent of the AEZ population is African American, and 76% of the population is made up of female-headed households with incomes below the poverty level, with a median household income of \$8,953. Through this coalition effort, partners hold weekly aerobics classes and work with supermarkets and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to conduct grocery store surveys, classes, and demonstrations. A key partner in the coalition recruited churches, beauty salons, and barbershops to establish cardiovascular wellness centers in the community and has trained over 80 volunteers to conduct blood pressure monitoring.

### Implications

This community-based approach can extend lifesaving prevention programs and health services across cultures to communities that would not likely be reached by traditional means. The state will continue to spearhead the country's efforts to eliminate health disparities by applying lessons learned from the REACH 2010 projects in communities across Georgia. This program demonstrates the importance of close collaboration with community members and creative partnerships with public and private organizations to reach every community member with important health messages and services.



## Addressing Secondary Prevention Through Health Care Provider Workshops

### Public Health Problem

Cardiovascular disease (CVD), mainly heart disease and stroke, is the leading cause of death for both men and women in Maine. In 2000, \$437 million was spent for cardiovascular-related hospital charges in Maine, which is about one-fourth of all hospital charges.

### Evidence That Prevention Works

Compelling evidence supports aggressive therapies for patients with CVD. The American Heart Association and American College of Cardiology urge medical care settings where CVD patients are treated to develop a specific plan to identify high-risk patients, apply the guidelines, and assess the success of appropriate treatments.

### Program Example

The Cardiovascular Health (CVH) Program in the Maine Department of Human Services, Bureau of Health, collaborates with the Maine Cardiovascular Health Council (MCHC) and the American Heart Association New England affiliate to improve secondary prevention. The CVH program and the American Heart Association provide regular training for health care providers. The American Heart Association hospital quality assurance program, “Get With the Guidelines,” is being conducted. The CVH program collaborates with the American Heart Association and the American Hospital Association to implement prevention guidelines for patients discharged from hospitals. The Maine Taskforce on Cardiovascular Disease Prevention, the medical advisory arm of the CVH Program, implemented a system of enrolling patients in cardiac rehabilitation programs. Another partner, the Maine Cares Coalition, a network of provider-sponsored community-based support programs, is working to ensure that treatment for patients with coronary heart disease and congestive heart failure follows national guidelines.

### Implications

This program demonstrates the importance of implementing recognized guidelines for the primary and secondary prevention of heart disease and stroke, which lead to fewer deaths following heart attacks and strokes. In Maine, statewide improvements have already been documented in the increased use of lipid lowering medication and reductions in patient cholesterol levels.

### Contact Information



## Partnering With Community Health Care Centers to Prevent Heart Attacks and Strokes

### Public Health Problem

Missouri has some of the highest rates of cardiovascular disease (CVD), mainly heart disease and stroke, in the country. It ranks second in the nation in deaths from coronary heart disease. Between 1990 and 1997, heart disease and stroke claimed 174,640 lives in Missouri, and in 1997, CVD accounted for 42% of all deaths. In 2000, Missouri had 210,735 hospitalizations attributed to heart disease and stroke, with direct medical costs exceeding \$3 billion.

### Evidence That Prevention Works

Preventable complications and deaths associated with CVD can be reduced if guidelines for standards of care are implemented. Effective management of hypertension results in highly significant reductions in premature death and disability from heart disease and stroke. Results from large-scale trials show that a 5 mm Hg reduction in diastolic blood pressure corresponds to a 21% reduction in heart disease risk. The recognition of stroke symptoms, use of the 9-1-1 Emergency Medical Systems, timely arrival at hospitals, and prompt treatment result in significantly improved outcomes for stroke victims.

### Program Example

The Missouri Cardiovascular Health (CVH) Program is partnering with the Missouri Diabetes Prevention and Control Program and Federally Qualified Health Centers (FQHCs) to administer and evaluate a new comprehensive approach to improving standards of care for patients with CVD, diabetes, and hypertension. The partners are implementing a registry that will store clinical patient data, making it possible to aggressively follow-up on and monitor FQHC patients. The FQHCs offer a unique opportunity to reach Missouri's high-risk minority and low-income populations, many of whom live in rural areas. In 2001, 184,712 Missourians used FQHCs as their primary source of health care. Additionally, the Missouri CVH program is collaborating with the Missouri Patient Care Review Foundation, the American Heart Association (AHA), and the Missouri Hospital Association to promote AHA's updated guidelines for the primary and secondary prevention of CVD. This approach is being carried out by working with health care systems, medical schools, and insurance organizations.

### Implications

This program demonstrates that populations benefit when states provide leadership and collaborate at the community level with organizations that provide, monitor, and pay for primary and secondary prevention services. State participation in the Cardiovascular Health Collaborative with FQHCs will enhance efforts to aggressively prevent heart disease and stroke, reduce health disparities, and increase access to quality care in these health care settings.

# North Carolina



## Influencing Environmental and Policy Changes in the Stroke Buckle States

### Public Health Problem

Stroke is the third leading cause of death in the United States. States in the Stroke Belt (North Carolina, South Carolina, Georgia, Alabama, Mississippi, Arkansas, Tennessee, and Louisiana) have higher stroke death rates than the rest of the country. Significantly higher rates occur in North Carolina, South Carolina, and Georgia, which make up the Stroke Belt Buckle. Many adults do not know the signs and symptoms of stroke and do not take immediate action. Lack of awareness and prompt response often result in stroke-related death and disability; only 26% of Americans can name the most commonly recognized warning sign of a stroke.

### Evidence That Prevention Works

Prevention of stroke disability and death is the best way to reduce the burden of this public health problem. Stroke prevention should include education on the signs and symptoms of stroke, of the need for emergency response (i.e., calling 9-1-1), and about stroke risk factors (high blood pressure, high cholesterol, diabetes, obesity) and lifestyle changes (quitting smoking, increasing physical activity) that can reduce stroke risk.

### Program Example

North Carolina, South Carolina, and Georgia formed the Tri-State Stroke Network in 2001. Consisting of 27 members from private and public sectors, the Network strives to increase public awareness of stroke signs and symptoms and when to call 9-1-1, and to enhance the treatment of stroke as a medical emergency. With the establishment of the Network, the three states support system enhancements by sharing limited resources and collaborating on stroke issues. With the addition of new partners, the Network is strengthening its capacity to address the excess burden of stroke in the Stroke Belt region. The Network has increased awareness of the stroke burden among state and local organizations, assessed the reasons for excess in stroke deaths, and examined priority strategies, regulations, and programs to improve stroke prevention. Because of the success of the Tri-State Stroke Network, CDC has funded additional states in the Stroke Belt to implement similar networks.

### Implications

This program demonstrates that state health departments are in a position to influence environmental and policy changes within their states by partnering with Emergency Medical System staff to promote statewide availability of 9-1-1, by increasing awareness of the American Heart Association guidelines on stroke signs and symptoms, and by implementing regional stroke networks with other states to share prevention strategies, resources, and partnership opportunities.

### Contact Information

# South Carolina



## Closing the Gap: Addressing Cardiovascular Disease Among African American Communities

### Public Health Problem

Every year more than one in four South Carolina residents suffer from some form of cardiovascular disease (CVD), mainly heart disease and stroke, and in 2000, almost 14,000 persons died of CVD. Thirty percent of South Carolinians are African American, and they carry a disproportionate burden of cardiovascular-related deaths and hospitalizations. African Americans in South Carolina also have higher stroke rates than the national average and have a shorter life expectancy than other South Carolinians.

### Evidence That Prevention Works

The Institute of Medicine summary report states, “Many social, economic, political, and cultural factors are associated with health and disease for which changes in individual health behaviors alone are not likely to result in improved health and quality of life.” Environmental and policy changes, affecting large segments of the population, can affect the physical, social, and economic environment to facilitate better health.

### Program Example

In 2002, the South Carolina Cardiovascular Health Program provided funding and training to eight health districts to implement cardiovascular health projects in collaboration with local community partners. Each of the eight districts sponsored activities and training designed to create heart-healthy policies and environmental supports in African American communities. The Palmetto Health District: Promoting Healthy Congregations Project focuses on increasing heart-healthy policy and environmental supports in faith-based organizations. The project is developing a community asset map to identify strengths, assets, and resources within the community; creating a community-wide media campaign (including print and broadcast channels) to increase awareness about high blood pressure and the signs and symptoms of heart disease and stroke; and conducting CVD interventions that create policy and environmental changes to help make members of the church more heart-healthy. Churches and faith organizations select and implement specific policies and environmental strategies appropriate to their needs that address high blood pressure, high cholesterol, tobacco use, physical inactivity, and poor nutrition.

### Implications

In South Carolina, African Americans are at an increased risk of developing heart disease and stroke across all age and socioeconomic groups. Efforts to focus on this population through local community partners should result in strong social support for policy and environmental interventions that encourage heart-healthy behaviors.





## Partnering With Community Health Centers to Control High Blood Pressure

### Public Health Problem

High blood pressure is a major modifiable risk factor for heart disease and stroke. Although high blood pressure is controllable and detectable, it is a significant problem in the United States, with over 50 million adults suffering from high blood pressure. One in every four adults has high blood pressure and African Americans are at even greater risk, with one in every three adults suffering from high blood pressure.

### Evidence That Prevention Works

Altering one's lifestyle by increasing physical activity, reducing dietary salt intake, or taking blood pressure medication has been proven effective in lowering blood pressure. A 5 mm Hg reduction in diastolic blood pressure corresponds to a 21% decrease in coronary heart disease risk. Similarly, illness and death from heart disease and stroke can be reduced when diastolic or systolic blood pressure levels are within the normal range.

### Program Example

The Virginia Cardiovascular Health Program supports system enhancements to track blood pressure testing and outcomes at 17 community health centers by developing a database and supporting data entry for high blood pressure patient chart reviews. Patients previously diagnosed with high blood pressure were the focus of the chart reviews. Based on the clinical guidelines adapted from the *Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VI)*, the chart reviews determine whether physicians are adhering to the guidelines for treating patients and whether their high blood pressure is under control. The Virginia Cardiovascular Health Program provides training for community health center practitioners and staff. The training sessions focus on implementing the guidelines for prevention, treatment, and control of high blood pressure. In addition to the training, the Virginia Cardiovascular Health Program is developing a video to be distributed to community health centers for on-site training to improve practitioners' ability to take accurate blood pressure measurements.

### Implications

This program demonstrates that states should partner with health care organizations, especially community health centers that serve low-income and often high-risk patients, to promote system enhancements, such as providing education and training about *JNC VI* guidelines and *Healthy People 2010* objectives.

### Contact Information



# **ADDRESSING LIFESTYLE CHANGES**



# **Nutrition and Physical Activity (Obesity)**



# Colorado

## Launching *Colorado on the Move*<sup>TM</sup>: A Comprehensive Effort to Increase Physical Activity

### Public Health Problem

Between 1987 and 2000, obesity reached epidemic proportions in the United States, with more than 45 million adults classified as obese. In Colorado, adult obesity (body mass index [BMI]  $\geq 30$ ) rates increased from 6.9% in 1990 to 14.9% in 2001; the prevalence of overweight (BMI  $\geq 25$ ) among adults also rose from 36.7% to 51.6% during those years.

### Evidence That Prevention Works

Research has demonstrated that preventive measures such as improved nutrition, tobacco cessation, increased physical activity, and early detection and intervention may prevent heart disease, stroke, and other chronic diseases. Physical activity helps to control weight; contributes to healthy bones, muscles, and joints; reduces falls among the elderly; helps to relieve the pain of arthritis; reduces symptoms of anxiety and depression; and is associated with fewer hospitalizations, physician visits, and medications.

### Program Example

Through a partnership with the University of Colorado Health Sciences, the Colorado Physical Activity and Nutrition Program is implementing two community interventions in Peetz, Colorado, which has a large rural population, and in the Denver Metro Black Churches, which allows program coordinators to work in an already established urban and African American setting to reach high-risk populations. These interventions focus on a physical activity component to encourage participants to walk 2,000 steps a day more than they walked before the program. Pedometers are offered to assist participants in their efforts. Additional worksites and community sites throughout the state are also participating. The intervention will introduce a nutrition component as well, most likely promoting a 5 A Day campaign. The program has been named *Colorado on the Move*<sup>TM</sup>, and researchers at the University of Colorado plan to expand this effort beyond the currently funded program as additional money becomes available. In addition, four task forces were formed to guide the expansion of this program by assessing the burden of obesity and the impact of the other task force efforts (worksites, school, and community) to promote *Colorado on the Move*<sup>TM</sup> and other initiatives.

### Implications

The *Colorado on the Move*<sup>TM</sup> program serves as a model for other states that are trying to encourage increased physical activity. This program demonstrates the importance of promoting community-based programs that encourage small behavioral changes over time to achieve long-term, positive health outcomes.

### Contact Information



# Launching the Healthy Hawaii Initiative: A Statewide Program to Promote Physical Activity and Nutrition

## Public Health Problem

According to 2001 Behavioral Risk Factor Surveillance System (BRFSS) data, 48% of adults in Hawaii do not engage in sufficient amounts of physical activity. Although more adults are active in Hawaii than in other parts of the United States, ethnic disparities are problematic; 58% of residents of Japanese and Filipino ancestry do not engage in sufficient levels of physical activity.

## Evidence That Prevention Works

In 2001, the Task Force on Community Preventive Services identified six interventions that are effective in increasing physical activity levels in a community: (1) large-scale, high-intensity, community-wide campaigns with sustained visibility; (2) point-of-decision prompts encouraging people to use the stairs; (3) individually adapted health behavior change programs; (4) school-based physical education; (5) social support interventions in community settings; and (6) enhanced access to places for physical activity combined with informational outreach activities.

## Program Example

In 1999, Hawaii decided to use a large portion of tobacco settlement funds on the Healthy Hawaii Initiative (HHI). HHI targets physical inactivity, tobacco use, and poor nutrition. Prominent features of HHI include school health programs, community grants, education for health professionals, and a communication campaign, “Start Living Healthy.” CDC provided technical assistance to the Hawaii Department of Health in evaluation and participated in a conference that led to the publication of *Recommendations for Assessment, Monitoring, and Evaluation of Physical Activity in Hawai’i*. From 2000 to 2002, the initiative funded over 40 schools and communities to implement programs and environmental and policy changes. Funded interventions include a walk to school program, a joint land use agreement between the Department of Parks and Recreation and schools, and a program to implement SPARK (Sports Play & Active Recreation for Kids) into schools’ curricula. With a 15-year time frame (1999–2014), HHI seeks to bring about environmental, policy, and programmatic changes to make long-term improvements in physical activity rates.

## Implications

With adequate resources, commitment, and technical assistance, states can develop, launch, and evaluate statewide initiatives to promote physical activity. This program demonstrates the importance of collaboration between state health departments, universities, and CDC in establishing and developing a successful statewide initiative.



## Massachusetts



### Exploring Nontraditional Approaches to Educate Special Populations About Available Health Services

#### Public Health Problem

Cambodians in Lowell, Massachusetts, are at a disproportionate risk for diabetes and cardiovascular disease (CVD), mainly heart disease and stroke. Among Cambodians in Lowell aged 45 or older, a disproportionate share of deaths are attributable to stroke (15.9%) and diabetes (13.4%) compared with total Massachusetts stroke (6.5%) and diabetes (2.5%) death rates. In 1999, heart disease was the leading cause of death for both Cambodian and all Massachusetts adults.

#### Evidence That Prevention Works

Research from several studies has demonstrated that improving nutrition, increasing physical activity, and improving access to proper preventive care can prevent or delay the progression of CVD and adverse diabetes-related outcomes such as lower-extremity amputations, kidney disease, and blindness.

#### Program Example

A critical part of the REACH 2010 strategy is to improve the health of racial and ethnic minority populations. The Cambodian Community Health 2010 project in Lowell, Massachusetts, targets CVD as its primary focus and diabetes as a secondary focus for Cambodian populations. During year one of the project, Community Conversations were held in seven locations throughout the Cambodian community to involve all community members in developing the action plan. The Community Action Plan combines strategies focusing on the Cambodian community and its leaders, the health care system and medical providers, and public health research. Strategies to reach community members included organizing a “walking meditation” trip through a Buddhist temple, conducting weekly Tai Chi classes, promoting medical interpreter services, and conducting a behavioral risk factor survey adapted for Cambodians. A Cambodian Elders’ Council also was formed to give a voice to older Cambodian refugees who often are homebound and isolated because of language barriers. Learning tours were also conducted to familiarize Cambodians with emergency services and related facilities such as police stations, hospitals, and city hall. Fruit and vegetable picking trips gave participants an opportunity to focus on nutrition, and health education classes, including smoking cessation instruction, were conducted in English as a Second Language classes.

#### Implications

This program demonstrates the importance of collaborating with community members and using culturally appropriate and innovative strategies to extend health education and services to special populations.

#### Contact Information



# Providing Disease Prevention Services and Athletic Shoes to Low-Income Women Through the WISEWOMAN Program

## Public Health Problem

Cardiovascular disease (CVD), mainly heart disease and stroke, is the leading cause of death in the United States and the number one health threat to women in Michigan. Improving nutrition and physical activity to reduce cardiovascular disease risk factors can be particularly challenging for low-income women, who typically have limited access to fitness centers, nutrition counseling, transportation, or fitness equipment.

## Evidence That Prevention Works

Research has demonstrated that preventive measures such as improved nutrition, increased physical activity, and early detection and intervention can prevent heart disease and stroke and improve the health of women who already have CVD. In addition, the University of South Carolina Prevention Research Center found that reducing barriers to exercise increases the likelihood that people will engage in physical activity.

## Program Example

WISEWOMAN programs provide additional preventive services to women participating in the National Breast and Cervical Cancer Early Detection Program. States use this established system and other partnerships to screen women for risk factors for heart disease and other chronic diseases, conduct nutrition and physical activity interventions, and provide referrals for medical care and smoking cessation as needed. In Michigan, WISEWOMAN staff used funds made available through the Lansing Area League of Women Voters to buy athletic shoes for low-income program participants.

WISEWOMAN staff also partnered with a conveniently located store that carries athletic shoes to allow selected participants to receive a quality pair of shoes through a discount and \$30 gift certificate combination. Each recipient was required to meet with a lifestyle counselor to set goals and complete a lifestyle contract. By eliminating one important barrier to physical activity (lack of appropriate equipment), the Ingham County Health Department helps WISEWOMAN participants to lead healthier lives.

## Implications

Screening and lifestyle interventions that reduce barriers can improve the health of low-income women. The WISEWOMAN program demonstrates the importance of working with nontraditional partners to increase resources to help low-income participants reduce their risk for cardiovascular disease.

# North Carolina



## Promoting a Childhood Healthy Weight Initiative by Improving Nutrition and Physical Activity

### Public Health Problem

The percentage of children who are overweight in the United States doubled during the past two decades, and the percentage among adolescents almost tripled. Data from the North Carolina Nutrition and Physical Activity Surveillance System show an even greater increase in the state. Between 1995 and 2000, the prevalence of overweight increased by 36% in preschool children, 40% in school-aged children, and 14% in adolescents.

### Evidence That Prevention Works

Research has demonstrated that preventive measures such as improved nutrition, tobacco cessation, increased physical activity, and early detection and intervention may prevent heart disease, stroke, and other chronic diseases. Healthy eating behaviors lower the risk for many chronic diseases, including obesity, heart disease, stroke, some types of cancer, diabetes, and osteoporosis. By establishing healthy eating and physical activity habits early in life, children are more likely to carry these habits into adulthood.

### Program Example

The North Carolina Healthy Weight Initiative is the coordinating group for issues related to healthy weight, nutrition, and physical activity for the state's children. Through this initiative, North Carolina developed a comprehensive state plan focused on children aged 2–18 years. The North Carolina initiative is enhancing the state's pediatric nutrition surveillance system and is implementing programs designed to improve the nutrition and physical activity behaviors of young children and their families. Launched in the fall of 2002, the plan, *Moving Our Children Toward a Healthy Weight: Finding the Will and the Way*, calls for a multilevel approach to reducing the number of overweight and obese children. It focuses not only on behavioral and interpersonal change, but also on the organizational, community, and societal changes necessary to support healthy eating habits and increased physical activity for children, teens, and their families. North Carolina is also enhancing its pediatric nutrition surveillance system to better monitor trends in body mass index and selected dietary and physical activity behaviors. In addition, a pilot intervention in eight counties throughout the state targets children aged 2–5 who are enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) or the Child and Adult Care Food Program. This program uses policy, environmental interventions, and educational programs to reach staff members and families with important health messages.

### Implications

The North Carolina initiative uses strong partnerships to enhance the state's overall capacity to mobilize nutrition and physical activity promotion efforts and reduce the number of children who are overweight. This program demonstrates the importance of a coordinated approach, which entails collaboration among partners both internal and external to the North Carolina Division of Public Health.

### Contact Information



## Training Peer Educators and Advocates for Health: The REACH Promotora Community Coalition

### Public Health Problem

Compared with rates among whites, rates of diagnosed diabetes are 2.5 times higher among American Indians and Alaska Natives, 2.0 times higher among African Americans, and 1.8 times higher among Hispanics. The Texas Department of Health estimates that more than 1.3 million Texans aged 18 years or older have diabetes. About 911,000 of these, 6% of the state's population, have been diagnosed; the remainder are not aware they have the disease.

### Evidence That Prevention Works

In the United States, diabetes is the leading cause of new cases of blindness, lower-extremity amputations, and kidney failure. These serious outcomes can be prevented or substantially delayed through regular screening, appropriate care that includes long-term follow-up, and behavior modification.

### Program Example

The REACH Promotora Community Coalition, led by Migrant Health Promotion, has developed a program to address diabetes along the border of Texas and Mexico. The coalition targets communities in Hidalgo and Cameron counties, which are more than 80% Mexican American and have some of the lowest socioeconomic indicators, with more than 35% of their residents living below the poverty line. Developing the full potential of the community health workers (*promotoras*) is key to this program. The *promotoras* not only serve the community as health educators and advocates, but also are trained to become community leaders as they gain experience as community organizers, program planners, and program evaluators. The target population lives in *colonias*, which are communities with little infrastructure. Therefore, it is vital to use existing institutions such as public schools, community health clinics, and community-based organizations to reach this population. Also, because many adults lack access to transportation or telephones, much of the work is conducted through home visits and neighborhood meetings. As a result of the Migrant Health Promotion project, school health teams have been created to assess existing nutritional choices and opportunities for physical activity in schools and suggest measures to improve these choices and opportunities at school and at home.

### Implications

By using community-based health advisors to promote behavior change along with an evaluation component to document and assess their contributions, the Migrant Health Promotion project lends credibility to diabetes prevention interventions. This community-based approach can extend lifesaving prevention programs and health services across cultural divides to communities that would not likely be reached by traditional means.

# Washington

## Promoting KidsWalk-to-School Day: A Program to Promote Physical Activity and Pedestrian Safety

### Public Health Problem

In the United States, only about 1 of every 10 trips to school is made by walking or bicycling. Of school trips 1 mile or less, only 31% are made by walking, and within 2 miles of school, just 2% are made by bicycling. Research suggests that the decline in walking and bicycling may be contributing to the number of overweight children, and in Washington, the number of overweight children has doubled between 1980 and 1999.

### Evidence That Prevention Works

Immediate health benefits of regular physical activity for children include building and maintaining healthy bones, muscles, and joints; controlling weight and reducing fat; fostering healthy social and emotional development; and improving academic performance.

### Program Example

To increase opportunities for children to engage in physical activity, Washington State has promoted KidsWalk-to-School Day and the creation of safe walking routes for children to raise awareness about the importance of walking to school. The Washington Coalition for the Promotion of Physical Activity (WCPPA) and the Oregon Coalition for the Promotion of Physical Activity (OCPA) collaborated to develop a KidsWalk-to-School Day packet of materials that included the Walkability Checklist, the Neighborhood Walking Safety Guide, CDC's KidsWalk-to-School Guide, a list of related educational Web sites, and a Safe and Active Routes to School presentation on CD-ROM. This packet was distributed to community leaders who are interested in promoting walk-to-school efforts. One of the best examples of community involvement in KidsWalk-to-School Day in Washington is in Kitsap County. The Kitsap County Health District solicited help from a broad array of partners including the American Red Cross, Washington State Traffic Safety Commission, Kitsap County Commission for Children and Youth, Parent Teacher Association (PTA), Kitsap Safe Kids Coalition, Kitsap Community Federal Credit Union, Naval Hospital Bremerton, and representatives from local school districts. About 3,500 children at seven schools and many parents participated in KidsWalk-to-School Day.

### Implications

The KidsWalk-to-School program encourages physical activity as an integral part of a child's daily routine. This program demonstrates the importance of promoting walking and bicycling to school to help increase the likelihood that children will engage in physical activity and carry this habit into adulthood. In addition, KidsWalk-to-School promotes the development of safe walking and bicycling routes and safe pedestrian practices to potentially reduce injury among children.

### Contact Information



# Tobacco







# Minnesota

## Reducing Tobacco Use Among Teenagers Through a Comprehensive Tobacco Control Program

### Public Health Problem

In 2001, 39% of high school students in Minnesota used tobacco, which was higher than the national average of 35% for this age group. Of the 1,245,492 young people aged 17 or younger in Minnesota, more than 97,000 will die prematurely of a tobacco-related disease if current tobacco-use patterns persist.

### Evidence That Prevention Works

Aggressive and comprehensive tobacco control programs in California, Florida, Massachusetts, Oregon, and Minnesota have produced substantial declines in cigarette use. Minnesota's multicomponent, statewide program has been in effect since 2000. In just 2 years, teen tobacco use in Minnesota has decreased by 11%.

### Program Example

With resources from Minnesota's settlement with the tobacco industry, the Minnesota Department of Health (MDH) designed and manages the Minnesota Youth Tobacco Prevention Initiative. The goal of the Initiative is to reduce youth tobacco use by 30% by 2005. The Initiative is a comprehensive effort that includes competitive grant programs supporting (1) community-based grants to 31 local groups and 31 population-at-risk (PaR) groups; (2) statewide initiatives and development grants specifically designed to meet the technical assistance needs of community-based grantees in the areas of evaluation, communication, media advocacy, youth development, legal resources, school-based prevention, secondhand smoke policy development, and partnership development; and (3) a marketing campaign/youth advocacy organization (Target Market) designed to counter tobacco industry marketing efforts through public information and education. All recipients of community-based grants are provided strategic planning and general technical assistance through regional MDH grant managers. PaR grantees receive additional, specialized support through a statewide technical assistance grant designed to meet the strategic needs of PaRs. The Initiative aims to reach all youth aged 12–17 years, with an emphasis on those in middle school (aged 12–14 years).

### Implications

When tobacco control programs are sustained over time, reductions in tobacco use occur. Reaching the 2005 goal will ultimately prevent 1,700 premature deaths and save \$480 million in health care costs every year in Minnesota. This program demonstrates the importance of implementing strategies that have been successful in other states and sharing best practices across states to ensure reductions in tobacco use among youth.

### Contact Information

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# Nebraska



## Implementing a Comprehensive Tobacco Control Program to Reduce Tobacco Use

### Public Health Problem

In 1999, cigarette smoking was responsible for an estimated 2,400 deaths in Nebraska, and tobacco-related health care expenditures cost the state an estimated \$419 million annually. Projections based on current data are that about 45,000 Nebraskan youth will become smokers and die prematurely as adults because of a smoking-related illness.

### Evidence That Prevention Works

Aggressive and comprehensive tobacco control programs in California, Florida, Massachusetts, and Oregon have produced substantial declines in cigarette use. In California, home to one of the longest-running tobacco control programs, rates of lung and bronchial cancer have declined 14%.

### Program Example

The Tobacco-Free Nebraska program is a multifaceted, comprehensive tobacco control program that incorporates community-based initiatives that involve a wide range of strategies (such as compliance checks with retailers and restaurants related to sales to minors and smoke-free environments) and target a variety of audiences, from at-risk high school youth to policy makers to racial and ethnic minorities. The program also supports state initiatives, including a media campaign and toll-free quit line, which are targeted to youth and adults. Nebraska's program also increases local tobacco control capacity by training people to develop and implement tobacco control strategies and to monitor and evaluate how successful these efforts are. Ongoing tobacco-use surveys are used to track patterns and changes in tobacco use in the state. In addition, an independent firm conducts ongoing evaluation of the program. Another program effort is the Teen Tobacco Education and Prevention Project, which provides high school students with the opportunity to compete for \$100,000 grants to design and create antitobacco messages and campaigns for their peers.

### Implications

When tobacco control programs are sustained over time, reductions in tobacco use occur. By implementing strategies that have been successful and following nationally recognized standards, Nebraska is poised for success in reducing tobacco use. This program demonstrates the importance of a comprehensive program to ensure reductions in tobacco use.



## Reaching Target Groups With High Rates of Tobacco Use Through Comprehensive Tobacco Control: A Policy-Based Approach

### Public Health Problem

In 2000, almost 21% of adults in Oregon were reported to smoke. Tobacco contributes to approximately 6,500 deaths in Oregon annually. If current tobacco-use patterns persist, approximately 73,000 young people in Oregon aged 17 years or younger will die prematurely of a tobacco-related disease.

### Evidence That Prevention Works

Aggressive and comprehensive tobacco control programs in California, Florida, Massachusetts, and Oregon have produced substantial declines in cigarette use. In California, home to one of the longest-running tobacco control programs, rates of lung and bronchial cancer have declined 14%.

### Program Example

Oregon's comprehensive tobacco control program includes media spots, innovative programs such as the Oregon Quit Line to help people quit smoking, a multifaceted school program, and the promotion of smoke-free workplaces and school environments. In addition, the state health department dedicated funding to target groups with high rates of tobacco use, such as gay men and African Americans. From 1996, when Oregon's comprehensive program was established, to 2001, cigarette consumption has decreased 30% (or 1.5 billion cigarettes per year), the proportion of Oregon students who smoke fell from 22% to 12% among 8<sup>th</sup> graders and from 28% to 20% among 11<sup>th</sup> graders, and the proportion of Oregon adults who smoke decreased from 23% to 21%. In addition a state law went into effect (as of January 1, 2002) that prohibits smoking in enclosed workplaces, with exemptions for bars and some other venues.

### Implications

Because almost all smokers begin smoking during their teenage years, preventing tobacco use among young people is critical to the overall goal of reducing the prevalence of smoking. In addition, policies that make enclosed workplaces smoke free protect workers and patrons from the health problems associated with secondhand smoke, promote cessation, and establish healthy social norms. Programs like Oregon's comprehensive tobacco control program play pivotal roles in reducing and eliminating tobacco use and demonstrate the importance of a policy-based approach.

### Contact Information

# Washington

## Identifying and Eliminating Disparities in Tobacco Use Through a Cross-Cultural Workshop

### Public Health Problem

In 2000, an estimated 21% of adults in Washington were reported to smoke cigarettes, but among some subpopulations the prevalence was much higher: for example, 37% among American Indians/Alaska Natives. In large part, this disparity may be attributed to limited access to tobacco prevention and control resources.

### Evidence That Prevention Works

In Washington, state-funded county-based programs have shown measurable progress in meeting statewide tobacco control objectives, including large declines in per capita cigarette consumption. Future efforts directed at identifying and eliminating disparities in smoking rates will build on this infrastructure and establish new capacity within underserved communities, where populations are often heavily targeted by tobacco industry marketing. The state has learned that community-based nongovernmental community organizations are generally more effective at reaching local populations than are state or local governments.

### Program Example

The Washington Department of Health convened a Cross-Cultural Workgroup on Tobacco to identify populations disparately affected by tobacco use. The membership includes representatives from organizations working with African American, American Indian, Asian American/Pacific Islander, Hispanic/Latino, gay-lesbian-bisexual-transgender, pregnant, low-income, and faith-based populations. Washington is developing a strategic plan to identify and reduce tobacco-related disparities and a marketing plan to educate community leaders of diverse populations about the strategic plan and to engage them in its implementation. During the strategic planning process, the state program funded six populations to assess their capacity and readiness to implement tobacco prevention and control activities and evaluated the strategic planning process.

### Implications

Securing meaningful participation in the strategic planning process from a broad range of population groups will enable Washington's Department of Health to identify the groups experiencing the most pronounced tobacco-related disparities. This program demonstrates the importance of developing culturally and contextually appropriate interventions to reduce health disparities.

# **School Health**





## Implementing a Coordinated School Health Program: One Local School's Success

### Public Health Problem

Florida schools serve 2.7 million students, approximately 20% of whom live in poverty. In 1999, 81% of Florida's youth (aged 10–24 years) did not attend daily physical education classes, 78% did not participate in any moderate physical activity, 74% did not eat the recommended five servings of fruits and vegetables per day, and about half (48%) consumed alcohol during the month preceding survey or had engaged in sexual intercourse (50%).

### Evidence That Prevention Works

Health education in schools can reduce the prevalence of health risk behaviors among young people. For example, health education resulted in a 37% reduction in the onset of smoking among 7<sup>th</sup> graders. In addition, obese girls in the 6<sup>th</sup> and 8<sup>th</sup> grades lost weight through a program at school, and students who attended a school-based life-skills training program were less likely than other students to smoke or use alcohol or marijuana.

### Program Example

Coordinated school health programs (CSHPs) provide a well-rounded approach to school health that includes health education, physical education, health services, nutrition services, health promotion for staff, counseling/psychological services, a healthy school environment, and parent and community involvement. In Sarasota, the principal of McIntosh Middle School, who was concerned about the impact of health problems on the attendance and performance of students and staff, committed the school to a 3-year state program to establish a CSHP. Using CDC's School Health Index, the school's site-based team assessed the school's resources, developed an action plan, and integrated the CSHP into the school's operations and curriculum. Implementing a CSHP has generated access to additional resources for students and staff, improved school attendance, and increased the percentage of students who scored 3.0 or higher on a state-mandated writing assessment. In addition, the majority of students at McIntosh Middle School are Renaissance members, an honor that requires a grade point average of 3.0 or above and no referrals for discipline. The Florida Department of Education identified McIntosh as a Five-Star School with a state grade of "A," and the department also recognized the school as a "Sunshine State Success Story: Emphasizing Teaching Standards Through Health 2001–2002" for making wellness a cornerstone of its education.

### Implications

CSHPs provide a focal point for collaboration and are a good use of resources to improve the health of youth and the adults they will become. These results show how a coordinated school health program improves learning, performance, and health for students and teachers.

### Contact Information

# West Virginia

## Preventing and Reducing Obesity Through a Coordinated School Health Program, Partner Education, and Collaboration

### Public Health Problem

West Virginia schools serve 301,000 students, approximately 25% of whom live in poverty. In 1999, 69% of West Virginia's youth (aged 10–24 years) did not attend daily physical education classes, 75% did not participate in any moderate physical activity, 80% did not eat the recommended five servings of fruits and vegetables per day, 16% were at risk for obesity, and 12% were obese.

### Evidence That Prevention Works

Health education in schools can reduce the prevalence of health risk behaviors among young people. For example, health education resulted in a 37% reduction in the onset of smoking among 7<sup>th</sup> graders. In addition, obese girls in the 6<sup>th</sup> and 8<sup>th</sup> grades lost weight through a program at school, and students who attended a school-based life-skills training program were less likely than other students to smoke or use alcohol or marijuana.

### Program Example

West Virginia established coordinated school health programs (CSHPs), giving its students the advantages of a well-rounded approach to school health that includes health education, physical education, health services, nutrition services, counseling/psychological services, a healthy school environment, and parent and community involvement. Through a revision of West Virginia's Board of Education Policy, the President's Physical Fitness Test became a school accreditation standard. In each school, 40% of students must pass the test or the school must demonstrate improvement over 3 years. Statewide, the proportion of children passing increased from approximately 5% in 1992 to 40% in 1999. From 1992 to 2000, more than 700 physical education teachers or health teachers received training related to CSHPs. The West Virginia Department of Education (WVDE) also held training sessions for physical educators to introduce the Physical Education Instructional Goals and Objectives and to emphasize lifetime fitness in physical education programs. Partnerships were also established, including the WVDE Office of Healthy Schools, the Office of Child Nutrition, and the West Virginia Nutrition Coalition, which collaborated on the planning and delivery of a week-long nutrition symposium.

### Implications

CSHPs provide a focal point for collaboration and are a good use of resources to improve the health of youth and the adults they will become. This program demonstrates the importance of a comprehensive approach to school health. Strong policy helps develop an environment that promotes improved health behaviors, and health education and physical education develop the knowledge, attitudes, and skills students need to engage in healthy eating and physical activity.





## Preventing and Reducing Obesity Through a Coordinated School Health Program

### Public Health Problem

Wisconsin schools serve 1.2 million students. In 2001, more than half (57%) of Wisconsin's youth (aged 13–18 years) did not attend daily physical education classes. In 2001, 15% were at risk for obesity, 10% were obese, and 88% did not consume the recommended five or more servings of fruits and vegetables on the day before the survey.

### Evidence That Prevention Works

Health education in schools can reduce the prevalence of health risk behaviors among young people. For example, health education resulted in a 37% reduction in the onset of smoking among 7<sup>th</sup> graders. In addition, obese girls in the 6<sup>th</sup> and 8<sup>th</sup> grades lost weight through a program at school, and students who attended a school-based life-skills training program were less likely than other students to smoke or use alcohol or marijuana.

### Program Example

Wisconsin established coordinated school health programs (CSHPs), giving its students the advantages of a well-rounded approach to school health that includes health and physical education, health and nutrition services, counseling/psychological services, a healthy school environment, and parent and community involvement. In 2001, in collaboration with the University of Wisconsin, the state's Department of Public Instruction (DPI) established an annual Best Practices in Physical Activity and Health Education Symposium, a 2-day staff development workshop for teachers. The DPI and Department of Health and Family Services were also awarded \$700,000 in additional CDC funding for a cardiovascular disease prevention project in Milwaukee Public Schools, resulting in enhanced nutrition education, school meals, and opportunities for physical activity. All Wisconsin school districts received nutrition education information and training opportunities. More than 3,200 staff were trained in topics such as the Dietary Guidelines for Americans 2000, the importance of a good breakfast, the relationship of nutrition to learning, and school nutrition policies to support healthy eating. In 2001, along with the state school health and physical education association, the DPI implemented "Movin' Schools," a complement to CDC's Youth Media Campaign. More than 10,000 young people increased their physical activity through school-linked activities in 2002.

### Implications

CSHPs are a vehicle for collaboration and are a good use of resources to improve the health of youth and the adults they will become. This program demonstrates how dollars invested in CSHPs deliver information and ideas for healthier living to thousands of students and their families.

### Contact Information

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