The New Spectrum of Prevention: A Model for Public Health Practice

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Abstract

The Spectrum of Prevention is a framework for health departments and community agencies to conceptualize, implement, and coordinate a wide variety of public health programs. This article describes the seven strategies in the Spectrum of Prevention and explains why the Spectrum is particularly appropriate for planning and coordinating programs that address complex community health issues. The broad range of activities encompassed by the Spectrum describes new roles for Public Health that suggest a broader definition of health and include approaches such as forming coalitions and networks and the newest strategy, mobilizing communities. Detailed examples demonstrate how one county public health department in California, Contra Costa Health Services, has used the Spectrum framework to improve community health.

The Spectrum of Prevention — A Tool for Planning and Coordination

The Spectrum of Prevention is a broad framework that includes seven strategies designed to address complex, significant public health problems. These strategies take into account the multiple determinants of community health and can be used to develop a comprehensive approach to current public health issues. While many of these strategies are familiar to public health practitioners, when considered as parts of a single approach they become an effective framework for planning public health interventions and coordinating the activities of multiple programs or agencies. The following strategies, or bands, are included in the Spectrum of Prevention:

- Influencing policy and legislation
- Mobilizing neighborhoods and communities
- Fostering coalitions and networks
- Changing organizational practices
- Educating providers
- Promoting community education
- Strengthening individual knowledge & skills

At Contra Costa Health Services, a county health department in California, the Spectrum of Prevention has been useful in planning programs to address traditional public health issues such as communicable disease and infant mortality. The Spectrum approach has also been particularly effective in addressing emerging public health problems. Epidemiologists have identified chronic diseases as today’s leading causes of death, with cancer, heart disease, and stroke disproportionately affecting low-income and minority communities. Community public health now also includes such issues as violence, drug abuse, and environmental contamination, all entwined in complex ways, and all requiring multi-level interventions. The Spectrum gives planners a structure to consider a range of efforts to approach a single issue.

The Spectrum is also a tool for improving coordination and collaboration among different agencies and among programs within large institutions. A variety of groups focus on public health issues — governmental and community-based organizations, neighborhood associations, the faith community, and individuals. Often their work is organized by categorical programs, each effort tied to a distinct funding source and mandated scope of work. It is easy for efforts to become fragmented, even among programs in the same organization. The Spectrum can help coordinate the efforts of different groups working on the same issue by providing a framework and common language for people from
diverse backgrounds to come together, share information, highlight gaps in service, and develop joint plans to achieve public health outcomes.

The Spectrum is particularly useful for public health departments that are planning and implementing projects in partnership with communities, each group bringing important expertise to the table to achieve a common goal. The Spectrum helps facilitate these partnerships by illustrating that short-term, seemingly free-standing activities are connected and part of a broader context.

The following examples illustrate the bands of the Spectrum of Prevention and show how the different strategies have been used in Contra Costa to address a wide range of public health issues. The true power of the framework, however, comes from the combined application of this spectrum of approaches to complex public health issues. That application of the Spectrum is illustrated in the case study following the discussion and examples.

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Policy rarely can be enacted, however, without other actions, such as mobilizing communities, fostering coalitions and promoting community education.

Mobilizing Communities

In the arena of public health, community mobilization is a relatively young concept. Traditionally, public health activities have been performed in a medical model, with the provider-expert at the center, delivering services to individuals. Addressing today's public health problems, however, requires a community as well as a medical approach. It is not effective for a public health professional to enter low-income neighborhoods and lecture residents to stop smoking and eat five-a-day servings of vegetables to reduce their risk of cancer or heart disease. These messages fail to capture the interest of communities confronting more urgent concerns of violence, drug use, unemployment, and the struggle to keep families together. Instead, health departments must be willing to meet with communities and share the agenda, prioritizing community concerns as well as health department goals.

In Contra Costa, as in other locations, health agencies are working with residents and community groups to increase the capacity of communities to work on issues they have identified as important. For example, the Healthy Neighborhoods Project works with community residents to identify neighborhood assets, develop a list of priority activities needed to improve neighborhood quality of life, and implement action plans. With technical assistance from county staff, community residents have been able to make significant and long-term changes affecting their health and safety. Project results include: increasing access to recreation and exercise by cleaning up parks littered with trash; creating healthy environments around schools by removing a tobacco billboard and installing stop signs, speed bumps and traffic lights; and working with local law enforcement to increase police patrols to reduce violence in the streets.

The Spectrum of Prevention – Discussion and Examples

Influencing Policy and Legislation

Legislation and other policy initiatives have proven to be among the most effective strategies for achieving broad public health goals. Both formal and informal policies have the ability to affect large numbers of people by improving the environments in which they live and work, encouraging people to lead healthy lifestyles, and providing for consumer protections.

Laws prohibiting smoking in workplaces and public places have contributed significantly to reducing smoking prevalence in California and elsewhere, providing one of the most significant impacts on public health in recent years. Local ordinances requiring that swimming pool areas be fenced have reduced drowning deaths and injuries among children. In Contra Costa, the Childhood Health and Disability Prevention Program (CHDP) participated in a successful advocacy effort to expand eligibility criteria for the state's Healthy Families Program, which provides health insurance to low-income children.
Fostering Coalitions and Networks

Coalitions and networks, composed of community organizations, policy makers, businesses, health providers and community residents working together, can be powerful advocates for legislation and organizational change. Coalitions and networks also provide an opportunity for joint planning, system-wide problem solving and collaborative policy development to ensure that the voices of all community sectors are represented in public health prevention programs.

There are numerous examples of health departments effectively working with coalitions and networks. Contra Costa’s Breast Cancer Partnership, a coalition of the Health Department, cancer organizations, community medical providers, women’s groups, the faith community, survivors, and diverse community organizations, came together to reduce the barriers for diagnosis and treatment of breast cancer. The Partnership worked with providers to implement a new state-funded breast cancer screening program for low income women, and developed strategies to increase breast cancer screening, especially in minority communities. They held breast health screening classes with the faith community, recruited Spanish-speaking Patient Navigators to help women through the medical systems, and produced a calendar featuring local African American breast cancer survivors. They also networked with similar Partnerships around California and linked with statewide breast cancer advocacy groups to lobby for cancer treatment. By 2002, African American women in Contra Costa were getting early diagnosis of breast cancer at the same rate as white women, and new legislation provided breast and cervical cancer treatment for all women in California.

In Contra Costa, other coalitions and networks have been instrumental in encouraging policy makers to enact ordinances to reduce injury, violence and chronic diseases. These groups include the Public and Environmental Health Advisory Board, Food and Nutrition Policy Consortium, West County AIDS Consortium, Childhood Injury Prevention Coalition, and California Bicycle Safety Network. By bringing together people from a number of agencies and organizations with similar goals, each of these coalitions has enabled its members to share resources and strategies and fostered collaborative planning for effective prevention.

Changing Organizational Practices

Changing organizational practices involves modifying the internal policies and practices of agencies and institutions. This can result in improved health and safety for staff of the organization, better services for clients, and a healthier community environment. Advocating for organizational change at agencies such as law enforcement, schools and health departments can result in a broad impact on community health.

At the urging of health experts, for example, the California Highway Patrol has developed the practice of reporting to the press whether people injured or killed in automobile accidents were wearing seat belts. Now, each newspaper report of a car crash includes an underlying public health education message to “buckle up and live.”

Contra Costa’s FoodWise project was successful in establishing a relationship with the county’s Employment and Human Services Department to provide discount coupons for fruits and vegetables to thousands of food stamp recipients.

In another case of organizational change, the county’s Public Health Laboratory worked with local hospital laboratories to streamline and automate reporting communicable diseases. This will enable the Health Department to respond more quickly to outbreaks of disease.

Educating Providers

This strategy reaches an influential group of individuals—in and out of the health field—who have daily contact with large numbers of people at high risk for injury and disease. By educating providers to identify and intervene in public health issues, professionals, paraprofessionals and community activists working with the public can become front-line advocates for public health.

By educating providers to identify and intervene in public health issues, professionals, paraprofessionals and community activists working with the public can become front-line advocates for public health. Providers can encourage adoption of healthy behaviors, screen for health risks, contribute to community education, and advocate for policies and legislation.

Here are some examples from Contra Costa: the Communicable Disease Program’s TB ASAP program trains staff of churches and other community-based
organizations to identify signs of tuberculosis infection among their clients and encourage them to seek immediate medical attention. The Family, Maternal and Child Health Program educates prenatal providers to promote breastfeeding and screen prenatal patients for substance abuse. The Public Health Division trains staff in county Ambulatory Care Clinics to become providers under the state Breast Cancer Early Detection Program, thereby increasing access for low-income and uninsured women to breast cancer screening services.

Promoting Community Education

The goals of community education are to reach the greatest number of individuals possible with health education messages, as well as to build a critical mass of people who will become involved in improving community health. Media advocacy — the use of mass media to shape the public's understanding of health issues — is an important part of community education campaigns. AIDS prevention and tobacco cessation campaigns are examples of community education familiar in many cities across the nation.

Contra Costa’s Bike Safety Project has used community events and media attention to help increase the use of bicycle helmets. Similarly, a coalition of police officers and nurses has been effective in using the media and car seat inspection events to educate parents to install and use car seats correctly, a major factor in reducing childhood injuries.

The “Put a Face On Homelessness” community education campaign was launched by the Contra Costa Homeless Program working jointly with the Public and Environmental Health Advisory Board. Drawing from an approach called Photovoice, program staff gave disposable cameras to homeless families and asked them to take pictures that conveyed important issues in their lives. The photos and accompanying stories were displayed in public venues throughout the county, raising community awareness that homelessness is a significant issue in the county and that a substantial portion of the homeless population consists of families with children.

Strengthening Individual Knowledge and Skills

This band of the Spectrum represents a classic approach of public health. Public health nurses, health educators and trained community members work directly with clients in the home, community settings or in clinics, providing health information to promote child and family health. Some also work with seniors to maintain well-being and independence.

In Contra Costa, the Injury Prevention Project trains community residents to conduct home safety inspections. Public Health program staff in a variety of programs, including the TeenAge Program, AIDS, Lead Poisoning Prevention, and Childhood Immunization provide health education at health fairs and other community events, and use the media to disseminate important messages on nutrition, exercise, smoking and other health issues. Less traditional topics such as stress, violence, employment and environmental issues are also covered.

Another part of strengthening individual knowledge and skills involves building the capacity of community members to use new approaches and to educate other individuals in their communities. Some health educators work with both youth and adults to build their capacity in areas such as media advocacy, community mobilizing, and working with policy makers to make positive changes in the health of their communities. Residents are encouraged to become more active advocates for community health concerns, get involved in local policy issues, or press for organizational change.
The Spectrum of Prevention – A Case Study

The Spectrum of Prevention is particularly effective as a framework for planning and coordinating a comprehensive approach to a major public health issue. A lead agency such as a Health Department can use the Spectrum to identify gaps in a prevention initiative and to understand how different components of a comprehensive approach can support each other. As more agencies and organizations in a community become familiar with the Spectrum, it can provide a common framework and language for joint planning and action.

This example from Contra Costa Health Services of preventing tobacco use illustrates how the various bands of the Spectrum coordinated the activities of the Health Department and other agencies over many strategies and across years of time to effectively implement a comprehensive approach to an issue. Activities from each band of the spectrum are described here.

Influencing Policy and Legislation
The Health Department’s Tobacco Prevention Program began working with a community coalition in 1984 to develop and support two pieces of legislation: the Clean Air Ordinance and Tobacco-Free Youth Ordinance. These policies have been successful in reducing exposure to second hand smoke and youth access to tobacco.

Mobilizing Communities
The TIGHT (Tobacco Industry Gets Hammered by Teens) project mobilized youth throughout Contra Costa to educate their peers about the health effects of smoking and to make presentations to their local city councils advocating for passage of the Tobacco-Free Youth Ordinance.

Fostering Coalitions and Networks
In the mid-1980’s, a coalition of the American Heart Association, the American Lung Association and the American Cancer Society, worked with Contra Costa’s Public Health Department to implement the strongest multi-city clean indoor air ordinance in the nation for its time. Subsequent actions by those groups and others led to the passage of the Tobacco-Free Youth Ordinance in 1998, perhaps the most comprehensive local measure in the United States to protect young people from tobacco industry influence. Dozens of members of the Tobacco Prevention Coalition and TIGHT attend City Council and Board of Supervisors meetings, document tobacco industry practices and advocate for funding for prevention. Such coalitions now exist in every county in California and often have led the fight for local ordinances related to the tobacco issue.

Changing Organizational Practices
Health Department staff who have direct contact with patients in programs such as the Women, Infants, and Children Program (WIC) have been trained to conduct smoking intervention efforts with patients. In another action, Public Health staff raised funds for a joint effort with the Sheriff’s Department to strengthen enforcement of laws promoting clean indoor air.

Educating Providers
Child Health and Disability Prevention Program (CHDP) staff educate physicians and daycare providers to make parents aware of the dangers of secondhand smoke. Teachers and administrators in the schools are encouraged to model healthy behavior by refraining from smoking on school grounds.

Promoting Community Education
The Health Department placed programming on countywide cable television promoting local tobacco ordinances and publicizing smoking cessation classes. These local efforts reinforced the state’s hard-hitting anti-smoking campaign on television, radio, and billboards all across California.

Strengthening Individual Knowledge and Skills
Maternal and Child Health (MCH) staff counsel and support pregnant women to stop smoking. Physicians in health department clinics reinforce anti-smoking messages with their patients. Tobacco Coalition members are trained in media advocacy, and TIGHT youth learn valuable public speaking skills by participating at their city council meetings.

To read more case studies or to share experiences about using the Spectrum, visit our website at ccpublichealth.org
Summary
The Spectrum of Prevention is not a new approach to public health, rather it is a framework that reminds us that difficult public health problems require a broad range of efforts. It is a guideline, and while not all of the strategies will be appropriate for every issue, the Spectrum provides a reminder that complex problems often require a range of approaches.

Two sets of examples have been provided to explain how the Spectrum of Prevention has been used by a county public health department. Discussion of each band of the Spectrum incorporates examples that illustrate how public health programs are taking on new roles, including those of advocate, community organizer, and partner, to achieve public health outcomes. A case study shows how a county public health department used the Spectrum to develop a comprehensive approach to one issue—reducing and preventing tobacco use—by working with a community coalition, local organizations and groups, and community residents.

Since the Spectrum of Prevention is a flexible model, organizations working in the field of public health and adapting the model based on their own experiences, successes, and failures may make valuable modifications to it. We encourage community residents, networks, coalitions, public health agencies and others to use and adapt the Spectrum to plan and implement their prevention efforts and to share their successes and insights.

History
In 1982 Contra Costa Health Services formed the Prevention Program. Larry Cohen, then Director of the Prevention Program, developed a framework, based on the work of Dr. Marshall Swift, for designing and implementing primary prevention programs. The resulting Spectrum of Prevention emphasized the importance of approaching public health prevention issues on several levels. In 1996, Contra Costa Health Services Public Health Division merged a number of prevention programs to create the Community Wellness & Prevention Program (CW&PP). Based on experience with new public health issues and strategies, the Public Health Division added a band for mobilizing neighborhoods and communities and renamed the framework The New Spectrum of Prevention: A Model for Public Health Practice. ■

For more information about the prevention programs described here or for other written materials, contact the Community Wellness & Prevention Program, Contra Costa Health Services, 597 Center Avenue, Suite 125, Martinez, CA 94553. Phone (925) 313-6808 or visit our website at http://ccprevention.org

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