# ADVANCING TOBACCO CONTROL THROUGH EVIDENCE-BASED PROGRAMS

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# ADVANCING TOBACCO CONTROL THROUGH EVIDENCE-BASED PROGRAMS

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#### **Overview**

In the Surgeon General's report, Reducing Tobacco Use, former U.S. Surgeon General David Satcher noted that "Our lack of greater progress in tobacco control is more the result of our failure to implement proven strategies than it is the lack of knowledge about what to do." The report provides a complete analysis of five major approaches to reducing tobacco use: educational, clinical, regulatory, economic, and comprehensive. The authors of the report concluded that the comprehensive approach, which involves the synergistic coordination of the other major approaches, has been most successful in reducing tobacco use, and that statewide comprehensive approaches were particularly effective. They estimated that if the strategies shown to be effective were fully implemented, the rates of tobacco use, both among young people and among adults, could be cut in half by 2010.2 In an independent analysis, the Institute of Medicine (IOM) also concluded that comprehensive state tobacco control programs can reduce rates of smoking and save lives.<sup>3</sup>

The conclusions of the Surgeon General's report and the IOM report are thus consistent: comprehensive statewide tobacco control programs work.

Recommended strategies for implementing such programs can be found in *Reducing Tobacco Use* (www.cdc.gov/tobacco),<sup>2</sup> as well as in CDC's *Best Practices for Comprehensive Tobacco Control Programs* (www.cdc.gov/tobacco)<sup>4</sup> and on the Web sites of the Task Force on Community Preventive Services (www.thecommunityguide.org)<sup>5</sup> and the Surgeon General (www.surgeongeneral.gov/tobacco/smokesum.htm).<sup>6</sup> The proven strategies discussed in these sources provide a strong foundation for action at the state level. Possible funding sources for

comprehensive state tobacco control programs include money from the settlement of the states' lawsuits against the tobacco industry, state excise tax revenues, general state funds, and federal and private sources.

#### **Burden**

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, it causes more than 440,000 deaths and costs the nation approximately \$75 billion in medical expenses and \$81.9 million in productivity losses.<sup>7</sup> Tobacco use is associated with cancer, heart disease. chronic obstructive pulmonary disease, and stroke— 4 of the 5 leading causes of death in the United States. In 2000, an estimated 46.5 million U.S. adults (23.3%) were current smokers. The prevalence of smoking was higher among men (25.7%) than among women (21.0%). Among racial/ethnic groups, Asians (14.4%) and Hispanics (18.6%) had the lowest prevalence of adult cigarette use, and American Indians/Alaska Natives had the highest rates (36%) (Table 1).8 Although nearly 70% of adult smokers want to quit smoking completely, only a small fraction are successful in any given year because of the highly addictive nature of tobacco use.8

Smoking rates among children and youth are perhaps even more disturbing than rates among adults. For example, rates among U.S. high school students increased significantly from approximately 28% in 1991 to 35% in 1999,9 while 15% of middle school students currently use some form of tobacco (cigarettes, smokeless tobacco, cigars, pipes, bidis, or kreteks).11 Overall, white teens are taking up

smoking at higher rates than are black and Hispanic teens.<sup>11</sup> Each day, more than 5,000 children or adolescents less than 18 years old try their first cigarette.<sup>11</sup> Although recent studies indicate that U.S. teen smoking rates may have leveled or begun to decline, they are still substantially above the goals articulated in *Healthy People 2010*.<sup>12</sup>

Tobacco products other than conventional cigarettes have also had catastrophic effects on users' health. The use of smokeless tobacco has been associated with leukoplakia and oral cancer, as well as with the early indicators of these conditions, peridontal

degeneration and soft tissue lesions; regular cigar use has been associated with cancers of the lungs, larynx, oral cavity, and esophagus; and the use of bidis (small, brown, often flavored tobacco cigarettes from India that are hand-rolled in tendu or tenburni leaf and secured with a string at one end) has been associated with heart disease and cancers of the mouth, pharynx and larynx, lung, esophagus, stomach, and liver. Although bidis were virtually unheard of in this country until quite recently, their popularity among young people has grown alarmingly: as of 2000, 2.4% of middle school

Table 1. Percentage of Persons Aged 18 years and Older Who Were Current Smokers,\* by Selected Characteristics—National Health Interview Survey, United States, 2000

Characteristic	Men (n=13,986)		Women (n=18,388)		Total (n=32,374)	
	%	(95% CI †)	%	(95% CI)	%	(95% CI)
Race/Ethnicity§						
White, non-Hispanic	25.9	( <u>+</u> 1.0)	22.4	( <u>+</u> 0.8)	24.1	( <u>+</u> 0.7)
Black, non-Hispanic	26.1	(± 2.5)	20.9	( <u>+</u> 1.7)	23.2	( <u>+</u> 1.5)
Hispanic	24.0	( <u>+</u> 2.1)	13.3	( <u>+</u> 1.6)	18.6	( <u>+</u> 1.3)
American Indian/Alaska Native¶	29.1	( <u>+</u> 11.0)	42.5	( <u>+</u> 11.0)	36.0	( <u>+</u> 8.0)
Asian**	21.0	( <u>+</u> 4.6)	7.6	( <u>+</u> 2.8)	14.4	( <u>+</u> 2.8)
Education <sup>††</sup>						
0-12 (no diploma)	33.2	( <u>+</u> 2.2)	23.6	( <u>+</u> 1.7)	28.2	( <u>+</u> 1.4)
≤8	26.1	( <u>+</u> 3.1)	14.2	( <u>+</u> 2.2)	20.0	( <u>+</u> 1.9)
9–11	37.6	( <u>+</u> 3.5)	30.8	( <u>+</u> 2.7)	33.9	( <u>+</u> 2.2)
12	40.1	( <u>+</u> 6.8)	25.3	( <u>+</u> 5.1)	32.7	( <u>+</u> 4.4)
GED <sup>§§</sup> diploma	50.1	( <u>+</u> 6.2)	44.3	( <u>+</u> 5.7)	47.2	( <u>+</u> 4.3)
12 (diploma)	31.7	( <u>+</u> 1.9)	23.5	( <u>+</u> 1.4)	27.2	( <u>+</u> 1.2)
Associate degree	21.9	( <u>+</u> 2.8)	20.4	( <u>+</u> 2.4)	21.1	( <u>+</u> 1.8)
Some college	25.8	( <u>+</u> 2.1)	21.6	( <u>+</u> 1.7)	23.5	( <u>+</u> 1.3)
Undergraduate degree	14.2	( <u>+</u> 1.7)	12.4	( <u>+</u> 1.5)	13.2	( <u>+</u> 1.1)
Graduate degree	9.1	( <u>+</u> 1.8)	7.5	( <u>+</u> 1.6)	8.4	( <u>+</u> 1.2)
Age group (yrs)						
18–24	28.5	( <u>+</u> 2.7)	25.1	(± 2.4)	26.8	( <u>+</u> 1.8)
25–44	29.7	( <u>+</u> 1.4)	24.5	( <u>+</u> 1.1)	27.0	(±0.9)
45–64	26.4	( <u>+</u> 1.5)	21.6	( <u>+</u> 1.3)	24.0	( <u>+</u> 1.0)
<u>&gt;</u> 65	10.2	( <u>+</u> 1.3)	9.3	( <u>+</u> 1.0)	9.7	( <u>+</u> 0.8)
Poverty status¶¶						
At or above	25.4	( <u>+</u> 1.0)	20.4	( <u>+</u> 0.9)	22.9	( <u>+</u> 0.7)
Below	35.3	( <u>+</u> 3.2)	29.1	( <u>+</u> 2.3)	31.7	( <u>+</u> 1.9)
Unknown	23.6	( <u>+</u> 1.8)	19.5	( <u>+</u> 1.4)	21.4	( <u>+</u> 1.1)
Total	25.7	( <u>+</u> 0.8)	21.0	( <u>+</u> 0.7)	23.3	( <u>+</u> 0.5)

<sup>\*</sup> Smoked >100 cigarettes during their lifetime and reported at the time of interview smoking every day or some days. Excludes 301 respondents for whom smoking status was unknown.

<sup>†</sup> Confidence interval.

<sup>§</sup> Excludes 287 respondents of unknown, multiple, and other racial/ethnic categories.

<sup>¶</sup> Wide variances among estimates reflect limited sample sizes.

<sup>\*\*</sup> Does not include Native Hawaiians and Other Pacific Islanders.

<sup>††</sup> Persons aged >25 years. Excludes 305 persons with unknown years of education.

<sup>§§</sup> General Educational Development.

<sup>¶¶</sup> The 1999 poverty thresholds from the Bureau of the Census were used in these calculations.

students and 4.1% of high school students reported smoking bidis.

Smoking also poses health risks for nonsmokers as well as for those who smoke. Nearly 9 of 10 nonsmoking Americans are exposed to environmental tobacco smoke (ETS), which has been associated with lung cancer and heart disease among nonsmoking adults and with serious respiratory problems among children. In addition, substantial evidence now indicates that ETS exposure is also associated with low birth-weight and sudden infant death syndrome.

The consequences of tobacco use have become a global concern. The World Health Organization (WHO) estimates that about 4 million people die every year of tobacco-related diseases and that without effective international tobacco control programs, the annual death toll will increase to as many as 10 million by 2030, 7 million among people in developing countries.

# Healthy People 2010 Objectives

Tobacco use is one of the 28 focus areas of *Healthy People 2010* and is also included in a smaller set of health priorities known as leading health indicators. For more information on the tobacco-related objectives in *Healthy People 2010*, visit www.health.gov/healthypeople. Following is a brief overview of these objectives:

- 27-1. Reduce tobacco use by adults.
- 27-2. Reduce tobacco use by adolescents.
- 27-3. Reduce the initiation of tobacco use among children and adolescents (developmental).
- 27-4. Increase the average age of first use of tobacco products by adolescents and young adults.
- 27-5. Increase the prevalence of smoking cessation attempts among adult smokers to 75%.
- 27-6. Increase the rate of smoking cessation among pregnant smokers to 30%.
- 27-7. Increase the prevalence of tobacco use cessation attempts by adolescent smokers to 84%.

- 27-8. Increase insurance coverage of evidence-based treatment for nicotine dependency.
- 27-9. Reduce the proportion of children who are regularly exposed to tobacco smoke at home to 10%.
- 27-10. Reduce the proportion of nonsmokers exposed to environmental tobacco smoke to 45%.
- 27-11. Increase smoke-free and tobacco-free environments in schools, including all school facilities, property, vehicles, and school events, to 100%.
- 27-12. Increase the proportion of work sites with formal smoking policies that prohibit smoking or limit it to separately ventilated areas to 100%.
- 27-13. Establish laws that prohibit smoking or limit it to separately ventilated areas in public places and work sites.
- 27-14. Reduce the rate of illegal tobacco sales to minors through better enforcement of laws.
- 27-15. Ensure that all states and the District of Columbia suspend or revoke state retail licenses of merchants who violate laws prohibiting the sale of tobacco to minors.
- 27-16. Eliminate tobacco advertising and promotions that influence adolescents and young adults (developmental).
- 27-17. Increase the percentage of adolescents who disapprove of smoking.
- 27-18. Increase the number of tribes, territories, and states (including D.C.) with comprehensive, evidence-based tobacco control programs (developmental).
- 27-19. Eliminate all state laws that preempt stronger tobacco control laws.
- 27-20. Reduce the toxicity of tobacco products by establishing a regulatory structure to monitor toxicity (developmental).
- 27-21. Increase the average federal and state tax on tobacco products.

# **National Leadership**

Reducing rates of tobacco use requires a partnership between the federal government and states. Several federal agencies have conducted studies whose results can provide a foundation for state action, including the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Agency for Health Care Policy and Research (AHCPR). These and other federal entities have produced and disseminated important information about the extent of tobacco use, the impact of tobacco use, and the effectiveness of various interventions to reduce tobacco use.

#### Surveys

Federally supported surveys of tobacco use include the Behavioral Risk Factor Survey, the National Health Interview Survey, the Youth Risk Behavior Survey, and the Youth Tobacco Survey conducted through CDC; the tobacco use supplement to the current population survey being conducted by the Bureau of Census, with support from NIH and CDC; the Monitoring the Future Study conducted through NIH; and the National Household Survey on Drug Abuse conducted through SAMHSA.

#### Research

The federal government also has sponsored research on the health impact of tobacco use, the determinants of tobacco use, and interventions to reduce tobacco use. Most of this research has been supported by NIH's National Cancer Institute (NCI); however, research into tobacco use has also been supported by other federal entities, including the National Institute on Drug Abuse, the National Institute of Child Health and Development, and the National Heart, Lung, and Blood Institute. Besides supporting disease-specific research, NCI has supported smoking-prevention and smokingcessation intervention studies, including mass media and school trials and large-scale demonstration projects such as COMMIT and ASSIST. CDC also supports applied research through its Prevention

Research Centers; this research focuses on identifying population segments disproportionately affected by tobacco use and on reducing or eliminating these disparities.

#### **Programs**

In addition to providing research and survey data that can help states design and implement tobacco control programs, various federal entities also directly support state programs. For example, SAMHSA implements the Synar regulation to reduce youth access to tobacco products through state-level compliance activities; the Agency for Health Care Policy and Research has published clinical practice guidelines on smoking cessation and has worked with a variety of health care organizations to ensure that the guidelines are implemented; and CDC supports several programs to prevent and reduce tobacco use, including the National Tobacco Control Program, which in FY 1999 funded efforts in all states and territories and the District of Columbia to establish core tobacco use prevention and reduction programs. CDC has also developed several educational and media programs that can be used in tobacco control efforts, including the Media Campaign Resource Center, which makes high-quality antismoking advertising materials available for use by states and organizations.

Private organizations are also playing an increasing role in tobacco control. The Robert Wood Johnson Foundation/American Medical Association's SmokeLess States program, for example, directly funds policy-focused interventions and approaches by private, nonprofit organizations. The American Legacy Foundation, an independent national public health foundation, is another important source of funding for state tobacco control programs. Created by the 1998 Master Settlement Agreement between participating states and the tobacco industry, the foundation aims to reduce rates of tobacco use and ETS exposure, reduce disparities in access to prevention and cessation services, and increase smoking-cessation rates. Although numerous

national organizations have undertaken critical activities to curb tobacco use, the success of tobacco control interventions will ultimately depend on the state and local agencies that devise and implement them.

Following is a list of some of the national organizations that can aid in state and local tobacco control efforts:

Action on Smoking and Health: www.ash.org
Advocacy Institute: www.advocacy.org
American Cancer Society: www.cancer.org
Americans for Nonsmokers Rights: www.nosmoke.org

American Heart Association: www.americanheart.org American Legacy Foundation: www.americanlegacy.org

American Lung Association: www.lungusa.org Agency for Healthcare Research and Quality: www.ahrq.org

Campaign for Tobacco-Free Kids: www.tobaccofreekids.org

Environmental Protection Agency: www.epa.gov NIH's National Cancer Institute: www.nci.nih.gov CDC's Office on Smoking and Health: www.cdc.gov/tobacco

Robert Wood Johnson Foundation/American Medical Association SmokeLess States program: www.ama-assn.org/ama/pub/category/3230.html

Substance Abuse and Mental Health Services Administration: www.samhsa.gov

# **Prevention Opportunities**

Data from California and Massachusetts show that comprehensive tobacco control programs can substantially reduce tobacco use, and in the case of California, reduce rates of death from lung cancer and cardiovascular disease. CDC recommends that such programs should have four main goals:

• To prevent the initiation of tobacco use among young people (primary prevention).

- To help current smokers quit (secondary prevention).
- To eliminate ETS exposure among nonsmokers (primary and secondary prevention).
- To identify population groups disproportionately affected by tobacco use and eliminate these disparities (primary and secondary prevention).

Comprehensive state tobacco control programs should attempt to create "environments" in which smoking is discouraged or banned. The primary way of doing this is by supporting legislative, regulatory, and voluntary organizational restrictions on the use of tobacco, such as on how it is sold, priced, and promoted, and where tobacco products are allowed to be used. These "environmental change" efforts should be supported by tobacco use prevention, treatment, and cessation programs and efforts to prevent people from being exposed to environmental tobacco smoke.

Comprehensive state tobacco control programs should serve as a model for "cultural inclusiveness" and "cultural competency" by addressing the specific concerns of various population segments, including racial and ethnic minorities and other groups at high risk for tobacco-related diseases. They should also attempt to increase awareness of the disproportionate toll that tobacco use exacts from minorities and to convince minority advocacy groups to include tobacco control as part of their agendas.

Comprehensive state tobacco control programs should attempt to partner with any group with overlapping interests that can help them reach their goals, from national nongovernmental health organizations such the American Cancer Society, to federal agencies such as CDC or NIH, to groups representing specific local constituencies such as a PTA chapter or minority advocacy group. Partnering with local groups or community leaders is essential, especially in areas with predominantly minority populations, since these local groups and leaders can help state program officials design interventions or educational campaigns that target local residents in a culturally appropriate manner.

In Best Practices for Comprehensive Tobacco Control Programs, CDC recommends ways in which states can establish tobacco control programs that are comprehensive, sustainable, and accountable. Its recommendations are based largely on analyses of existing state programs, especially on those in California and Massachusetts, which were funded with revenue from state tobacco excise taxes. Although the document includes recommended funding ranges for various program components, state officials are of course responsible for funding decisions and, in making them, will have to determine what their most pressing needs are and what funds are available. CDC does, however, recommend that states implement some level of activity in each of the nine categories of programs identified in Best Practices. Current allocations for comprehensive state tobacco control programs range from \$2.50 to more than \$10 per capita; however, no state is currently implementing all of the recommended program components fully. The estimated costs of such full implementation range from \$7 to \$20 per capita in states with populations under 3 million, from \$6 to \$17 per capita in states with populations of 3 to 7 million, and from \$5 to \$16 per capita in states with populations over 7 million.

In *Best Practices*, CDC identifies the following nine categories of programs that should be part of any comprehensive state-level tobacco control program:

#### I. Community Programs to Reduce Tobacco Use

Local community programs offer a wide range of prevention activities, including engaging youth in developing and implementing tobacco control interventions; developing partnerships with local organizations; conducting educational programs for young people, parents, enforcement officials, community and business leaders, health care providers, school personnel, and others; and promoting both governmental and nongovernmental policies that promote clean indoor air, restrict access to tobacco products, foster insurance coverage for smoking-cessation treatment, and support other program objectives. In California and Massachusetts,

local coalitions and programs have been instrumental in state efforts to reduce tobacco use. California spends approximately \$1.00 per capita on these programs, and Massachusetts spends more than \$2.50 per capita.

# II. Chronic Disease Control Programs to Reduce the Burden of Tobacco-Related Diseases

Even if current tobacco use stopped, the accumulated effects of smoking would cause disease among past users for decades to come. Therefore, any comprehensive tobacco control program should include programs to prevent tobacco-related diseases and to detect them as early as possible. The following are examples of such programs, with CDC's recommended funding levels in parentheses:

- Cardiovascular disease prevention (\$500,000 for building capacity and \$1–\$1.5 million for a more comprehensive program).
- Asthma prevention (base funding of \$200,000—\$300,000 and \$600,000—\$800,000 to support initiatives at the local level). For more information on asthma prevention, please visit www.epa.gov.
- Oral health programs (\$400,000–\$700,000).
- Cancer registries (\$75,000–\$300,000).

#### III. School Programs

School program activities include implementing CDC's Guidelines for School Health Programs to Prevent Tobacco Use and Addiction, which call for tobacco-free policies, teacher training, parental involvement, cessation services, the implementation of curricula shown to be effective by CDC's Research to Classroom Project, and the coordination of school-based tobacco control efforts with those of local community coalitions and statewide media and educational campaigns. Oregon has developed a new funding model for school programs based on these guidelines and reports from California and Massachusetts. At an annual funding level of approximately \$1.60 per student, Oregon was able to provide grants to approximately 30% of its school districts. Thus, states following a funding model similar to Oregon's would need to budget roughly

\$4.00–\$6.00 per student in grades K–12 in order to institute programs in all school districts.

#### IV. Enforcement

To be effective, tobacco control policies must be vigorously enforced, particularly policies that restrict minors' access to tobacco and those that restrict smoking in public places. State enforcement efforts should be coordinated with those of the Food and Drug Administration (FDA) and the Substance Abuse and Mental Health Services Administration (SAMHSA). California and Massachusetts have addressed enforcement issues by making enforcement a required activity for all recipients of community program grants. Florida has taken a more centralized approach by having state alcoholic beverage control officers conduct compliance checks with the help of locally recruited youth in all regions of the state.

#### V. Statewide Programs

State tobacco control programs can support local programs by providing technical assistance in conducting program evaluations, using the media to discourage tobacco use, implementing smoke-free policies, and reducing minors' access to tobacco. Statewide organizations representing population segments disproportionately affected by tobacco use can be particularly helpful in devising and implementing interventions targeting those groups. California and Massachusetts have awarded grants to statewide organizations, businesses, and other partners that total about \$0.40 to \$1.00 per capita per year.

# VI. Counter-Marketing

As its name indicates, counter-marketing is used to counter the marketing efforts of tobacco companies as well as subtler social forces (such as youth peer pressure) that encourage smoking. Countermarketing can take many forms, including paid television, radio, billboard, and print advertisements; the use of media advocacy and other public relations techniques such as press releases, local antismoking events, and health

promotion activities; and efforts to reduce tobacco industry sponsorship and promotion of various events (often by helping to arrange for replacement sponsors). Counter-marketing activities can be used to promote smoking cessation and discourage smoking initiation, as well as to garner public support for tobacco control interventions. Countermarketing campaigns should be a primary activity in all states with comprehensive tobacco control programs. With funding levels ranging from less than \$1.00 to almost \$3.00 per capita, countermarketing campaigns in California, Massachusetts, Arizona, and Florida can serve as models for other states.

#### VII. Cessation Programs

Smoking-cessation programs can yield significant health and economic benefits. Effective cessation strategies include brief advice by medical providers, counseling, and pharmacotherapy. Smokingcessation activities of comprehensive state tobacco control programs should include establishing population-based treatment programs such as telephone cessation helplines; working to ensure that treatment for tobacco use is covered under both public and private insurance; and eliminating cost barriers to treatment for underserved populations, particularly the uninsured. Although no state is fully implementing the smokingcessation program recommended by the Agency for Health Care Policy and Research, Massachusetts and California are implementing its basic elements, and the complete recommended program is being implemented in several large health maintenance organizations around the country.

#### VIII. Surveillance and Evaluation

Tobacco-use surveillance involves monitoring people's tobacco-related behaviors, attitudes, and long-term health outcomes at regular intervals. State tobacco control programs should use such surveillance activities to measure both local and statewide progress toward meeting short-term and intermediate objectives.

Through coordinated surveillance and evaluation activities, state tobacco control programs can demonstrate their accountability, monitor the implementation of program elements, and measure their impact over various periods of time. Logic models can help them to plan and report on these surveillance and evaluation activities, as well as to use surveillance and evaluation results to demonstrate the effectiveness of program activities to decision makers and to show program stakeholders what the program can accomplish over a given period of time (Figure 1).

In An Introduction to Evaluation Planning, Implementation, and Use, CDC's Office on Smoking and Health (OSH) recommends that tobacco control programs divide their evaluation efforts into the following six steps:

- Step 1: Engage stakeholders.
- Step 2: Describe the program.
- Step 3: Focus the evaluation design.
- Step 4: Gather credible evidence.
- Step 5: Justify conclusions.
- Step 6: Ensure that evaluation findings are used, and share lessons learned.

To ensure the comparability of evaluation data from state tobacco control programs throughout the

Outcomes Activities Short-term Intermediate Inputs Outputs Long-term Knowledge and Decreased attitude change Federal smoking programs Countermarketing Exposure to Reduced initiation pro-health among youth messages Reduced exposure Increased to ETS cessation among youth School-based and sdults prevention Community State and education mobilization programs curricula. Increased environments with no smoking Creation of smoking bans, Reduced tobacco-Policy and regulations. related morbidity regulatory and policies and mortality Community action and national Adherence to and partners enforcement of bans, Decreased regulations. tobacco-related and policies disparity Targeted to disparate populations

Figure 1. Logic Model for Tobacco Use Prevention and Control

country, OSH recommends that states use surveillance systems compatible with the Behavioral Risk Factor Surveillance System (BRFSS), the Youth Risk Behavior Survey (YRBS), the Adult Tobacco Survey (ATS), and the Youth Tobacco Survey (YTS). OSH also recommends that states modify these existing systems to meet their specific needs, either by adding additional questions or survey modules, by sampling more extensively to capture local-level data, or by focusing surveillance efforts on populations with high rates of tobacco use or tobacco-related illnesses. In addition, OSH encourages states to combine traditional surveillance with the collection of data on "environmental indicators" such as state and local tobacco policies, pro-tobacco efforts, and taxes on tobacco products; to use information from a variety of sources in program planning; and to disseminate surveillance and evaluation findings in forms most appropriate for specific groups of program stakeholders.

Although state health departments should develop the capacity to manage and conduct surveillance and evaluation activities, they should also, when possible, partner with organizations capable of helping them with these activities, including universities, various health organizations, and local groups that can help them reach populations disproportionately affected by tobacco use.

OSH recommends that state tobacco control programs allocate 10% of their resources for surveillance and evaluation.

## IX. Administration and Management

To be effective, state tobacco control programs will need a strong management structure to coordinate program components, involve multiple state and local agencies (e.g., health, education, law enforcement) and levels of local government, and partner with statewide voluntary health organizations and community groups. In addition, their administration and management systems must

be able to prepare and implement contracts and monitor program spending and program activities. In California and Massachusetts, at least 5% of program resources were used to build program management structures.

OSH recommends that the management team of state tobacco control programs include people with expertise in program development, coordination, and management; fiscal management, including management of funding to state and local partners; leadership development; tobacco control and tobacco use prevention content; cultural competence; public health policy, including analysis, development, and implementation; community outreach and mobilization; training and technical assistance; health communications, including counter-marketing; the strategic use of both free and paid media messages; strategic planning; gathering and analyzing data (surveillance); and evaluation methods. OSH also recommends that the management team include at least seven full-time positions or their equivalent (FTEs), with the program manager and administrative support positions filled by health department personnel and the other positions filled by either health department personnel or contractors.

# **Professional Development**

As part of its effort to provide information, resources, and training opportunities to the staffs of state tobacco control programs and their various partners, OSH sponsors or cosponsors the following regularly scheduled training activities.

#### **Annual National Tobacco Control Conference**

OSH is a primary cosponsor of this annual 2-day conference of tobacco control experts and advocates working at local, state, national, and international levels. The conference gives participants a chance to share their knowledge and experiences and to form mutually beneficial relationships with others in the field.

#### Annual Tobacco Use Prevention Training Institute (TUPTI)

TUPTI is a week-long multidisciplinary training and education program in which professionals working in tobacco use prevention can hone their skills in dealing with a variety of policy, management, and program issues. It also gives tobacco use prevention practitioners and researchers a chance to interact with each other and perhaps form new partnerships. TUPTI promotes interactive, adult-centered teaching and emphasizes the importance of choosing intervention models most appropriate for a particular setting. TUPTI courses, which promote a comprehensive approach to tobacco use prevention and reduction, are taught by faculty with practical or academic expertise in the field.

#### **Annual Surveillance and Evaluation Workshop**

OSH also sponsors an annual 2-day workshop where state tobacco control personnel can discuss surveillance and evaluation issues, especially those related to the Youth Tobacco Survey and the Adult Tobacco Survey. The primary purpose of this workshop is to foster consistency, collaboration, and innovation in surveillance and evaluation activities among all participants in the National Tobacco Control Program.

# **Training Meetings**

Program managers, coordinators, and other personnel from states and other entities receiving OSH grants for comprehensive tobacco control programs have the opportunity to meet up to two times a year at OSH-sponsored training sessions on specific topics.

#### **Audio Conferences**

OSH conducts regular audio conferences each month to provide up-to-date information and facilitate information exchange among state health departments and other tobacco control partners.

# Strategic Planning

To participate in OSH's National Tobacco Control Program (NTCP), state tobacco control programs

must produce a 5-year strategic plan to prevent smoking initiation among youth, promote quitting among adults and youth, eliminate the public's risk for exposure to environmental tobacco smoke (ETS), and identify and target population groups disproportionately affected by tobacco use. The plan should describe the state's strategies for meeting the NTCP's four goals, include a logic model linking program activities to outputs and outcomes over time, and describe and provide a timeline for data-collection activities. The plan should also reflect all tobacco prevention and control activities in the state, complement other state health department plans to reduce rates of tobacco-related chronic diseases such as cancer and cardiovascular disease, and clearly describe how the state will collaborate with partners on various levels. During the strategic planning process, state programs should seek input from all stakeholders, especially those populations disproportionately affected by tobacco use. In addition to producing a 5-year strategic plan, state and local tobacco control programs should produce an annual action plan that identifies specific, measurable objectives and the time frames for achieving them.

By helping stakeholders in a proposed comprehensive tobacco control program jointly define their goals and objectives, the planning process can help solidify and strengthen the support for these programs.

## **Funding**

The following summary of budgetary recommendations for each program area are from CDC's *Best Practices for Comprehensive Tobacco Control Programs*.

Community programs to reduce tobacco use: Base funding of \$850,000–\$1.2 million per year for state personnel and resources; \$0.70–\$2.00 per capita per year for local governments and organizations.

Programs to reduce the burden of tobacco-related chronic diseases: \$2.8 million-\$4.1 million per year.

School programs: \$500,000–\$750,000 per year for personnel and resources to support individual school districts; \$4.00–\$6.00 per student in grades K–12 for annual awards to school districts.

Enforcement: \$150,000–\$300,000 per year for interagency coordination; \$0.43–\$0.80 per capita per year for enforcement programs.

Statewide programs: \$0.40-\$1.00 per capita per year.

Counter-marketing: \$1.00-\$3.00 per capita per year.

Cessation programs: \$1 per adult to identify and advise smokers about tobacco use; \$2 per smoker to provide brief counseling; and the cost of a full range of cessation services including the provision of pharmaceutical aids, behavioral counseling, and follow-up support (\$137.50 per program participant covered by private insurance; \$275 per program participant covered by publicly financed insurance).

Surveillance and evaluation: 10% of total annual program costs.

Administration and management: 5% of total annual program costs.

Specific, detailed OSH budget recommendations for individual state tobacco control programs (for FY 1998) can be found in *Best Practices for Comprehensive Tobacco Control Programs*, which can be accessed on-line at www.cdc.gov/tobacco/research\_data/stat\_nat\_data/bpfundmod.pdf.

# Future Directions—2003 and Beyond

Over the next year, OSH will focus on four critical issues: protecting the viability of state programs, enhancing smoking-cessation services, informing the public about the dangers of new tobacco products, and providing global leadership on tobacco control.

#### **Protecting the Viability of State Programs**

In 2002, budget deficits and other political pressures caused many states to make deep cuts in their funding for tobacco control, particularly in funding derived from the Master Settlement Agreement (MSA) with the tobacco industry. Preliminary OSH estimates show that the total amount of MSA funds appropriated for (but not necessarily spent on) tobacco prevention and control fell from \$600 million in FY 2002 to \$430 million for FY 2003, which represents a 34% decline from the \$655 million in MSA funds actually spent on tobacco prevention and control in FY 2001. History shows that these and other spending cuts could have major public health implications. Similar cuts to California's Proposition 99-funded tobacco control program caused falling tobacco use rates in California to plateau and even begin increasing in some population segments in the mid-1990s. When full funding was restored, usage rates resumed their decline. The recent history of tuberculosis (TB) control in this country provides another disturbing parallel. After successful prevention programs virtually eliminated TB as a public health threat, funding for TB control was cut during the 1990s. As a result, TB rates have crept back up, and TB is once again a major public health issue.

In 2002, even California and Massachusetts, pioneers and leaders in state-based comprehensive tobacco control, were forced to slash the budgets of their tobacco control programs. Because of its massive budget deficit, California withheld all \$35 million of the MSA funds that had been set aside for the state tobacco control program for 2002-2003 and also cut the amount the program was to receive from the state's excise-tax-funded Health Education Account (from \$86 million to \$60 million), meaning that the program's budget was cut by \$61 million. Still more drastic was the 90% budget cut in Massachusetts' tobacco control program, which saw its funding cut from \$48 million to \$6 million following an emergency

rescission by the governor. The impact was enormous, including an immediate shutdown of the program's paid counter-advertising campaign. The Massachusetts Department of Public Health is using its available funds to sustain the basic program-delivery infrastructure of its tobacco control program and is hoping to see funding restored in the near future.

OSH is well aware of how much effort and how many resources it takes to launch a comprehensive tobacco control program, and we know that programs must be sustained if they are to be effective. To help states sustain their programs in today's challenging economic environment, OSH is committed to intensifying its efforts to provide science-based technical assistance, materials, and other resources to help states in the areas of program planning, implementation, and evaluation. In addition to providing core funding through the National Tobacco Control Program (about \$1 million per state per year), OSH is dedicated to helping states sustain and document the successes of current programs and fill critical gaps in downsized programs. OSH is also working actively with its national funding partners, including Legacy, the American Cancer Society (ACS), the Robert Wood Johnson Foundation, NCI, and SAMHSA, to ensure that the collective resources for tobacco control are used most strategically. By investing in proven strategies, rigorously monitoring the progress of their tobacco control initiatives, and continuing to support effective programs, states—working closely with OSH and other national partners—have the ability both to achieve our shared tobacco control goals and to see an impressive return on their investment in the form of a healthier population, lower health care costs, and greater economic productivity.

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