VIII Surveillance and Evaluation

Justification

A comprehensive tobacco control program must have a surveillance and evaluation system that can monitor and document program accountability for State policymakers and others responsible for fiscal oversight. Experience in California and Massachusetts has demonstrated the importance of evaluation data in verifying program results for policymakers.[1–3]

Surveillance is the monitoring of tobacco-related behaviors, attitudes, and health outcomes at regular intervals of time. Surveillance should monitor the achievement of primary program goals, including decreasing the prevalence of tobacco use among young people and adults, per-capita tobacco consumption, and exposure to environmental tobacco smoke. In addition, a wide range of intermediate indicators of program effectiveness needs to be documented, including policy changes, changes in social norms, and exposure of individuals and communities to statewide and local program efforts. Surveillance should also monitor the prevalence of pro-tobacco influences, including advertising, promotions, and events that glamorize tobacco use.

Although surveillance is a crucial part of evaluation research, specific evaluation surveys and data collection systems are also needed to evaluate individual program activities. Program evaluation efforts should build upon and complement tobacco-related surveillance systems by linking statewide and local program efforts to progress toward intermediate and primary outcome objectives. Optimally, evaluation systems should be able to track the progress of each program element in meeting annual performance indicators related to statewide objectives. Additionally, evaluation research can provide data on the relative effectiveness of specific innovative program activities.

A comprehensive State tobacco control plan, with well-defined goals, objectives, and performance indicators, enables surveillance and evaluation data systems to be developed in a timely fashion. Collection of baseline data related to each objective and performance indicator is critical to ensuring that program-related effects can be clearly measured. For this reason, the establishment of surveillance and evaluation systems must have first priority in the planning process.

CDC's Office on Smoking and Health has developed a "Surveillance and Evaluation Options Paper" based on experience in working with California, Massachusetts, Oregon, Maine, Mississippi, Florida, Texas, and Minnesota. The following are examples of current best practices in surveillance and evaluation activities:

- Participation in national surveillance systems (e.g., the Behavioral Risk Factor Surveillance System, the Youth Risk Behavior Survey, and the Pregnancy Risk Assessment Monitoring System) enables States to evaluate program efforts in relation to ongoing efforts and initiatives in other States. These national data can be used to compare State program impact and outcomes with national trends. In addition, States have enhanced these national systems by adding State-specific questions and modules, increasing sample sizes to capture local and special population data, and modifying sampling procedures (e.g., using split samples) to provide more data on intermediate performance objectives.

- Several States have conducted tobacco-specific surveys to complement the broader surveillance data systems. These include school-based youth tobacco surveys; surveys of adults, school administrators, teachers, opinion leaders, and health care providers; local program monitoring surveys; State and local policy tracking; monitoring of pro-tobacco activities; and local media monitoring. The methodology for many of these tobacco-specific evaluation systems is described in the California Independent Evaluation Report.[2]

- In 1998, Mississippi, Florida, and Texas conducted the Youth Tobacco Survey (YTS), a school-based, statewide survey of young people in grades 6 through 12. This survey assessed students' attitudes, knowledge, and behaviors related to tobacco use and exposure to environmental tobacco smoke, as well as their exposure to prevention curricula, community programs, and media messages aimed at preventing and reducing youth tobacco use. It also collected information on the effectiveness of enforcement measures. Baseline data from YTS and other tobacco-specific surveys have demonstrated to policymakers the seriousness of the tobacco problem and the types of performance objectives that can be monitored.

- Periodic special statewide surveys of adults and young people have been conducted in several States to evaluate exposure to and participation in major program elements, particularly media. The methodology for these types of surveys is described in California's evaluation reports.[1,2]

State surveillance efforts should be coordinated with Federal tobacco surveillance programs. SAMHSA's National Household Survey on Drug Abuse provides national tobacco prevalence estimates for cigarettes, chewing tobacco, moist snuff, and cigars among people aged 12 to 17, 18 to 25, and adult tobacco use. Starting in 1999, the survey will provide information on the brands of cigarettes that young people smoke, and the nationwide sampling will be large enough in the eight largest States (CA, TX, NY, FL, PA, IL, OH, and MI) to provide a valid State-specific estimate of smoking prevalence in the three age strata. A minimum of 500 interviews will be completed in each age strata in each State annually. Additionally, the National Cancer Institute added a tobacco module to the Current Population Survey in 1992–93, 1995–96, and 1998–99. This module provides State-specific estimates on smoking prevalence, quit attempts, exposure to environmental tobacco smoke at home and work, and cessation counseling by physicians and dentists among adults aged 18 years and older. Finally, CDC conducts the annual National Health Interview Survey, which provides the primary national surveillance of tobacco use in this country.

Budget

State health departments currently manage most tobacco surveillance systems. Health departments must be able to expand their resources to meet additional demands. Many States work in conjunction with universities to implement and coordinate surveillance, evaluation, and research activities. Standard practice dictates that about 10% of total annual program funds be allocated for surveillance and evaluation. Experience in California and Massachusetts has shown that these funds can be used both for statewide systems and to increase the technical capacity of local programs to perform evaluation activities. For example, in California every grantee must spend 10% of its budget on evaluating its own activities. The California Tobacco Control Program publishes a directory of evaluators (e.g., the Stanford Center for Research in Disease Prevention) who can consult with local programs and conduct local program evaluations.[4]

Core Resources

Independent Evaluation Consortium. Final Report of the Independent Evaluation of the California Tobacco Control Prevention and Education Program: Wave I Data, 1996–1997. Rockville, MD: The Gallup Organization, 1998.

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Surveillance and Evaluation Options Paper for State Tobacco Use Prevention Programs, Atlanta, GA: Office on Smoking and Health, 1998.

Pierce JP, Gilpin EA, Emery SL, et al. Tobacco control in California: who's winning the war? An evaluation of the Tobacco Control Program, 1989–1996. La Jolla, CA: University of California, San Diego, 1998.

Substance Abuse and Mental Health Services Administration. Reducing Tobacco Use Among Youth: Community-Based Approaches—A Guideline. Washington, DC: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, 1997. DHHS Publication No.: 97–3146.

Stanford Center for Research in Disease Prevention. Tell Your Story: Guidelines for Preparing an Evaluation Report. Palo Alto, CA: California Department of Health Services, Tobacco Control Section, 1998.

Windsor, R. Evaluation for Health Promotion, Health Education, and Disease Prevention Programs, 2nd ed. Mountain View, CA: Mayfield Publishing Company, 1994.

References

1 Pierce JP, Gilpin EA, Emery SL, et al. Tobacco control in California: who's winning the war? An evaluation of the Tobacco Control Program, 1989–1996. La Jolla, CA: University of California, San Diego, 1998.

2 Independent Evaluation Consortium. Final report of the independent evaluation of the California Tobacco Control Prevention and Education Program: Wave I Data, 1996–1997. Rockville, MD: The Gallup Organization, 1998.

3 Abt Associates, Inc. Independent evaluation of the Massachusetts tobacco control program, 4th annual report, January 1994–June 1997. Cambridge, MA: Abt Associates, Inc., 1998.

4 Stanford Center for Research in Disease Prevention. Tell your story: guidelines for preparing an evaluation report. Palo Alto, CA: California Department of Health Services, Tobacco Control Section, 1998.