The Evaluation of the American Stop Smoking Intervention Study for Cancer Prevention (ASSIST)

The ASSIST evaluation had to address daunting challenges—the project was complex, it was a natural experiment with no clear control sites, and the resources for the evaluation were limited. By necessity, it focused only on those components of the project that could be quantified as part of the evaluation conceptual framework—not all components of the ASSIST project could be evaluated. This monograph, *ASSIST: Shaping the Future of Tobacco Prevention and Control*, and the next in this series, Monograph 17, *Evaluating ASSIST: A Blueprint for Understanding State-Level Tobacco Control*, are designed as companion documents. Whereas Monograph 16 focuses on the conceptualization of the ASSIST project, the processes and interventions used to implement ASSIST, and the transition of ASSIST from a demonstration project to the National Tobacco Control Program, Monograph 17 addresses the evaluation framework, the details of the ASSIST evaluation, and the results of this effort. Following is a brief overview of this upcoming NCI publication.

Monograph 17. Evaluating ASSIST: A Blueprint for Understanding State-Level Tobacco Control

The ASSIST evaluation broke new ground in the assessment of public health interventions that are diffused throughout a population and outside the bounds of a randomized controlled clinical trial through the use of a validated metric known as the Strength of Tobacco Control (SoTC) index and a policy outcomes measure, the Initial Outcomes Index (IOI). These measures correlated with eventual public health outcomes, such as changes in smoking prevalence and consumption, and the individual constructs of SoTC—namely, resources, capacity, and efforts—and relate directly to measurable indicators at the state level.

This evaluation demonstrates that the ASSIST project clearly benefited public health. It also documents a successful approach to assessing complex public health programs and can serve as a guide for current and future tobacco control efforts. The evaluation methodologies and indices may also be applied to other complex community-based interventions beyond the field of public health.

Below are the major topics addressed in Monograph 17:

- The ASSIST evaluation framework and key constructs
- The development of the SoTC index, its descriptive characteristics, and examples of how it can be used to assess and improve state tobacco control programs
- Difficulties associated with attempts to measure tobacco industry counterefforts, along with potential solutions

- Documentation of the ASSIST media interventions, including methods used to identify, code, and analyze newspaper coverage of the four priority policy areas
- Methods used to track and measure changes in state and local clean indoor air laws
- A measure created to reflect a state's dependence on tobacco, which may affect implementation of comprehensive tobacco control programs
- Demographic, economic, sociopolitical, and geographic factors that might affect the evaluation of a tobacco control program
- The development of the IOI, which assessed the policy outcomes of states' tobacco control efforts
- The methodology and outcomes of the ASSIST evaluation
- Econometric techniques used to assess the cost-effectiveness of the ASSIST project
- The generalizability of the ASSIST evaluation efforts to other public health initiatives

The evaluation found that ASSIST states showed a statistically significant decrease in smoking prevalence compared with non-ASSIST states and that per capita decreases in consumption were associated with policy outcomes. The evaluators estimated that if the ASSIST program had been implemented nationwide, there would be at least 1,213,000 fewer smokers, with a corresponding decrease in premature death and disease.

Beyond its desired outcomes in tobacco use and public health, the lessons learned from the ASSIST evaluation have important implications for the future of public health. It broke new ground in the assessment of evidence-based public health practices, particularly in situations where randomized controlled trials are not possible. Because of its size and scope, the ASSIST evaluation represents a trend away from simple cause-and-effect relationships toward understanding the behavior of systems. It serves as a precursor to growing systems and network approaches that are helping us to understand more complex and interdependent behavior in real-world public health interventions.