Reducing Exposure to Environmental Tobacco Smoke

Based on strong evidence of effectiveness in reducing exposure to secondhand smoke, the Community Preventive Services Task Force (Task Force) recommends smoking bans and restrictions implemented alone or in combination with other community or workplace interventions. Smoking bans prohibit smoking in a workplace or public area, while restrictions limit smoking to a designated area. Smoke-free policies can be established through state laws, local ordinance, or policies in private establishments.

The Task Force's review of qualified studies found a median 72 percent reduction in measures of secondhand smoke in tests conducted between 6-12 months after a ban was implemented. In the 4-18 months following implementation, self-reported exposure to secondhand smoke dropped by a median 60 percent. The Task Force determined that policies were effective across public and private workplaces and healthcare settings. According to CDC's 2010 Tobacco Control State Highlights report, "Creating smoke-free policies in workplaces and other public places not only protects nonsmokers from involuntary exposure to the toxins in tobacco smoke, but also may have the added benefits of increasing the number of smokers who quit and reducing tobacco consumption by those who continue to smoke."

Translating Recommendations into Public Health Practice and Policy. State tobacco prevention and control programs perform multiple functions related to implementation of smoking bans and restrictions.

Partnerships. Smoking restrictions and bans involve multiple partners, including state and local health departments, employers (representing lodging, restaurants, bars, casinos, and other public places), community-based and advocacy organizations, and local and state decisionmakers. Partnerships with chronic disease (e.g., stroke and heart disease) programs and task forces, as well as public health institutes, universities, foundations, and other community-based organizations can leverage public and private resources.

Issues and Considerations. Reducing exposure to environmental tobacco can involve a continuum of strategies. Even in states without comprehensive statewide smoke-free laws, there are steps that can reduce exposure to environmental tobacco smoke. State health officials can inform employers about smoke-free benefits and resources and support implementation of an effective smoke-free policy. Resources such as CDC's "Making Your Workplace Smokefree: A Decisionmaker's Guide" or the American Cancer Society's "Strategies for Implementing a Smoke-Free Workplace" offer employers tools for assessing current company policies and developing and implementing policies. Although some private sector establishments may resist smoke-free policies, The Guide to Community Preventive Services (The Community Guide) and resources listed here can be effective tools for businesses. In addition to providing interventions with strong evidence of effectiveness, they also demonstrate the economic benefits associated with smoke-free policies.

Action Steps. The action steps that follow in Table 1 provide a continuum of options for state agencies and other employers that want to implement evidence-based environmental tobacco interventions.

Healthcare Effects from Secondhand Smoke

"[E]xposure to secondhand smoke causes premature death and disease in nonsmokers. In 2009, the Institute of Medicine concluded that secondhand smoke exposure causes heart attacks, even brief exposure to secondhand smoke could plausibly trigger a heart attack, and smoke-free laws result in fewer heart attack hospitalizations. Additionally, the Surgeon General concluded in 2006 that there is about a 25-30% increase in the risk of coronary heart disease from exposure to secondhand smoke. Nonsmokers who are exposed to secondhand smoke at home or work also increase their lung cancer risk by 20-30%."

Source: CDC 2010 Tobacco Control State Highlights Report, p. 3.

Table 1. Action Steps and Options

Phase	Action Steps and Options
Pre-Implementation	• Inform and educate internal and external partners about Task Force recommendations and resources. • Engage key partners early on to assess needs, build consensus, and adopt evidence-based strategies. • Gather baseline data about current smoking rates and state and local smoking restrictions and bans. National and state resources include CDC's Tobacco Control State Highlights report (which contains state-specific data about high-impact strategies), CDC's State Tobacco Activities Tracking and Evaluation (STATE) System, and the Kaiser Family Foundation's database of worksite smoking restrictions. • Analyze data to identify unmet needs and policy opportunities. States may opt to appoint a working group to analyze data, identify gaps (e.g., policies that do not cover all worksites, restaurants, and bars), and opportunities for implementing evidence-based policies.
Implementation	• Adopt evidence-based intervention(s) that respond to state and local public health and smoking policy needs. Strengthening state laws to require smoke-free restaurants and bars may require enhanced education (for policymakers, employers, and other stakeholders) and consensus-building among key partners. Public health officials can also inform and educate restaurants and other public places to adopt smoke-free policies. Public and private case studies and best practices can provide useful implementation strategies. • Support implementation through technical assistance or staff training to inform restaurants and other public places about the law and help them implement and comply with requirements (through guidelines, FAQs, web-based resources, etc.). State health agency websites can provide public and workplace education materials, fact sheets, "no smoking" signs, and other resources for promoting awareness and supporting implementation.
Evaluation	• Evaluate outcomes and improve programs. Measuring public health benefits related to interventions (e.g., comparison of emergency department heart attack admissions before and after implementation) can inform policymakers and other stakeholders about the impacts of smoke-free interventions.

State Experiences. Smoking laws and restrictions vary. According to CDC, in 2009, 22 states prohibited smoking in all indoor workplaces, restaurants, and bars, and 29 states provided partial coverage (in one or two settings) or no protection from secondhand smoke exposure.[1] According to a 2011 CDC Morbidity and Mortality Weekly Report, almost half of U.S. residents are covered by a comprehensive indoor smoking ban at the state or local level.

State health agencies play an important role by informing and educating the public about the impacts of public health interventions. Following passage of **North Carolina's** 2010 Smoke-free Restaurant, Bars, and Lodging Law, the Tobacco Prevention and Control Branch (TPCB) partnered with the University of North Carolina Department of Emergency Medicine to conduct a study that found a 21 percent reduction in emergency room visits by patients who were experiencing a heart attack. The state experience reinforces earlier findings from an Institute of Medicine evaluation that found a reduction in heart attacks as a result of smoke-free laws. The decline in heart attacks in North Carolina resulted in an estimated $3.3-$4.8 million in healthcare cost savings.

Additional Resources and Links

An electronic version of this and other action sheets, with links to the resources listed in this document, is available at http://www.astho.org/Programs/Evidence-Based-Public-Health/.

• North Carolina Tobacco Prevention and Control Branch Epidemiology and Evaluation Unit, "North Carolina Smoke Free Restaurants and Bars Law and Emergency Department Admissions for Acute Myocardial Infarction," 2011
• CDC Morbidity and Mortality Weekly Report, State Smoke Free Laws for Worksites, Restaurants and Bars, 2000-2010, April 2011
• ASTHO Fact Sheet, Interventions to Decrease Tobacco Use in Workplaces

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[1] http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/pdfs/highlights2010.pdf, page 224.