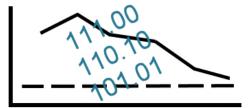
Goal Area 2

Eliminating Nonsmokers' Exposure to Secondhand Smoke



Tobacco Use Prevention Data & Evaluation Workgroup

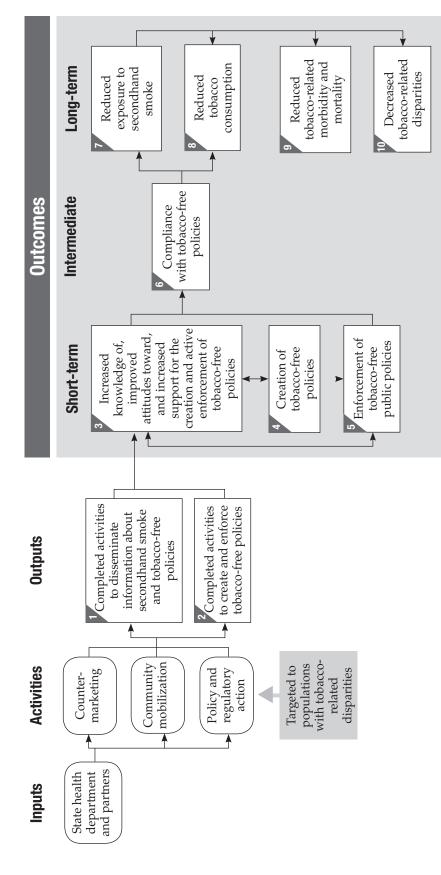
This document contains excerpts from:

Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs.* Atlanta, GA: Centers for Disease Control and Prevention; 2005.

Note: Only a small portion of the references and citations from the complete document are included in these excerpts.

Goal Area 2





Eliminating Nonsmokers' Exposure to Secondhand Smoke

Short-term Outcomes

Outcome 3: Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies

- 2.3.1 Level of confirmed awareness of media messages on the dangers of secondhand smoke
- ▶ 2.3.2 Level of receptivity to media messages about secondhand smoke
- ▶ 2.3.3 Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke
- ▶ 2.3.4 Proportion of the population willing to ask someone not to smoke in their presence
- ▶ 2.3.5 Proportion of the population that thinks second hand smoke is harmful
- 2.3.6 Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women
- ▶ 2.3.7 Level of support for creating tobacco-free policies in public places and workplaces
- ▶ 2.3.8 Level of support for adopting tobacco-free policies in homes and vehicles
- ▶ 2.3.9 Level of support for active enforcement of tobacco-free public policies
- ▶ 2.3.10^{NR} Level of support for creating tobacco-free policies in schools

Outcome 4: Creation of tobacco-free policies

- ► 2.4.1 Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places
- ▶ 2.4.2 □ Proportion of workplaces with voluntary tobacco-free policies
- ► 2.4.3 Proportion of the population that works in environments with tobacco-free policies
- ► 2.4.4 Proportion of the population reporting voluntary tobacco-free home or vehicle policies
- ► 2.4.5 Proportion of schools or school districts reporting the implementation of 100% tobacco-free policies
- ► 2.4.6 Changes in state tobacco control laws that preempt stronger local tobacco control laws

Outcome 5: Enforcement of tobacco-free public policies

- ▶ 2.5.1 Number of compliance checks conducted by enforcement agencies
- ► 2.5.2 Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies
- ▶ 2.5.3 Number of warnings, citations, and fines issued for infractions of tobacco-free public policies

Intermediate Outcomes

Outcome 6: Compliance with tobacco-free policies

- ▶ **2.6.1** Perceived compliance with tobacco-free policies in workplaces
- ► 2.6.2 Perceived compliance with tobacco-free policies in indoor and outdoor public places
- ▶ 2.6.3 Proportion of public places observed to be in compliance with tobacco-free policies
- ► **2.6.4** Perceived compliance with voluntary tobacco-free home or vehicle policies
- ▶ 2.6.5 Perceived compliance with tobacco-free policies in schools

Long-term Outcomes

Outcome 7: Reduced exposure to secondhand smoke

- ► 2.7.1 Proportion of the population reporting exposure to secondhand smoke in the workplace
- ► 2.7.2 Proportion of the population reporting exposure to secondhand smoke in public places
- ► 2.7.3 Proportion of the population reporting exposure to secondhand smoke at home or in vehicles
- ► 2.7.4 Proportion of students reporting exposure to second hand smoke in schools
- ► 2.7.5 Proportion of nonsmokers reporting overall exposure to secondhand smoke

■ Outcome 8: Reduced tobacco consumption □

- ▶ **2.8.1** Per capita consumption of tobacco products
- ▶ 2.8.2 Average number of cigarettes smoked per day by smokers
- ▶ **2.8.3** Smoking prevalence

Increased Knowledge of, Improved Attitudes Toward, and Increased Support for the Creation and Active Enforcement of Tobacco-free Policies

The theory of change associated with eliminating nonsmokers' exposure to secondhand smoke starts with increasing people's knowledge of the dangers of exposure to secondhand smoke, changing their attitudes toward the acceptability of exposing nonsmokers to secondhand smoke, and increasing their support for passing and enforcing tobacco-free policies. Ideally, such changes should lead to increases in the number of environments with tobacco-free policies and increased compliance with those policies as people become more conscious of the importance of smoke-free air. In reality, passing tobacco-free policies is subject to many inhibiting and facilitating influences and factors. Moreover, adopting a policy does not ensure that the policy will be actively enforced or become self-enforcing.

Experience suggests that interventions intended to increase knowledge of and support for passing or enforcing tobacco-free policies can be effective.^{1,2} In addition, experience and logic dictate that sufficient support for tobacco-free policies by either the public or decision makers will lead to the adoption of tobacco-free policies (including voluntary tobacco-free policies).³

Experience also shows that policy makers review data on public support for tobaccofree policies carefully before they decide whether to support such policies.⁴⁻⁷ One study, for example, showed that support for a New York City law requiring that restaurants be tobacco free was associated with compliance with the law.³ In addition, a study from California showed that exposure to a state media campaign promoting tobacco-free policies and laws was significantly associated with increases over time in reported smoking bans in homes.⁸ Other studies show that increased knowledge of the adverse health effects of secondhand smoke is associated with increased efforts by individuals to minimize their exposure to secondhand smoke and with reductions in actual exposure to secondhand smoke.^{9,10}

Listed below are the indicators associated with this outcome:

- ► 2.3.1 Level of confirmed awareness of media messages on the dangers of secondhand smoke
- ▶ 2.3.2 Level of receptivity to media messages about secondhand smoke
- ► 2.3.3 Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke
- ▶ 2.3.4 Proportion of the population willing to ask someone not to smoke in their presence
- ▶ 2.3.5 Proportion of the population that thinks second hand smoke is harmful

- ▶ 2.3.6 Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women
- ▶ 2.3.7 Level of support for creating tobacco-free policies in public places and workplaces
- ▶ 2.3.8 Level of support for adopting tobacco-free policies in homes and vehicles
- ▶ 2.3.9 Level of support for active enforcement of tobacco-free public policies
- ▶ 2.3.10^{NR} Level of support for creating tobacco-free policies in schools

References

- Clarke H, Wilson MP, Cummings KM, Hyland A. The campaign to enact New York City's Smoke-Free Air Act. *Journal of Public Health Management* and Practice. 1999;5(1):1–13.
- 2. Magzamen S, Glantz SA. The new battleground: California's experience with smoke-free bars. *American Journal of Public Health.* 2001;91(2):245–52.
- Hyland A, Cummings KM, Wilson MP. Compliance with the New York City Smoke-Free Air Act. *Journal of Public Health Management and Practice*. 1999; 5(1):43–52.
- U.S. Department of Health and Human Services. *Reducing tobacco use: a report* of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- U.S. Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Rockville, MD: Office of the Surgeon General; Washington, DC: Government Printing Office; 2001.
- Thomson GW, Wilson N. Public attitudes about tobacco smoke in workplaces: the importance of workers' rights in survey questions. *Tobacco Control.* 2004;13(2):206–7.
- Howard KA, Rogers T, Howard-Pitney B, Flora JA, Norman GJ, Ribisl KM. Opinion leaders' support for tobacco control policies and participation in tobacco control activities. *American Journal of Public Health*. 2000;90(8):1283–7.
- Rohrbach LA, Howard-Pitney B, Unger JB, Dent CW, Howard KA, Cruz TB, Ribisl KM, Norman GJ, Fishbein H, Johnson CA. Independent evaluation of the California Tobacco Control Program: relationships between program exposure and outcomes, 1996–1998. *American Journal of Public Health*. 2002;92(6):975–83.
- Li C, Unger JB, Schuster D, Rohrbach LA, Howard-Pitney B, Norman G. Youths' exposure to environmental tobacco smoke (ETS): associations with health beliefs and social pressure. *Addictive Behaviors*. 2003;28(1):39–53.
- Kurtz M, Kurtz JC, Johnson SM, Beverly EE. Exposure to environmental tobacco smoke: perceptions of African American children and adolescents. *Preventive Medicine*. 1996;25(3):286–92.

Increased Knowledge of, Improved Attitudes Toward, and Increased Support for the Creation and Active **Enforcement of Tobacco-free Policies**

Indicator Rating ← O Q ● ● → better

Number	Indicator	Overall quality low ← high	evaluation evi-	unith of the states	Face VI	practicus	orcepted
2.3.1	Level of confirmed awareness of media messages on the dangers of secondhand smoke		\$\$	•			
2.3.2	Level of receptivity to media messages about secondhand smoke		\$\$ [†]	\bigcirc	•	\bigcirc	
2.3.3	Attitudes of smokers and nonsmokers about the accept- ability of exposing others to secondhand smoke		\$\$\$ [†]	•	•	•	•
2.3.4	Proportion of the population willing to ask someone not to smoke in their presence		\$\$ [†]	•	•	\bigcirc^{\dagger}	
2.3.5	Proportion of the population that thinks secondhand smoke is harmful		\$\$ [†]	•		•	
2.3.6	Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women		\$\$ [†]	•	•	•	
2.3.7	Level of support for creating tobacco-free policies in public places and workplaces		\$\$ [†]	•			
2.3.8	Level of support for adopting tobacco-free policies in homes and vehicles		\$\$\$	Q	•	•	•
2.3.9	Level of support for active enforcement of tobacco-free public policies		\$\$\$ [†]	Q	•		•
2.3.10 ^{NR}	Level of support for creating tobacco-free policies in schools		Q	Q	Q	Q	\bigotimes

* Denotes low reviewer response: that is, greater than 75% of the experts either did not rate the indicator, or gave the criterion an invalid rating (see Appendix B for an explanation).

† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation). \heartsuit Denotes no data. \square

 $^{\tt NR}$ Denotes an indicator that is not rated (see Appendix B for an explanation). \Box

Creation of Tobacco-free Policies

Creating tobacco-free policies in workplaces, other public places, and homes and vehicles not only protects nonsmokers from involuntary exposure to the toxins in tobacco smoke, but also may have the added benefit of reducing tobacco consumption by smokers and increasing the number of smokers who quit.^{1–3} Smoking bans and restrictions are effective in reducing secondhand smoke exposure.^{1,2}

Smoking bans may be implemented by governments (through legislation or regulation), oversight groups (e.g., the Joint Commission on Accreditation of Healthcare Organizations), individual employers or businesses, or private citizens (e.g., smoking bans in homes and vehicles). By approaching these groups or individuals and encouraging them to develop their own tobacco-free policies, tobacco control programs can protect the public from secondhand smoke. Where state law preempts stronger local laws, tobacco control programs retain the option of mobilizing the private sector to introduce voluntary smoking bans in workplaces and public places. In considering which channel to pursue, programs should take into account (1) the legal authority vested in various entities (e.g., counties, cities, local boards of health), (2) the level of support among relevant decision makers and their constituents, and (3) the feasibility of persuading these entities to implement tobacco-free policies. It is also worth remembering that despite the recent passage of a number of comprehensive state clean-indoor-air laws, comprehensive and strong laws can also be enacted at the local level, where such laws are easier to adopt and enforce.4

Experience shows that the education that occurs when a community debates whether it wants a local tobacco-free law—a debate that typically generates extensive media coverage—can greatly facilitate enforcement of the law, sometimes making it largely self-enforcing. Continued education of business proprietors, employers, and the public during the implementation process is also important in this regard. Preemptive laws prevent communities from engaging in the process of public education, mobilization, and debate that occurs when a local ordinance is under consideration, a process that can increase awareness and change social norms.⁵ Such laws also pose a barrier to local enforcement because communities and local enforcement agencies may be less likely to enforce state laws that they were not directly involved in adopting than to enforce local ordinances.⁵

Regardless of which route is used to implement them, smoking bans are effective, cost-effective, feasible, and broadly supported by the public.^{1,2,6} The dangers of secondhand smoke are well researched and well known, and the growth and spread of this knowledge has been accompanied by a radical reduction in the level of acceptability of smoking in public places and workplaces.^{7,8}

Listed below are the indicators associated with this outcome:

- ▶ 2.4.1 Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places
- ▶ 2.4.2 □ Proportion of workplaces with voluntary tobacco-free policies
- ▶ 2.4.3 Proportion of the population that works in environments with □ tobacco-free policies □
- ▶ 2.4.4 Proportion of the population reporting voluntary tobacco-free home □ or vehicle policies □
- ► 2.4.5 Proportion of schools or school districts reporting the implementation of 100% tobacco-free school policies
- ▶ 2.4.6 Changes in state tobacco control laws that preempt stronger □ local tobacco control laws □

References

- Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 12. *Population-based smoking cessation: proceedings of a conference on What Works to Influence Cessation in the General Population*. Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4892.
- 4. National Cancer Institute. Smoking and Tobacco Control Monograph No. 11. *State and local legislative action to reduce tobacco use.* Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4804.
- Centers for Disease Control and Prevention. Preemptive state tobacco-control laws—United States, 1982–1998. Morbidity and Mortality Weekly Report. 1999;47 (51 & 52):1112–4.
- 6. Gilpin EA, Lee L, and Pierce JP. Changes in population attitudes about where smoking should not be allowed: California versus the rest of the USA. *Tobacco Control.* 2004:13(1):38–44.
- Brownson RC, Eriksen MP, Davis RM, Warner KE. Environmental tobacco smoke: health effects and policies to reduce exposure. *Annual Review of Public Health*. 1997;18:163–85.
- 8. Brownson RC, Hopkins DP, Wakefield MA. Effects of smoking restrictions in the workplace. *Annual Review of Public Health.* 2002;23:333–48.

148

Creation of Tobacco-free Policies

Indicator Rating ←○○●●→ better

Number	Indicator	Overall quality low ← → high	evaluation evices	utins,	Face Vo	practice	anephed
2.4.1	Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places		\$\$\$				•
2.4.2	Proportion of workplaces with voluntary tobacco-free policies		\$\$		•	•	
2.4.3	Proportion of the population that works in environments with tobacco-free policies		\$\$ [†]	•	•	•	
2.4.4	Proportion of the population reporting voluntary tobacco-free home or vehicle policies		\$\$ [†]	•	•	•	
2.4.5	Proportion of schools or school districts reporting the implementation of 100% tobacco-free school policies		\$\$				
2.4.6	Changes in state tobacco control laws that preempt stronger local tobacco control laws		\$	Q	•	•	•

+□ Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

 \bigotimes Denotes no data.

Enforcement of Tobacco-free Public Policies

Experience shows that tobacco-free policies make a difference only when voluntary compliance is adequate or the policies are actively enforced. If the entities that are regulated (e.g., businesses, public agencies) do not experience any pressure to follow newly legislated policies, the policies will contribute little to reducing exposure to secondhand smoke. Although little research has been done on the effects of enforcing tobacco-free policies, research concerning other policies shows that policy enforcement is effective in improving compliance.¹ With the recent trend toward passing comprehensive smoke-free laws that cover bars, the need for active enforcement of those laws is likely to become greater.²

Listed below are the indicators associated with this outcome:

- ▶ 2.5.1 Number of compliance checks conducted by enforcement agencies
- ► 2.5.2 Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies
- ▶ 2.5.3 Number of warnings, citations, and fines issued for infractions of tobacco-free public policies

References

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's Smoke-Free Workplace Law among bars and restaurants in Los Angeles County. *Tobacco Control.* 2003;12(3):269–73.

For Further Reading

Biener L, Cullen D, Di ZX, Hammond SK. Household smoking restrictions and adolescents' exposure to environmental tobacco smoke. *Preventive Medicine*. 1997;26(3):358–63.

Farkas A, Gilpin EA, Distefan JM, Pierce JP. The effects of household and workplace smoking restrictions on quitting behaviours. *Tobacco Control.* 1999;8(3):261–5.

Farkas AJ, Gilpin EA, White MM, Pierce JP. Association between household and workplace smoking restrictions and adolescent smoking. *Journal of the American Medical Association*. 2000;284(6):717–22.

Gilpin EA, Pierce JP. The California Tobacco Control Program and potential harm reduction through reduced cigarette consumption in continuing smokers. *Nicotine and Tobacco Research*. 2002;4(Suppl 2):S157–66.

Enforcement of Tobacco-free Public Policies

Indicator Rating $\leftarrow \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \rightarrow \text{better}$

Number	Indicator	Overall quality low high high high high high high high hig						
2.5.1	Number of compliance checks conducted by enforcement agencies		\$\$\$	Ø		•	•	
2.5.2	Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies		\$\$\$	Ø		•	•	
2.5.3	Number of warnings, citations, and fines issued for infractions of tobacco-free public policies		\$\$\$	Q				

† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation). \boxtimes Denotes no data.

Compliance with Tobacco-free Policies

The evidence is clear that exposure to secondhand smoke is harmful and that increasing the number of tobacco-free environments can save lives.¹ Compliance with voluntary tobacco-free policies in homes and vehicles is an important marker of social normative changes that have an effect on the health of children and on tobacco use among young people.² Although the need for compliance with tobacco-free policies is apparent, little research has been done specifically on whether increased compliance leads to decreased exposure to secondhand smoke (perhaps because the connection has face validity). Perceived compliance can be measured as that reported by members of a community responding to questionnaires and interviews. Actual compliance can be measured by observation. Observational measures capture a point in time, while population-based surveys capture the perceptions of individuals regarding compliance over a prior period.

Listed below are the indicators associated with this outcome:

- ▶ 2.6.1 □ Perceived compliance with tobacco-free policies in workplaces
- ► **2.6.2** Perceived compliance with tobacco-free policies in indoor and outdoor public places
- ► 2.6.3 Proportion of public places observed to be in compliance with tobaccofree policies
- ► **2.6.4** Perceived compliance with voluntary tobacco-free home or vehicle policies
- ▶ 2.6.5 Perceived compliance with tobacco-free policies in schools

References

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- Wakefield M, Chaloupka F, Kaufman N, Orleans C, Barker D, Ruel E. Effect of restrictions at home, at school, and in public places on teenage smoking: cross sectional study. *British Medical Journal*. 2000;321(7257):333–7. Erratum in: *British Medical Journal*. 2000;321(7261):623.

For Further Reading

Lynch BS, Bonnie RJ. *Growing up tobacco free: preventing nicotine addiction in children and youths.* Washington, DC: National Academy Press; 1994.

Compliance with Tobacco-free Policies \square

Indicator Rating ←○○●●→better

Number	Indicator	Overall quality low high high high high high high high hig							
2.6.1	Perceived compliance with tobacco-free policies in workplaces		\$\$†	Q	•				
2.6.2	Perceived compliance with tobacco-free policies in indoor and outdoor public places		\$\$\$ [†]	Q		•	•		
2.6.3	Proportion of public places observed to be in compliance with tobacco-free policies		\$\$\$\$+	Q	۲		•		
2.6.4	Perceived compliance with voluntary tobacco-free home or vehicle policies		\$\$†	•	•	•	•		
2.6.5	Perceived compliance with tobacco-free policies in schools		\$\$	\bigcirc	•	•	•		

†□ Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

 \bigotimes Denotes no data.

Reduced Exposure to Secondhand Smoke

There is substantial evidence regarding the harm caused by exposure to secondhand smoke. Secondhand smoke can lead to lung cancer and heart disease in adults and to many serious health problems (e.g., lower respiratory infections, asthma, sudden infant death syndrome, ear infections) in children.^{1–3} Evidence also indicates that tobacco smoke is especially harmful to pregnant women and to fetal development.^{1,2} Reducing nonsmokers' exposure to secondhand smoke can prevent disease and save lives.^{1–4} Median exposure levels and the percentage of nonsmokers in the United States who are exposed to secondhand smoke have decreased significantly.⁵

Listed below are the indicators associated with this outcome:

- ► 2.7.1 Proportion of the population reporting exposure to secondhand smoke in the workplace
- ► 2.7.2 Proportion of the population reporting exposure to secondhand smoke in public places
- ► 2.7.3 Proportion of the population reporting exposure to secondhand smoke at home or in vehicles
- ► 2.7.4 Proportion of students reporting exposure to secondhand smoke in schools
- ► 2.7.5 Proportion of nonsmokers reporting overall exposure to secondhand smoke

References

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- U.S. Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Rockville, MD: Office of the Surgeon General; Washington, DC: Government Printing Office; 2001.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency*. Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 4. □U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- Changes in secondhand smoke exposure among nonsmokers from different racial/ethnic groups: United States, 1988–1994 and 1999–2000. Data from 1988– 1994 NHANES III survey and 1999–2000 NHANES survey. Poster Presentation. 132nd Annual American Public Health Association Meeting, Washington, DC, November 6–10, 2004.

Reduced Exposure to Secondhand Smoke

		\leftarrow \bigcirc \bigcirc \bigcirc \bigcirc \rightarrow better							
Number	Indicator	Overall quality Reserved to a strength of the							
2.7.1	Proportion of the population reporting exposure to secondhand smoke in the workplace		\$\$ [†]						
2.7.2	Proportion of the population reporting exposure to secondhand smoke in public places	•••••	\$\$\$		$\overline{\bullet}$				
2.7.3	Proportion of the population reporting exposure to secondhand smoke at home or in vehicles		\$\$ [†]	•	•	•			
2.7.4	Proportion of students reporting exposure to secondhand smoke in schools		\$\$\$	Q					
2.7.5	Proportion of nonsmokers reporting overall exposure to secondhand smoke		\$\$						

Indicator Rating

†□ Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).
ℕ Denotes no data.

Reduced Tobacco Consumption

Although the main goal of activities to eliminate exposure to secondhand smoke is protecting nonsmokers, another possible outcome is the reduced cigarette use that may result from cessation by smokers or the decreased number of cigarettes smoked per day by continuing smokers. Research shows that smokers in workplaces with tobacco-free policies may reduce the number of cigarettes they smoke or quit smoking altogether.^{1,2} In addition, young people who live in households with tobacco-free policies are less likely to smoke than those who live in households in which people smoke.³

Listed below are the indicators associated with this outcome:

- ▶ 2.8.1 Per capita consumption of tobacco products
- ▶ 2.8.2 Average number of cigarettes smoked per day by smokers
- ► **2.8.3** Smoking prevalence

References

- 1. Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal*. 2002;325(7357):188.
- Farrelly MC, Pechacek TF, Chaloupka FJ. The impact of tobacco control expenditures on aggregate cigarette sales: 1981–2000. *Journal of Health Economics*. 2003;22(5):843–59. Erratum in: *Journal of Health Economics*. 2004;23(2):419.
- 3. Farkas AJ, Gilpin EA, White MM, Pierce JP. Association between household and workplace smoking restrictions and adolescent smoking. *Journal of the American Medical Association*. 2000;284(6):717–22.

For Further Reading

Biener L, Cullen D, Di ZX, Hammond SK. Household smoking restrictions and adolescents' exposure to environmental tobacco smoke. *Preventive Medicine*. 1997;26(3):358–63.

National Cancer Institute. Smoking and Tobacco Control Monograph No. 11. *State and local legislative action to reduce tobacco use.* Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4804.

184

Reduced Tobacco Consumption



Number	Indicator	Overall quality low high high high high high high high hig							
2.8.1	Per capita consumption of tobacco products		\$						
2.8.2	Average number of cigarettes smoked per day by smokers		\$\$ [†]			•			
2.8.3	Smoking prevalence		\$\$ [†]						

+ Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).