

## Ventilation Does Not Protect People From Secondhand Smoke

The 2006 Surgeon General's report on secondhand smoke reviewed over 20 years of scientific evidence and concluded the only way to fully protect nonsmokers from exposure to secondhand smoke is to eliminate smoking indoors. The Surgeon General has confirmed that separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposure of nonsmokers to secondhand smoke.<sup>i</sup> Despite this, the tobacco industry has tried to push ventilation technology as an alternative to smoke-free environments and as a way to prevent the enactment of smoke-free policies.

### Smoking Sections Don't Protect Nonsmokers

- Designated smoking sections within restaurants are often part of the same room and same ventilation system as nonsmoking areas and offer little protection. Recirculation of air through a building's ventilation systems results in secondhand smoke from a smoking area appearing in nonsmoking areas as well.
- Nonsmoking areas are not "smoke-free". In a study of 17 sites, there was only a 50% reduction in exposure to tobacco smoke in the nonsmoking areas compared to the smoking areas. Some nonsmoking areas provided no reduction in exposure to smoke.<sup>ii</sup>

### Ventilation Technologies Are Ineffective

- No U.S. science agency has found that ventilation systems reduce occupational exposure to secondhand smoke to an acceptable level.<sup>iii</sup>
- The 2006 Surgeon General's report concluded that exposure of nonsmokers to secondhand smoke cannot be controlled by air cleaning or mechanical air exchange.
- In June 2005, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the national and international standard setting body for indoor air quality, adopted a position document that stated the only way to effectively eliminate health risks associated with indoor exposure to secondhand smoke is to ban smoking activity.<sup>iv</sup>
- ASHRAE also stated that no engineering approaches, including dilution ventilation or air cleaning technologies, have demonstrated or should be relied upon to control health risks from secondhand smoke.<sup>v</sup>
- Impractical, tornado-like levels of ventilation would be needed in restaurants and bars in order to adequately protect workers and patrons from the risks associated with secondhand smoke.<sup>vi</sup>
- Ventilation technology may help reduce the irritability and the smell of smoke, but does not eliminate the cancer-causing chemicals.<sup>vii</sup>
- Ventilation was unable to control cancer-causing pollution in seven hospitality venues in Boston, prior to the city's smoke-free ordinance. Indoor air pollution levels were 4 times higher than National Ambient Air Quality Standards' outdoor requirements.<sup>viii</sup>

### Separately Ventilated Smoking Rooms Are Costly and Don't Protect Everyone

- Prohibiting smoking is the most effective way to limit nonsmokers' exposure to secondhand smoke and it is the only way to protect *both* workers and patrons.
- Separately ventilated smoking rooms do not take into consideration the health of employees who must enter these rooms. Restaurant and bar employees have been found to be at a higher risk of disease due to their disproportionate exposure to secondhand smoke.<sup>ix</sup>
- Adverse health effects for the occupants of separately ventilated smoking rooms cannot be controlled by ventilation.<sup>x</sup>
- Smoke-free policies are the least expensive change for businesses to implement and for the city to enforce. Installation, maintenance, and remodeling costs associated with a proper ventilation system that includes an enclosed smoking area and outside exhaust may be cost-prohibitive for many businesses.

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<sup>i</sup> U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>ii</sup> Cains T, et al. "Designated "No Smoking" Areas Provide From Partial to No Protection From Environmental Tobacco Smoke." *Tobacco Control*. 2004.

<sup>iii</sup> U.S. HHS (2006); Department of Labor, Occupational Safety and Health Administration (1994). Federal Register of Proposed Rulemaking, "Indoor Air Quality," FR 59:15 968-16039; and Repace, James (2000).

"Can Ventilation Control Secondhand Smoke in the Hospitality Industry?"

<sup>iv</sup> American Society of Heating, Refrigeration, and Air-Conditioning Engineers, Environmental Tobacco Smoke Position Document Committee, "ASHRAE Position Document on Environmental Tobacco Smoke." June 2005.

<sup>v</sup> ASHRAE, 2005.

<sup>vi</sup> Repace, James. "Can Ventilation Control Secondhand Smoke in the Hospitality Industry?" June 2000.

<sup>vii</sup> ASHRAE, 2005.

<sup>viii</sup> Repace, James. "An Air Quality Survey of Respirable Particles and Particulate Carcinogens in Boston Pubs Before and After a Smoking Ban." Repace Associates Inc. 2003.

<sup>ix</sup> Siegel, M. Involuntary Smoking in the Restaurant Workplace: A Review of Employees Exposure and Health Effects. *JAMA*. 1993.

<sup>x</sup> ASHRAE, 2005.