



Ventilation Systems Do Not Protect the Public from Secondhand Smoke

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Ventilation Systems Do Not Protect People from Exposure to Secondhand Smoke

- The 1986 Surgeon General's report on involuntary smoking (secondhand smoke exposure) concluded that, "the simple separation of smokers and nonsmokers within the same airspace may reduce, but does not eliminate, the exposure of nonsmokers to ETS [environmental tobacco smoke]." ¹
- According to the Centers for Disease Control and Prevention (CDC), there is no safe level of exposure to secondhand smoke. ²
- The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) is the international standard-setting body for a number of engineering practices, including ventilation. According to ASHRAE, ventilation and other air filtration technologies cannot eliminate all the health risks caused by secondhand smoke exposure, and because there is no safe level of exposure to secondhand smoke, tobacco smoke does not belong in indoor areas. ³
- The Occupational Safety and Health Administration (OSHA) states that "[F]rom the industrial hygiene perspective, general ventilation as delivered by heating, ventilation and air condition (HVAC) systems, is not an acceptable engineering control measure for controlling occupational exposures to [environmental tobacco smoke] ETS." ⁴
- Studies have found that ventilation technology does protect the workers and the public from secondhand smoke. ^{5 6} One study, in which the toxic quality of the air was measured in smoke-free establishments and establishments with ventilation systems, found that establishments with ventilation systems had contamination levels greatly exceeding those encountered on major truck highways and polluted city streets. ⁷

Ventilation Systems Manufacturers Do Not Guarantee Protection from Secondhand Smoke Toxins

- Major ventilation system manufacturers, including Allergy Control Products, Allergy Buyers Club, Brookstone, Espitech, Honeywell, IQ Air North America, Peak Pure Air, Radio Shack, Sharper Image, United Air Specialists and Wein Products, state that their ventilation systems cannot safely remove all the toxins in secondhand smoke from air. ⁸

Secondhand Smoke is Harmful to Health

- Every year secondhand smoke causes the deaths of 35,000 Americans ⁹. In North Carolina, 1,220 to 2,180 adults, children and babies die each year from others' smoking ¹⁰.
- Nonsmokers exposed to secondhand smoke have been shown to have many of the same tobacco-related diseases as active smokers. Secondhand smoke has been shown to increase nonsmokers' risk of heart disease, stroke, and cancer. ⁹
- The CDC warns that "...all patients at risk of coronary heart disease or with known coronary artery disease should be advised to avoid all indoor environments that permit smoking". ²
- Non-smokers routinely exposed to secondhand smoke at work see their risk of lung cancer increase by at least 50%. ^{11 12 13}

Any questions, please contact:

NC Alliance for Health

3131 RDU Center, Suite 100, Morrisville, NC 27560

Telephone: 919-463-8328; Fax: 919-463-8392 / ncalliance@heart.org / www.ncallianceforhealth.org

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- ¹ U.S. Surgeon General. *The Health Consequences of Involuntary Smoking*. Washington, DC: U.S. Department of Health and Human Services, 1986.
- ² **Pechacek, TF and Babb, S** *How acute and reversible are the cardiovascular risks of secondhand smoke?* *BMJ*. 2004 Apr 24;328(7446):980-3.
- ³ Samet, J.; Bohanon, Jr., H.R.; Coultas, D.B.; Houston, T.P.; Persily, A.K.; Schoen, L.J.; Spengler, J.; Callaway, C.A., "ASHRAE position document on environmental tobacco smoke," American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE),2005.
- ⁴ Department of Labor, Occupational Safety and Health Administration, Federal Register notice of proposed rulemaking, "Indoor Air Quality", FR 59:15968-16039, April 5, 1994 (www.osha-slc.gov/FedReg_osh_data/FED19940405.html).
- ⁵ Joint Research Centre, Indoor air pollution: new EU research reveals higher risks than previously thought. Brussels: European Commission. September 22, 2003.
- ⁶ Repace, J.L., "Risk management of passive smoking at work and at home," *St. Louis University Public Law Review* 8(2); 763-785, 1994.
- ⁷ Repace, J. "Respirable Particles and Carcinogens in the Air of Delaware Hospitality Venues Before and After a Smoking Ban." *Journal of Occupational and Educational Medicine*. September 10, 2004.
- ⁸ Americans for Nonsmokers' Rights "Ventilation and Air Filtration: What Air Filtration Companies and the Tobacco Industry Are Saying" Fact Sheet, downloaded April, 2006 at: <http://216.70.75.85/pdf/ventilationquotes.pdf>
- ⁹ National Cancer Institute. *Health Effects of Exposure to Environmental Tobacco Smoke*. Smoking and Tobacco Control Monograph No. 10. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 1999.
- ¹⁰ Campaign for Tobacco-Free Kids "The Toll of Tobacco in North Carolina" Fact Sheet, downloaded March 1, 2006 at: <http://www.tobaccofreekids.org/reports/settlements/toll.php?StateID=NC>
- ¹¹ Shopland, D.R.; Anderson, C.M.; Burns, D.M.; Gerlach, K.K., "Disparities in smoke-free workplace policies among food service workers," *Journal of Occupational and Environmental Medicine*, 46(4): 347-356, April 2004.
- ¹² Siegel, M. "Involuntary Smoking in Restaurant Workplace: A Review of Employee Exposure and Health Effects." *JAMA*, 270:490-493, 1993.
- ¹³ Johnson KC, Hu J, Mao Y. Lifetime residential and workplace exposure to environmental tobacco smoke and lung cancer in never-smoking women, Canada 1994-97. *Int J Cancer*. 2001 Sep;93(6):902-6.