



Why Secondhand Smoke Should be Eliminated from North Carolina's Worksites and Public Places

(November 2006)

Secondhand Smoke is Harmful to Health

- The 2006 Surgeon General's Report on the Health Consequences of Involuntary Exposure to Secondhand Smoke found that there is no risk-free level of exposure to secondhand smoke¹.
- Every year secondhand smoke causes the deaths of 35,000 Americans². In North Carolina, 1,220 to 2,180 adults, children and babies die each year from others' smoking³.
- 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^{1 2 4}.

Cardiovascular Disease/ Stroke

- As little as thirty minutes of exposure can trigger a heart attack in someone with heart disease or risk factors for heart disease². The Centers for Disease Control and Prevention (CDC) warns, "...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"⁵.
- Community restrictions on smoking in public places have significantly reduced the incidence of heart attacks among bartenders^{6 7}.

Cancer

- Secondhand smoke exposure has been shown to cause lung and nasal cancer in nonsmoking adults^{1 2}. An estimated 3,000 new cases of lung cancer per year are as a result of secondhand smoke exposure⁸.
- Non-smokers routinely exposed to secondhand smoke at work see their risk of lung cancer increase by at least 50%^{9 10 11}.

Secondhand Smoke Dramatically Affects Youth

- According to the National Cancer Institute and the Environmental Protection Agency (EPA), young people exposed to secondhand smoke are at increased risk for lower respiratory infections, chronic ear infections, asthma, abdominal obesity, and hyperglycemia¹² and can have impaired ability to learn, including reading deficits and deficits in math and reasoning¹³.
- Studies show that children exposed to secondhand smoke are more likely to start smoking as adolescents¹⁴.
- Pregnant women exposed to secondhand smoke are at increased risk to have low birth-weight babies.¹⁵

Smoke-Free Policies Are Good for Business

- No rigorous, scientifically conducted study has found negative economic impact from smoke-free policies; some, in fact, have found an increase in restaurant and bar sales following local or statewide restrictions on smoking in public places¹⁶.
- The Journal *Contemporary Economic Policy* recently published an article showing that restaurant sales were higher in cities with smoke-free policies.
- According to the Society of Actuaries, the cost of secondhand smoke to the US economy is nearly \$10 billion a year, ranging from medical bills to lost hours on the job¹⁷.
- The EPA estimates that smoke-free restaurants can expect to save about \$190 per 1,000 square feet each year in lower cleaning and maintenance costs¹⁸.

Ventilation Systems Do Not Protect People from Exposure to Secondhand Smoke

- According to the CDC, there is no safe level of exposure to secondhand smoke⁵.
- 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 areas¹⁹.
- The 2006 Surgeon General's Report on the Health Consequences of Involuntary Exposure to Secondhand Smoke found that ventilation systems are ineffective at removing harmful particulates from the air. The best way to protect people from exposure to secondhand smoke is to completely eliminate exposure through smoke-free policies¹.

For more information, contact NC Alliance for Health

ncalliance@heart.org

919-463-8328

-
- ¹ U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General—Executive Summary*. 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
 - ² 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.
 - ³ 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>
 - ⁴ California Air Resources Board, Sacramento, CA. January 25, 2006. <http://www.arb.ca.gov/toxics/ets/factsheetets.pdf>
 - ⁵ Pechacek, TF and Babb, S *How acute and reversible are the cardiovascular risks of secondhand smoke?* BMJ. 2004 Apr 24;328(7446):980-3.
 - ⁶ Sargent, RO, Shepard, RM and Glantz, SA *Reduced incidence of admissions for myocardial infarction associated with public smoking ban: before and after study*. BMJ 2004 328: 977-980.
 - ⁷ Samet, JM *Smoking Bans Prevent Heart Attacks* Circulation, October 3, 2006; 114(14): 1450 - 1451.
 - ⁸ CDC – MMWR – Dec 24, 2004
 - ⁹ 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.
 - ¹⁰ Siegel, M. "Involuntary Smoking in Restaurant Workplace: A Review of Employee Exposure and Health Effects." *JAMA*, 270:490-493, 1993.
 - ¹¹ 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.
 - ¹² U.S. Environmental Protection Agency. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. Washington, DC: U.S. Environmental Protection Agency;1992. Pub. No. EPA/600/6-90/006F.
 - ¹³ Yolton, K. et al., "Exposure to Environmental Tobacco Smoke and Cognitive abilities of U.S. Children and Adolescents," *Environmental Health Perspectives*, 113(1): 98-103. Available at <http://ehp.niehs.nih.gov/members/2004/7210/7210.pdf>.
 - ¹⁴ Becklake, M.R.; Ghezzo, H.; Ernst, P., "Childhood predictors of smoking in adolescence: a follow-up study of Montreal schoolchildren," *CMAJ* 173(4): 377-379, August 16, 2005.
 - ¹⁵ US Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Washington, DC: US Government Printing Office, 2001.
 - ¹⁶ Scollo, M., Lal, A., Hyland, A., Glantz, SA. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control*, 12: 13-20, 2003.
 - ¹⁷ Behan, D.F.; Eriksen, M.P.; Lin, Y., "Economic Effects of Environmental Tobacco Smoke," Society of Actuaries, March 31, 2005. Download at <http://www.soa.org/ccm/content/areas-of-practice/life-insurance/research/economic-effects-of-environmental-tobacco-smoke-SOA/?printerFriendly=1>. Accessed on August 17, 2005.
 - ¹⁸ "The dollars (and sense) benefits of having a smoke-free workplace," Michigan Department of Community Health, [2000].
 - ¹⁹ 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.