

Ventilation

Ventilation Why is ventilation not the answer? Many ask why ventilation is the not the answer to alleviating secondhand smoke. Secondhand smoke contains toxins proven to have harmful effects. There are more than 4000 identified toxic chemicals and 43 carcinogens in cigarette smoke. The National Environmental Health Information Service has defined secondhand smoke as a "known human carcinogen," which means that there is no acceptable level of exposure (1). In fact, with normal ventilation, an average non-smoker inhales approximately 1½ cigarettes in a non-smoking section of a restaurant during a 2 hour visit (2). The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE), the national group charged with setting ventilation standards, has established Standard 62-1999 which states that the elimination of indoor smoking is preferable to ventilation (3). Even after facing litigation from tobacco interests, ASHRAE re-committed itself to its findings and re-affirmed their standards in 2000. ASHRAE had previously declared that ventilation cannot eliminate risks of secondhand smoke, although it may be able to reduce some odor or some particle content (4). It might be out of your sight but it is not out of the range of your lungs. Even the Philip Morris USA website notes that ventilation will not remove the dangers of secondhand smoke from the air: "Business owners who choose to accommodate smoking should reduce secondhand smoke through... the use of high quality ventilation systems to minimize smoke in the air. While not shown to address the health effects of secondhand smoke... (5)" A typical ventilation system alters the air once per hour to limit carbon dioxide levels, and that is just one of the 43 carcinogens that are found in cigarette smoke. It would take more than three hours to rid a room of 95% of the smoke even if the smoking has stopped (6). It would take a steady tornado-strength wind to completely eliminate smoke risks from the air (7). Citations "9th Report on Carcinogens ‐ Revised January 2001." U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program. Mike Royer, The Journal Gazette. "American National Standards Institute (ANSI) Decision, March 21, 2000." ASHRAE standard 62-1999. "Secondhand Smoke," Philip Morris USA. Repace, J. " Risk management and passive smoking at work and at home." St. Louis U. Public Law Review, 12(2): 763-85, 1994. Repace, J. Report for the California Dept. of Health Services; Repace Associates, Inc., June 2000.