

Ventilation Fact Sheet

Eliminating secondhand smoke from indoor places is the only guaranteed method for protecting people from indoor exposure to secondhand smoke.

- There is no safe level of secondhand smoke exposure, only elimination of secondhand smoke can guarantee protection from its effects.¹
- No ventilation system has been designed that guarantees protection from exposure to secondhand smoke. The main purposes of ventilation systems are to limit the accumulation of carbon dioxide and to reduce odors.²
- While a ventilation or air purification system may be successful in reducing the level of visible smoke in the air, this reduction does not eliminate the hazardous toxins and gases contained in secondhand smoke.³
- Using current standards for indoor air exchange, ventilation rates would have to be increased more than a thousand times to reduce cancer risk associated with secondhand smoke.³
- Ventilated smoking rooms leak smoke into the rest of the building, thus harming everyone. Up to ten percent of smoking room air enters non-smoking areas just by opening and closing the door.⁴
- The 1986 Surgeon General's Report on involuntary smoking concluded that, "the simple separation of smokers and nonsmokers within the same airspace may reduce, but does not eliminate, the exposure of nonsmokers to environmental tobacco smoke."⁵
- At an average ventilation rate of one air exchange per hour, it takes three hours to remove 95% of the smoke from a single cigarette—and the remaining five percent can still be harmful.²
- Phillip Morris USA, the world's largest tobacco company, understands the limits of ventilation systems and states, "While not shown to address the health effects of secondhand smoke, ventilation can help improve the air quality of an establishment."⁶

References:

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3. Repace, J., "Smoking in the workplace: ventilation. In: Smoking Policy: Questions and Answers, no. 5.," Seattle: Smoking Policy Institute, [n.d.]
4. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Journal: "Shutting the Door on ETS Leakage," ashrae.org, July 2003.
5. U.S. Surgeon General. "The Health Consequences of Involuntary Smoking." Washington, DC: U.S. Department of Health and Human Services, 1986.
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