

SMOKE-FREE ENVIRONMENTS

Partial Smoke-Free Laws Do Not Work

The only effective way to protect the public from secondhand smoke is to enact comprehensive smoke-free laws that cover all indoor workplaces and public places, including all restaurants, bars, and other hospitality venues.¹

For years, the tobacco industry has attempted to undermine policies to protect people from secondhand smoke. The tobacco industry pushes for policies that ‘accommodate’ smokers such as partial smoke-free laws or designated smoking rooms. These ‘accommodation’ policies allow smokers to continue to smoke inside public places and do not completely protect against exposure to the harms of secondhand smoke.

Partial smoke-free laws do not protect from exposure to secondhand smoke

Laws that do not require 100% smoke-free public places are ineffective at protecting public health.

- In Spain, the smoke-free law implemented in 2006 required workplaces to be smoke-free but contained exemptions for restaurants and bars. Large restaurants and bars were allowed to set up ventilated designated smoking rooms, and small venues could decide their smoke-free status.
 - There were no significant decreases in exposure to secondhand smoke, respiratory symptoms or salivary cotinine (a biomarker for secondhand smoke exposure) among workers in environments with partial or no restrictions on smoking.²
 - Only an estimated 10–20% of small venues became completely smoke-free.²
- In Chile, large restaurants or bars were allowed to set up ventilated designated smoking rooms, and small venues could decide their smoke-free status. Air quality assessments carried out in Santiago found that:
 - Air nicotine concentration was 35.5 times higher inside ventilated designated smoking rooms, than completely smoke-free venues.³ Employees were still exposed to secondhand smoke because they were required to provide service in DSAs.
 - Air nicotine concentration was 56.2 times higher in venues that allowed smoking in all areas than in completely smoke-free venues.³

Designated smoking areas do not protect from exposure to secondhand smoke

Smoke from designated smoking areas easily moves from the smoking areas to areas in a venue where smoking is not allowed.

- In Switzerland, non-smoking areas in venues with designated smoking areas had indoor air pollution 2.7 times greater than completely smoke-free venues.⁴
- Air quality studies in Beijing show that restaurants with designated smoking areas had more than twice the amount of particle pollution than restaurants with 100% smoke-free policies.⁵

GENERAL DEFINITIONS

DESIGNATED SMOKING AREAS are indoor areas where smoking is allowed. Smoking areas are not structurally separated from non-smoking areas.

DESIGNATED SMOKING ROOMS are separately enclosed rooms in which smoking is allowed.

VENTILATION is a system or mechanism used to attempt to filter secondhand smoke or vent secondhand smoke to the outside, usually used in conjunction with designated smoking rooms.

Designated smoking rooms and ventilation do not work

Designated smoking rooms even with ventilation do not protect people from secondhand smoke because smoke inevitably leaks into non-smoking areas, ventilation does not remove secondhand smoke, and workers still need to enter the room to provide services. Designated smoking rooms are also costly to construct, maintain, and enforce.

- A Hong Kong technical feasibility study of smoking concluded that even the best designed designated smoking rooms do not fully protect non-smokers from secondhand smoke — some leakage of secondhand smoke is inevitable. The study also found that smoking rooms are not practical due to the technical demands and costs associated with the building, operation and maintenance of the rooms.⁹
- In Santiago, Chile, one study found that smoke from designated smoking rooms leaked into non-smoking areas. Non-smoking areas of venues that allowed smoking in ventilated designated smoking rooms had air nicotine concentration 3.2 times higher than completely smoke-free venues.³
- In the United States, a study of four airport designated smoking rooms with properly functioning ventilation found evidence of secondhand smoke leakage to the indoor smoke-free areas due to the opening and closing of doors.¹⁰

Corporate documents from British American Tobacco (BAT) acknowledge that ventilation and air filtration are ineffective at removing secondhand smoke. Despite such knowledge, BAT has extensively promoted these technologies to the hospitality industry since the mid-1990s.⁶

- The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the leading association of ventilation professionals, concluded, “the only means of effectively eliminating health risk associated with indoor exposure is to ban smoking activity.” ASHRAE found that no engineering approaches, including current and advanced dilution ventilation or air cleaning technologies, have been demonstrated to control health risks from environmental tobacco smoke exposure in spaces where smoking occurs.⁸

Recent studies document that toxins from tobacco smoke remain even after the cigarette has been extinguished; this is known as ‘thirdhand’ smoke. As a result, indoor spaces become contaminated with tobacco toxins even after the visible smoke disappears.⁷ Ventilation systems do not prevent the deposits of such toxins.

Key messages

- **There is no safe level of exposure to tobacco smoke. The only effective way to protect people is to provide 100% smoke-free air and eliminate smoking in indoor environments.**
- **Partial smoke-free laws, ventilation systems, designated smoking rooms and designated smoking areas do not protect the public and workers from the deadly effects of secondhand smoke.**
- **100% smoke-free laws help guarantee the fundamental right to breath clean air for all, protect the health of workers and non-smokers, and encourage smokers to quit.**

(1) World Health Organization. Protection from exposure to second-hand smoke: Policy recommendations, 2007. (2) Fernandez E, Fu M, Pascual JA, Lopez MJ, Perez-Rios M, Schiaffino A, et al. Impact of the Spanish smoking law on exposure to second-hand smoke and respiratory health in hospitality workers: a cohort study. *PLoS One* 2009;4(1):e4244. (3) Erazo M, Iglesias V, Droppelmann A, Acuna M, Peruga A, Breyse PN, et al. Secondhand tobacco smoke in bars and restaurants in Santiago, Chile: evaluation of partial smoking ban legislation in public places. *Tob Control* 2010;19(6):469-74. (4) Huss A, Kooijman C, Breuer M, Bohler P, Zund T, Wenk S, et al. Fine particulate matter measurements in Swiss restaurants, cafes and bars: what is the effect of spatial separation between smoking and non-smoking areas? *Indoor Air* 2010;20(1):52-60. (5) Capital Medical University. Fine Particles Density Monitoring Research on the Air in Six Types of Places in Beijing. Beijing: Capital Medical University, 2008. (6) Leavell NR, Muggli ME, Hurt RD, Repace J. Blowing smoke: British American Tobacco's air filtration scheme. *British Medical Journal* 2006;332(7535):227-29. (7) Singer BC, Hodgson AT, Guevarra KS, Hawley EL, Nazaroff WW. Gas-phase organics in environmental tobacco smoke. 1. Effects of smoking rate, ventilation, and furnishing level on emission factors. *Environ Sci Technol* 2002;36(5):846-53. (8) American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE). Environmental tobacco smoke: Position document. Atlanta: ASHRAE, 2005. (9) Wan M-P, Wu C-L, Chan T-T, Chao CY, Yeung L-L. Removal and Leakage of Environmental Tobacco Smoke from a Model Smoking Room. *Journal of Occupational and Environmental Hygiene* 2010;7(10):573-84. (10) Lee K, Hahn EJ, Robertson HE, Whitten L, Jones LK, Zahn B. Air quality in and around airport enclosed smoking rooms. *Nicotine Tob Res* 2010;12(6):665-8.