

# FCA

Framework Convention Alliance  
for Tobacco Control

## SECONDHAND SMOKE

**S**econdhand smoke (SHS), also known as environmental tobacco smoke, is a complex mixture of more than 4,800 chemical compounds, including 69 known carcinogens. Article 8.1 of the FCTC states that “scientific evidence has unequivocally established that exposure to tobacco smoke causes death, disease and disability”. According to the World Health Organization, SHS is a human carcinogen for which there is no “safe” level of exposure.<sup>1</sup>

### SHS Harms Children and Other Nonsmokers

WHO estimates that nearly 700 million — or nearly half of the world’s children — breathe air polluted by tobacco smoke. Infants and young children exposed to SHS experience:

- increased rates of lower respiratory tract infections (such as bronchitis and pneumonia) and ear infections;
- an exacerbation of chronic respiratory symptoms (such as asthma);
- a reduced rate of lung growth; and
- an increased risk of death from sudden infant death syndrome (SIDS).

Children’s exposure to SHS may also contribute to cardiovascular disease in adulthood and to neurobehavioural

impairment, while exposure of non-smoking women to SHS during pregnancy may cause reductions in fetal growth.<sup>2</sup>

Secondhand smoke is a significant cause of heart disease. In 1997, the California Environmental Protection Agency concluded that in the United States alone, secondhand smoke is responsible for an estimated 35,000 to 62,000 deaths among nonsmokers from heart disease each year.<sup>3</sup> In addition, two important investigations have reviewed all of the studies and found a link between SHS and heart disease.<sup>4</sup> Both of these meta-analyses concluded that nonsmokers who lived with smokers were at increased risk for heart disease, experiencing about a 30% increase in the risk of a heart attack or death from

heart disease. Other studies documenting the harm SHS causes to nonsmokers include:

- An International Agency for Research on Cancer (IARC) study which concluded that secondhand smoke causes lung cancer and other health problems.<sup>5</sup>
- A 2003 University of Minnesota study which found that after only four hours in a casino where smoking was allowed, non-smokers had dramatically increased levels of carcinogens circulating in their blood.<sup>6</sup>
- A pooled analysis of two large European and American studies found that exposure to secondhand smoke from spousal, workplace and social sources confers a 22% increased risk of lung cancer in people who never smoked. Those with the longest exposure had an increased risk of 32%.<sup>7</sup>
- A 1998 study in Norway concluded passive maternal smoking increased the risk for low birthweight babies.<sup>8</sup>
- A study in the *British Medical Journal* documents a 40% drop in hospital admissions for heart attacks in the U.S. city of Helena following the implementation of a comprehensive smoke-free law (this effect was reversed when pro-tobacco forces convinced a court to suspend enforcement of the law).<sup>9</sup>

## Tobacco Industry Resistance to SHS Restrictions

Despite the overwhelming scientific evidence, four of the world's top five tobacco companies still publicly maintain that SHS poses no danger to nonsmokers. Privately, however, tobacco companies perceive emerging public concern and awareness about SHS as a major threat to their business. The tobacco companies have used a variety of tactics to fight clean air policies. These include:

### Challenge the Science

- According to an internal industry document, the tobacco companies have developed a strategy in “every international area (USA, Europe, Australia, Far East, South America, Central America & Spain)...to set up a team of scientists organized by one national coordinating scientist and American lawyers, to review scientific literature and carry out work on ETS to *keep the controversy alive*”(emphasis added).<sup>10</sup>
- Tobacco companies have spent millions of dollars in an attempt to undermine the findings of a ten year study on passive smoking by the research branch of WHO.<sup>11</sup>
- Tobacco companies have secretly funded businesses and research institutes such as Healthy Buildings International, Inc. to minimize the dangers of workplace SHS through suspect research methods and advocacy work.<sup>12</sup>

### Exaggerate the Economic Impact

- The tobacco industry has attempted to create alliances with the hospitality industry and has created and funded “front groups” which claim to represent bar, hotel and restaurant owners. These groups have led the fight against smoke-free legislation, arguing that eating establishments and other businesses where people congregate will suffer enormous financial losses from smoking bans, even though research from around the world has found these claims to be unfounded.<sup>13</sup>

### Promote “Accommodation” and “Courtesy of Choice” Programs

- The tobacco industry has aggressively promoted ventilation as an alternative to smoke-free environments around the world, despite the fact that ventilation technology is incapable of removing all the harmful elements in tobacco smoke.<sup>14</sup> A recent U.S. study found the tobacco industry has developed a network of consultants who promote ventilation as

a “solution” to SHS. The consultants, who represent themselves as independent, usually work under close, but generally undisclosed, industry supervision.<sup>15</sup>

- Tobacco industry-funded “courtesy of choice” programs — often carried out in conjunction with the hospitality industry — attempt to equate the “right to smoke” with the right to breathe unpolluted air by promoting separate smoking areas or the above-mentioned ventilation solutions.<sup>16</sup>

Perhaps unsurprisingly, an analysis of SHS articles published in the *Journal of the American Medical Association* found that “the only factor correlated with concluding that passive smoking is not harmful was whether an author was affiliated with the tobacco industry.”<sup>17</sup>

## Reducing Exposure to SHS

Promoting smoke-free public places and work places can help protect children and other nonsmokers from SHS and increase public awareness of the negative health effects of smoking. It also reduces the social acceptability of smoking and can increase the likelihood that smokers of all ages will smoke fewer cigarettes or stop smoking entirely. The U.S. National Cancer Institute found that being employed in a smoke-free workplace is associated with a reduction in the number of cigarettes smoked per day and an increase in the success rate of smokers who are attempting to quit.<sup>18</sup>

Over the past few years, scores of countries have moved to create smoke-free public places and workplaces. In the first half of 2004 alone India, Ireland, Norway, New Zealand, Bhutan and Uganda all passed smoke-free legislation which covers public places and workplaces, including bars and restaurants. The key now will be to make sure these new laws are adequately enforced.

## Implementing the FCTC

Guiding Principle 4.1 of the FCTC calls on governments to “protect all persons from exposure to tobacco smoke”, rather than just specific populations such as children or pregnant women. This protection should be extended, according to Article 8.2, “in indoor workplaces, public transport, indoor public places and...other public places.” In light of this, the Framework Convention Alliance recommends ending smoking in the following areas:

- hospitals, child-care centers, schools and universities;

- places of public entertainment, such as theaters, concert halls and museums;
- public transportation, such as buses, taxicabs, trains, airplanes and boats;
- bars, restaurants, stores and shopping malls;
- all government buildings; and
- all indoor workplaces.

**WHO also recommends:**

- the placement of health warnings on cigarette packages advising smokers that their tobacco smoke is harmful to

children and others;

- training for physicians and other health professionals on the health impacts of SHS; and
- programs to assist pregnant women to stop smoking.

However, it is difficult to legislate what goes on in the privacy of people's homes, where the majority of young peoples' exposure to SHS occurs. WHO therefore recommends governments launch education campaigns targeted at household decision-makers highlighting the negative impact of SHS on children and other nonsmokers.<sup>18</sup>

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## Resources on the Web:

"Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant," CalEPA draft report (2003) [www.arb.ca.gov/toxics/ets/dreport/dreport.htm](http://www.arb.ca.gov/toxics/ets/dreport/dreport.htm)

WHO Consultation on ETS and Child Health (1999) [www.who.int/toh/TFI/consult.htm](http://www.who.int/toh/TFI/consult.htm)

Report of the Scientific Committee on Tobacco and Health. Department of Health, UK (1998) [www.official-documents.co.uk/document/doh/tobacco/contents.htm](http://www.official-documents.co.uk/document/doh/tobacco/contents.htm)

CalEPA, "Health Effects of Exposure to Environmental Tobacco Smoke" (1997) [www.oehha.org/air/environmental\\_tobacco/finalets.html#download](http://www.oehha.org/air/environmental_tobacco/finalets.html#download)

TobaccoScam aims to curtail the tobacco industry's manipulation of the hospitality industry. [www.tobaccoscam.ucsf.edu](http://www.tobaccoscam.ucsf.edu)

U.S. National Toxicology Program — 10th Report on Carcinogens <http://ehp.niehs.nih.gov/roc/tenth/profiles/s176toba.pdf>

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## Endnotes

1. World Health Organization. *International Consultation on Environmental Tobacco Smoke (ETS) and Child Health*. January 11–14, 1999 (WHO/NCD/TFI/99.10).
  2. *Ibid.*
  3. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. "Health Effects of Exposure to Environmental Tobacco Smoke." *Tobacco Control* Vol. 6, No. 4, (1997).
  4. J. He, et al. "Passive Smoking and the Risk of Coronary Heart Disease—A Meta-Analysis of Epidemiologic Studies," *New England Journal of Medicine*, Vol. 340, (1999), pp.920-6 and M.W. Law et al. "Environmental Tobacco Smoke Exposure and Ischaemic Heart Disease: An Evaluation of the Evidence." *British Medical Journal*, Vol. 315, (1997), pp. 973-980.
  5. World Health Organization. *Tobacco Smoke and Involuntary Smoking*. International Agency for Research on Cancer, Monograph Series, Vol.83.
  6. K. Anderson, et al. "Metabolites of a Tobacco-Specific Lung Carcinogen in Nonsmoking Casino Patrons." *Cancer Epidemiology Biomarkers & Prevention*. Vol. 12, (December 2003), pp. 1544-1546. <<http://cebp.aacr-journals.org/cgi/content/abstract/12/12/1544>>
  7. P. Brennan, et al. "Secondhand smoke exposure in adulthood and risk of lung cancer among never smokers: A pooled analysis of two large studies." *International Journal of Cancer*. Vol. 109, No. 1, (December 2003), pp. 125-131. <<http://www3.interscience.wiley.com/cgi-bin/abstract/106570877/ABSTRACT>>
  8. P. Nafstad and D. Fugelseth. "Nicotine Concentration in the Hair of Nonsmoking Mothers and Size of Offspring." *American Journal of Public Health*, Vol. 88, (January 1998).
  9. R. P. Sargent, R. M. Shepard, and S. A. Glantz. "Reduced incidence of admissions for myocardial infarction associated with public smoking ban: before and after study." *British Medical Journal*. Vol. 328 (April 2004), p. 977 - 980.
  10. Note on special meeting of the UK [Tobacco] Industry on Environmental Tobacco Smoke. (London: February 17, 1988.) Bates #701247331-336; <[http://www.pmdocs.com/PDF/2060563936\\_3941.PDF](http://www.pmdocs.com/PDF/2060563936_3941.PDF)>
  11. S. Boseley. "\$2m Plot to Discredit Smoking Study Exposed," *The Guardian*, (April 7, 2000); E. Ong and S. Glantz. "Tobacco Industry Efforts Subverting International Agency for Research on Cancer's Second-Hand Smoke Study." *The Lancet*. Vol. 355, (April 8, 2000). <<http://www.thelancet.com/newlancet/sub/issues/vol355no9211/publichealth1253.html>>
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12. M. Mintz. "The Building Doctor." *Washington Post Magazine*. (March 24, 1996); Minutes of meeting of the Executive Committee. *The Tobacco Institute, Inc.* (December 10, 1987) <<http://www.tobaccoinstitute.com/getallimg.asp?DOCID=TIMN0014390/4393>>
13. M. Scollo, A. Lal, A. Hyland and S. Glantz. "Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry." *Tobacco Control*. Vol. 12, No. 1 (March 2003); .W. J. Bartosch and G. C. Pope. "Economic effect of restaurant smoking restrictions on restaurant business in Massachusetts, 1992 to 1998." *Tobacco Control*. Vol. 11, Suppl. 2 (June 2002) p. ii38-ii42.
14. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. *ASHRAE 62-1999: Ventilation for Acceptable Indoor Air Quality*. See Addendum 62e. <[www.ashrae.org](http://www.ashrae.org)>
15. J. Drope, S. A. Bialous, S. A. Glantz. "Tobacco industry efforts to present ventilation as an alternative to smoke-free environments in North America." *Tobacco Control*. Vol. 13, Suppl. 1 (March 2004), p. 41-47.
16. J. Dearlove, S. Bialous, and S. Glantz. "Tobacco industry manipulation of the hospitality industry to maintain smoking in public places." *Tobacco Control*. Vol. 11, No. 2 (June 2002), p. 94-105.
17. D.F. Barnes, et al. "Why review articles on the health effects of passive smoking reach different conclusions," *Journal of the American Medical Association*. Vol. 279 No. 19, (May 20, 1998).
18. National Cancer Institute. *Population Based Smoking Cessation: Proceedings of a Conference on What Works to Influence Cessation in the General Population, Smoking and Tobacco Control Monograph No. 12*. NIH Pub. No. 00-4892, (November 2000).
19. *Op cit*

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**Framework Convention Alliance on Tobacco Control**

Rue Henri-Christiné 5, Case Postale 567, CH-1211 Genève, Switzerland

**tel.** 41-22-321-0011; 1-202-352-3284 **fax.** 41-22-329-1127 **e-mail:** [fca@globalink.org](mailto:fca@globalink.org)[www.fctc.org](http://www.fctc.org)*Adapted and updated with permission from the 2000 World Conference on Tobacco OR Health fact sheets. June 2005.*

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