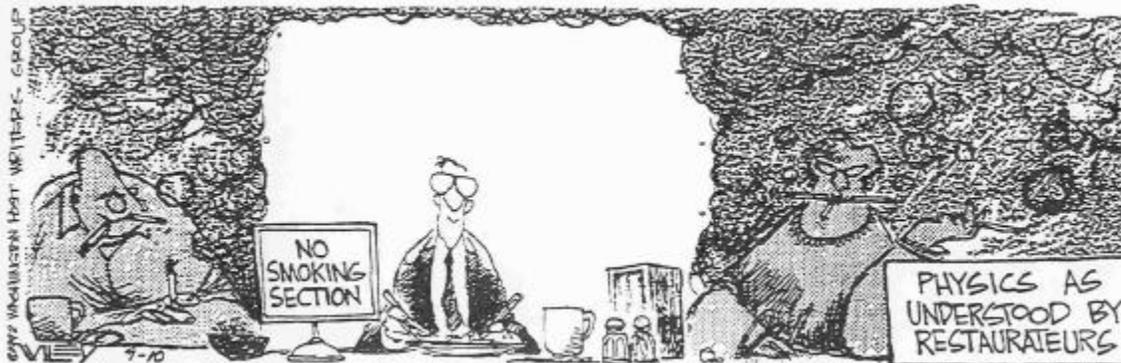


# CAMPAIGN For TOBACCO-FREE Kids®

## VENTILATION TECHNOLOGY DOES NOT PROTECT PEOPLE FROM SECONDHAND TOBACCO SMOKE

### NON SEQUITUR



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As this political cartoon from 1992 illustrates so well, the ventilation “solutions” to the problems posed by secondhand smoke that the tobacco industry, its allies, and others have proposed over the years fall far short of the mark of protecting the health of non-smokers.

Even though the tobacco industry has pushed ventilation technology without much success for years as a sensible, reasonable, and common sense solution to accommodate the interests and needs of both smokers and non-smokers in indoor environments<sup>1</sup>, the industry has recently redoubled its claims that there are “new and emerging technologies” that make it unnecessary to create smoke free environments.

**However, while sounding reasonable, the problem with the ventilation “solution” is that based on current scientific information, even the newest ventilation technologies under ideal conditions are incapable of removing all secondhand smoke and its toxic constituents from the air.<sup>2</sup> Therefore, the scientific evidence is clear: ventilation technology does not serve as an alternative to eliminating exposure to secondhand smoke as the best strategy to protect people’s health.**

While there may be the potential for reducing levels of exposure to secondhand smoke using current ventilation technology, there remains no scientific evidence or consensus about whether there is any safe level of exposure.<sup>3</sup> And no credible scientific, medical, or engineering authority has claimed that ventilation is capable of protecting people’s *health* from the toxins in secondhand smoke. Until such consensus develops (if ever), ventilation technology as a “solution” to secondhand smoke is inadequate and only laws that prohibit smoking in indoor environments can guarantee safe levels of exposure to secondhand smoke.

### **What does the tobacco industry say about ventilation and health?**

**Philip Morris U.S.A.** - While the tobacco industry presents ventilation as a “solution” to the problems of secondhand smoke and urges restaurants to spend tens of thousands of dollars on complex systems that don’t solve the problem of exposure to secondhand smoke, Philip Morris (in the fine print) admits that these systems do not protect health – “*Options*, Philip Morris USA does not purport to address health effects attributed to environmental tobacco smoke.”<sup>4</sup>

**George Benda, CEO, Chelsea Group, Ltd. (ventilation consultant to Philip Morris U.S.A.)** – The following quotes are taken from testimony by Mr. Benda at a Mesa, Arizona City Council hearing:

1. In response to a question about whether or not proposals for ventilation technology solutions are based on old technology (that independent government and engineering experts have concluded are incapable of removing all the harmful properties of secondhand smoke from indoor spaces), Mr. Benda stated, “... it is the same technology we’ve all known.”<sup>5</sup>
2. In addition, Mr. Benda stated that building ventilation systems are designed to operate in a specific manner and that any alterations to the building could impact the effectiveness of the ventilation system. Due to these built-in design factors in all buildings, to renovate these systems in a way that even attempts to remove all secondhand smoke contaminants from the air would require every building owner to “restructure the entire building” and that such major retrofits would cost “tens of thousands of dollars.”<sup>6</sup> In comparison, smoke free indoor air laws are free.

### **What do the people who make ventilation equipment say about ventilation and health?**

**Honeywell, Inc. (leading industry manufacturer of ventilation products)** – “We stand by the efficiency and quality of our air cleaners as comfort and convenience products, but we are not making claims that these are health products.”<sup>7</sup>

“Q: Will filtering eliminate all health hazards known to occur with exposure to ETS?

A: Honeywell has not in the past and does not make health hazard claims.”<sup>8</sup>

“Q: If filtering does not eliminate all health hazards, to what degrees are those hazards reduced?

A: Honeywell has not data to support health hazard claims.”<sup>9</sup>

### **What do the experts say about ventilation technology?**

**Occupational Safety and Health Administration (OSHA)** - "... from the industrial hygiene perspective, general ventilation as delivered by heating, ventilation and air condition (HVAC) systems, is not an acceptable engineering control measure for controlling occupational exposures to [environmental tobacco smoke] ETS.”<sup>10</sup>

**ASHRAE Standard 62-1999, Addendum 62e** – The purpose of this standard is to “... specify minimum ventilation rates and indoor air quality that will be acceptable to human occupants ...”<sup>11</sup> and it assumes nonsmoking environments everywhere except bars and casinos.

“Since the last publication of this standard in 1989, numerous cognizant authorities have determined that ETS is harmful to human health. These authorities include, among others, the United States Environmental Protection Agency, World Health Organization, American Medical Association, American Lung Association, National Institute of Occupational Safety and Health,

National Academy of Sciences, Occupational Safety and Health Administration, and the Office of the U.S. Surgeon General.”<sup>12</sup>

It is important to note that several tobacco companies, including R.J. Reynolds Tobacco Company and Philip Morris U.S.A., appealed various parts of the ASHRAE 62-1999, Addendum 62e standard. All of these appeals have been rejected and in a letter dated July 12, 2000, the American Standards Institute’s Board of Appeals informed Philip Morris that it rejected their appeal and stated that the “ASHRAE Addendum 62e remains an approved American National Standard.”<sup>13</sup>

**U.S. Environmental Protection Agency (EPA)** – “EPA recommends that every company have a smoking policy that effectively protects nonsmokers from involuntary exposure to tobacco smoke. Prohibiting smoking indoors or limiting smoking to rooms that have been specially designed to prevent smoke from escaping to other areas of the building are two options that will effectively protect nonsmokers ... If smoking is permitted indoors, it should be in a room that meets several conditions:

1. Air from the smoking room should be directly exhausted to the outside by an exhaust fan. Air from the smoking room should not be re-circulated to other parts of the building. More air should be exhausted from the room than is supplied to it to make sure ETS doesn't drift to surrounding spaces.
2. The ventilation system should provide the smoking room with 60 cubic feet per minute of supply air per smoker. This air is often supplied by air transferred from other parts of the building, such as corridors.
3. Nonsmokers should not have to use the smoking room for any purpose. It should be located in a non-work area where no one, as part of his or her work responsibilities, is required to enter.”<sup>14</sup>

**National Institute of Occupational Safety and Health (NIOSH)** – “In indoor workplaces where smoking is permitted, [secondhand smoke] can spread throughout the airspace of all workers. The most direct and effective method of eliminating ETS from the workplace is to prohibit smoking in the workplace. Until that is achieved, employers can designate separate, enclosed areas for smoking, with separate ventilation. Air from this area should be exhausted directly outside and not re-circulated within the building or mixed with the general dilution ventilation for the building.”<sup>15</sup>

**Repace Associates, Inc. (secondhand smoke consultants)** – “... it is clear that dilution ventilation, air cleaning, or displacement ventilation technology even under moderate smoking conditions cannot control ETS risk to *de minimis* levels for workers or patrons in hospitality venues without massively impractical increases in ventilation ... Smoking bans remain the only viable control measure to ensure that workers and patrons of the hospitality industry are protected from exposure to the toxic wastes from tobacco combustion.”<sup>16</sup>

**Conclusion: Based on the overwhelming body of scientific evidence:**

1. ***Ventilation technology does not protect people from the dangers posed by secondhand tobacco smoke. The simplest and cheapest way to protect people from secondhand smoke is to create smoke free environments.***
2. ***States and local governments should not waste taxpayer dollars to fund new reviews to prove something to which we already know the answer.***

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<sup>1</sup> See Philip Morris website, "Options, Philip Morris USA" that discusses ventilation technology as a reasonable accommodation of smokers and non-smokers. [www.pmoptions.com/home/home.asp](http://www.pmoptions.com/home/home.asp).

<sup>2</sup> 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)).

<sup>3</sup> Ibid.

<sup>4</sup> See Philip Morris website, "Options, Philip Morris USA" that discusses ventilation technology as a reasonable accommodation of smokers and non-smokers. <http://www.pmoptions.com/und/und.asp>.

<sup>5</sup> Based on a transcript (from videotape) of an exchange at a City Council meeting in Mesa, Arizona, between Chelsea Group ventilation consultant George Benda and City Councilman Jim Davidson, dated November 15, 1999.

<sup>6</sup> Ibid.

<sup>7</sup> Communication from Janell Siegfried, Honeywell, Inc. to Dr. Clark dated June 12, 2000 in relation to debate over ventilation provision in the Duluth, MN City Council.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Department of Labor, Occupational Safety and Health Administration, Federal Register notice of proposed rulemaking, "Indoor Air Quality", FR 59:15968-16039, April 5, 1994 ([www.osha-slc.gov/FedReg\\_osh\\_data/FED19940405.html](http://www.osha-slc.gov/FedReg_osh_data/FED19940405.html)).

<sup>11</sup> ASHRAE 62-1999: Ventilation for Acceptable Indoor Air Quality, see Addendum 62e.

<sup>12</sup> Ibid.

<sup>13</sup> Letter from Anne Caldas, Secretary Appeals Board, American National Standards Institute to Edward A. Fickes, Fickes Engineering and Code Group, Inc., Matthew N. Winokur, Philip Morris Management Corporation, and Mark Lehrman, Wells Gardner Electronics, dated July 12, 2000.

<sup>14</sup> U.S. Environmental Protection Agency (EPA), "Secondhand Smoke: What You Can Do About Secondhand Smoke As Parents, Decision-Makers, and Building Occupants," EPA-402-F-93-004, July 1993 ([www.epa.gov/iaq/ets/index.html](http://www.epa.gov/iaq/ets/index.html)).

<sup>15</sup> National Institute of Occupational Safety and Health, "Current Intelligence Bulletin 54: Environmental Tobacco Smoke in the Workplace - Lung Cancer and Other Health Effects." Publication No. 91-108, June 1991 ([www.cdc.gov/niosh/nasd/docs2/as73000.html](http://www.cdc.gov/niosh/nasd/docs2/as73000.html)).

<sup>16</sup> Repace, James, Report for the California Department of Health Services, "Can Ventilation Control Secondhand Smoke in the Hospitality Industry? An Analysis of the Document "Proceedings of the Workshop on Ventilation Engineering Controls for Environmental Tobacco Smoke in the Hospitality Industry", sponsored by the Federal Occupational Safety and Health Administration and the American Conference of Governmental Industrial Hygienists," Repace Associates, Inc., June 2000 ([www.repace.com](http://www.repace.com)).

<sup>17</sup> Communication from Janell Siegfried, Honeywell, Inc. to Dr. Clark dated June 12, 2000 in relation to debate over ventilation provision in the Duluth, MN City Council.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.