



*Questions and Answers on*

## Ventilation of Second-Hand Smoke

***Can ventilation clear second-hand smoke from restaurants, bars and other public or work-places?***

Yes, it can clear *some* smoke from the air. But there is no ventilation system capable of making the air clean enough to meet established air quality standards.

***Who sets ventilation standards?***

The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) sets standards for ventilation rates. These standards are so widely accepted that they are often written into laws and regulations. They are the industry norms throughout North America and many other parts of the world.

***What are the ventilation standards for second-hand smoke?***

ASHRAE considers that there is no acceptable ventilation for second-hand smoke.

In 1999, ASHRAE revised its indoor air quality standard (called the Ventilation for Indoor Air Quality, Standard 62-1999). Until that time, ASHRAE had provided ventilation standards to remove the odours from second-hand smoke. After 1999, ASHRAE accepted the evidence from other authorities that there is no acceptable level of exposure to the chemicals found in cigarette smoke, and rescinded those standards.

ASHRAE standards only apply to air which does not contain cigarette smoke.

***Have any scientific bodies tried to find an acceptable ventilation standard?***

Yes, but they decided that, at best, it could only remove 90% of the smoke.

In 1998, the U.S. Occupational Safety and Health Association (OSHA) partnered with the the

American Conference of Governmental Industrial Hygienists to sponsor a review by 14 ventilation experts to determine if there were technically and economically feasible engineering controls for environmental tobacco smoke in restaurants, bars and casinos. The panel was assume that the total elimination of second-hand tobacco smoke was not an option. It concluded that the standard ventilation systems (mixed dilution ventilation) was unsatisfactory for controlling worker exposure. They panel felt that newer methods, such as displacement ventilation, could remove more smoke. They estimated that under optimal conditions, up to 90% of smoke could be removed.

***What is the safe level of exposure to second-hand smoke?***

No agency involved in setting occupational exposure limits has found an acceptable level of exposure to second hand smoke.

***Have any Canadian agencies found an acceptable ventilation standard?***

No.

The British Columbia Workers Compensation board recently reviewed its regulations on exposure to second hand smoke. It held public hearings, where ventilation options were forwarded by Honeywell and other engineering firms.

Health Canada was asked to test ventilation proposals by the City of Toronto. Health Canada declined to do so "Since no ventilation system will protect everybody, and might even delude non-smokers into a false sense of protection."