



ENVIRONMENTAL TOBACCO SMOKE

Environmental Tobacco Smoke (ETS) comes from the secondhand smoke exhaled by smokers and side stream smoke emitted from the burning end of cigarettes, cigars and pipes.

INDOOR AIR QUALITY PROBLEM

ETS is more than just a nuisance. In fact it is one of the most widespread and harmful indoor air pollutants. ETS contains more than 4700 chemical compounds including: arsenic (rat and ant poison), benzene (rubber cement), lead (car battery material), phenol (used in production disinfectants and plastic), and hydrogen cyanide (poison used in gas chambers). It often produces levels of carbon monoxide and other toxins well above accepted standards for human exposure. In addition to breathing in ETS when people smoke, harmful chemicals stick around long after smoking ends because they are absorbed by drapes, linens, furniture, and clothes. They are then re-emitted back into the air you breathe.

HEALTH EFFECTS

The health effects of smoking on smokers have been known for decades. Smokers greatly increase their risk of developing lung cancer, emphysema, and heart disease. Increasingly, research is finding that exposure to ETS is dangerous to non-smokers' health. In fact, exposure to ETS is a known cause of lung cancer and respiratory illness, and has been linked to heart disease. Healthy individuals are at risk from ETS, but the following populations are at ever greater risk: fetuses and newborns, children, and people with asthma or other respiratory conditions

Pregnant women who smoke or are exposed to ETS:

- increase the risk of miscarriage, premature birth, or stillbirth
- have babies which generally have lower birth weights and shorter lengths

Children exposed to ETS experience a number of health problems, some of them severe:

- in the first two years of life, children of parents who smoke at home have a much higher rate of lung disease such as bronchitis and pneumonia
- there is an association between ETS exposure and the development of asthma in younger children.¹
- research indicates a worsening of asthma in children living with parents who smoke
- children living in homes with a smoker have a slower rate of growth in lung function as the lung matures. This may increase the risk of developing lung disease later in life
- the Ontario Medical Association² suggests that thousands of health effects occur in Ontario children each year as a result of ETS exposure, such as asthma exacerbation, middle ear infections, tonsillitis and lower respiratory tract infections.

For people living with asthma or other respiratory conditions, exposure to ETS may cause:

- a worsening of symptoms (e.g. wheeze, shortness of breath, cough)
- increased medication use and more emergency room visits

Non-smokers living with a smoker double their risk of developing lung cancer. Recent research suggests that non-smoker exposure to ETS increases the risk of heart disease.

¹Clearing the Air: Asthma and Indoor Air Exposures. Committee on the Assessment of Asthma and Indoor Air. Division of Health Promotion and Disease Prevention. Institute of Medicine, Washington, D.C. January, 2000.

²Ontario Medical Association Position Paper on Second Hand Smoke. 1996



WHAT YOU CAN DO

ETS is one of the easiest indoor air pollutants to control. By removing the source (cigarettes, cigars, pipes) you eliminate the problem. Increasing ventilation and filtration are not viable options to clear the air. There are no mechanical devices capable of removing all of the particles and gases found in ETS.

Separating smokers and non-smokers is also ineffective. In 1986, the U.S. Surgeon General's report on involuntary smoking concluded that "the simple separation of smokers and non-smokers within the same air space may reduce, but does not eliminate, the exposure of non smokers to ETS"¹. There is only one way to eliminate second-hand smoke from indoor air; remove the source.

Here are a few quick tips:

- prohibit smoking in your home
- have family members or guests smoke outdoors
- if you or a family member smoke, consider quitting. Contact The Lung Association at 1-888-566-5864 for information on smoking cessation programs
- work with other parents and family members to help promote the concept of smoke-free families in your neighbourhood

Health experts, environment experts, and millions of Canadians are concerned about the risks of air pollution. The Lung Association is committed to helping people take action to reduce those risks.

¹U.S. Surgeon General's report: The Health Consequences of Involuntary Smoking. Washington, D.C. Department of Health and Human Services, 1986.