



Winnipeg Regional  
Health Authority

Office régional de la  
santé de Winnipeg

## **SECONDHAND SMOKE** **(ENVIRONMENTAL TOBACCO SMOKE)**

### **FACT SHEET**

**Q: What is secondhand smoke (ETS)?**

**A:** Secondhand smoke, also referred to as environmental tobacco smoke (ETS), is the smoke that comes from:

- the tip of a burning cigarette, cigar or pipe.
- a smoker exhaling.

**Q: What is in secondhand smoke (ETS)?**

**A:** Secondhand smoke (ETS) consists of poisonous gases, liquids, and solid particles, all of which we can breathe in. Secondhand smoke contains more than 4,000 chemicals, over 50 of which are known or suspected cancer-causing agents.

Some of the cancer-causing agents are:

- benzene
- chromium
- nickel
- vinyl chloride
- cadmium

Agents suspected to cause cancer include:

- benzopyrene
- formaldehyde
- lead

Other toxic substances in secondhand smoke are:

- Carbon monoxide
  - Decreases the amount of oxygen in the blood going to the heart. That makes the heart work harder to get enough oxygen to the body.
- Nicotine
  - Makes the heart beat faster and, therefore, makes the heart work harder.
  - Causes the blood vessels to narrow. This increases blood pressure and makes the heart work harder to push blood through the arteries.
  - Increases plaque build-up in the blood vessels. This increases blood pressure, makes the heart work harder, and can lead to blood clots.
- Tar
  - Forms brown, sticky deposits in the lung tissue, which damages the lung tissue.

**Q: How much exposure to secondhand smoke (ETS) is okay?**

**A:** The Environmental Protection Agency (EPA) in the United States classifies secondhand smoke (ETS) as a “Class A” carcinogen. This means that there is no known safe level of exposure.

**Q: What are the health effects of long-term exposure to secondhand smoke (ETS)?**

**A:** Health effects of long-term exposure to secondhand smoke include:

- Increased risk of lung cancer. Approximately 350 non-smoking Canadians will die each year from lung cancer related to secondhand smoke.
- Increased risk of dying from a heart attack. A non-smoker with a smoking spouse has a 20 – 30% greater risk of dying from a heart attack than a non-smoker with a non-smoking spouse.
- Makes chronic obstructive lung disease (COPD), or emphysema, worse.

**Q: What are the immediate health effects of exposure to secondhand smoke (ETS)?**

**A:** Health effects of short-term exposure to secondhand smoke include:

- Increased risk of asthma attacks and bronchitis.
- Irritation of the eyes, throat, nose, and lungs.
- Allergic reactions.
- Headache, sore throat, nausea, and dizziness.
- Decreased lung functioning.
- Contraction of coronary arteries - the blood vessels supplying the heart with oxygen.

**Q: What are the particular health effects of exposure to secondhand smoke (ETS) for children?**

**A:** Children are particularly vulnerable to secondhand smoke because they breathe faster than adults, resulting in absorption of higher amounts of the toxic substances found in secondhand smoke. Health effects for children include:

- Decreased fetal growth, resulting in low birth weight babies.
- Increased risk for sudden infant death syndrome (SIDS).
- Pneumonia
- Bronchitis
- Asthma - a trigger for children with asthma, and a risk factor for new cases of asthma.
- Middle ear infections.
- If parents smoke, children learn that smoking is a normal part of adulthood. These children are more likely to start smoking in adolescence than children with non-smoking parents.

**Q. What are the health effects for bar and restaurant workers and for other workers exposed to secondhand smoke (ETS)?**

**A:** These workers may be exposed to very high levels of secondhand smoke since the concentration of smoke in bars and restaurants is often higher than in the homes of smokers and they are exposed for prolonged periods of time. Particular considerations for workers include:

- Working in a smoke-filled environment has about the same long-term effect on a person's health as smoking ten cigarettes a day.
- Restaurant workers have a 50% higher risk of lung cancer than the general population.
- Non-smoking restaurant and bar workers have higher rates of lung cancer than non-smokers in other fields. Waitresses have four times the expected lung cancer mortality rate and 2.5 times the expected heart disease mortality rate.
- A 1998 study of California bartenders showed that after bars were smoke-free, both workers who were smokers and non-smokers had fewer respiratory symptoms and irritation, and improved lung function.

**Q: What can I do about secondhand smoke?**

**A:** You can:

- Make your home and car smoke-free places.
- Support smoke-free public places. Let the smoke-free establishments you visit know you appreciate the clean air.
- Avoid places where smoking is allowed. Let the businesses you are not visiting know you would prefer clean air.
- Let your City and Provincial politicians know how you feel about smoke-free clean air in public places.