

## Second and third-hand smoke

### Second-hand smoke

Second-hand smoke is a mixture of the smoke exhaled by a smoker and the smoke that comes from the lit end of tobacco products such as cigarettes, cigars and pipes. Two thirds of smoke from a cigarette is not inhaled by the smoker, but enters the air around the smoker.

### What is in second-hand smoke?

There are over 4000 chemical compounds in second-hand smoke of which 60 are known to cause cancer. Second-hand smoke has more harmful chemicals than smoke inhaled directly by a smoker because it does not pass through a filter. It contains up to:

- Three times the amount of tar
- Five times the amount of carbon monoxide
- Six times the amount of nicotine

No ventilation system can effectively remove second-hand smoke from your home or car. The only way to eliminate second-hand smoke from indoor air is to **remove the source**.

### What is the risk?

Second-hand smoke exposure causes disease and death in both smokers and healthy non-smokers. It kills over 1100 Canadians each year. Exposure to second-hand smoke can cause:

- Lung cancer
- Nasal sinus cancer
- Heart disease
- Stroke
- Heart attacks

It is also linked to other cancers such as cervical, brain, bladder and thyroid cancers.

### Second, third-hand smoke and children

Children are especially vulnerable to second and third-hand smoke because their lungs and respiratory system are still developing. They breathe more quickly, their bodies are smaller, they spend more time crawling on the floor, put things in their mouths and can't break down the harmful chemicals as easily as adults.

Children who are exposed to second-hand smoke are at greater risk of developing:

- Colds and pneumonia
- Bronchitis
- Asthma
- Ear infections
- An effect on intellectual development and behaviour
- Sudden infant death syndrome (SIDS)

For more information on a smoke-free environment for your children, visit [Best Start](#).

## **Pregnancy, breastfeeding, smoking and second-hand smoke**

When a woman is pregnant, toxins in second-hand smoke can cross to the unborn baby and may slow their growth and affect their development. Babies of women who smoke or are regularly exposed to second-hand smoke during pregnancy are at higher risk for:

- Miscarriage
- Premature birth
- Still birth
- Low birth weight
- Birth defects
- Slower development

Scientific research has shown that the nicotine and other toxic chemicals in tobacco smoke will pass to the child through the breast milk. Smoking cessation should be encouraged for all pregnant, breastfeeding and postpartum women.

For more information on the risks of smoking during pregnancy, visit [Motherisk](#).

### **Third-hand smoke**

[Third-hand smoke](#) is the toxic tobacco smoke chemicals that are left even after the smoker has put out the cigarette, cigar or pipe. It gets trapped in hair, skin, fabric, carpet, furniture and toys hours or even days after a cigarette is put out. It builds up over time long after the smoke can no longer be seen or smelled. A room or car where people usually smoke (even if they are smoking at the time) holds third-hand smoke toxic chemicals.

Third-hand smoke gets into household dust, which can be swallowed, especially by babies when they put their hands in their mouths. [Babies](#) can take in 20 times more third-hand smoke than adults.

### **Tips to protect from third-hand smoke**

Opening a window, running a fan or air purifier or smoking near a chimney will not get rid of tobacco smoke.

- Keep your home and vehicle smoke-free
- If you smoke, work to quit or cut down. Contact Smokers' Helpline 1-877-513-5333 or visit [smokershelpline.ca](http://smokershelpline.ca)
- Smoke outdoors, away from entrances or windows
- Wash your hands after smoking
- Wear a jacket or layer or clothes than can be removed after smoking before going into your home
- Keep your family members away from any place where people usually smoke

For more information contact York Region *Health Connection* at 1-800-361-5653, TTY 1-866-252-9933 or visit [www.york.ca/health](http://www.york.ca/health).