

The Harmful Effects of Second-hand Smoke

What is second-hand smoke?

Second-hand smoke is a mix of smoke from the burning end of a lit cigarette, pipe or cigar plus smoke blown into the air by the person smoking.

How dangerous is second-hand smoke?

Second-hand smoke is poisonous and has over 4000 chemicals, including 50 that can cause cancer. Breathing second-hand smoke can be more dangerous than inhaling smoke through a cigarette. It has twice as much nicotine and tar as the smoke that people smoking inhale and five times more carbon monoxide, a deadly gas that starves your body of oxygen.

Other chemicals found in second-hand smoke include:

- Benzo[a]pyrene – found in coal tar, one of the most potent cancer-causing chemicals.
- Formaldehyde – used to preserve dead animals.
- Hydrogen cyanide – used in rat poison.
- Ammonia – used to clean floors and toilets.

Each year in Canada, breathing second-hand smoke causes more than 1000 deaths among people who do not smoke, mainly from lung cancer and heart disease, and keeps many more from leading healthy lives.

How does second-hand smoke harm your health?

Health experts do not know of a safe level of exposure to second-hand smoke.

People who do not smoke, and who are exposed to the toxic chemicals in second-hand smoke on a regular basis, can suffer serious and life-threatening health problems.

In the long term, people exposed to second-hand smoke have a greater risk of suffering from lung cancer, nasal sinus cancer, heart disease, stroke, and breathing problems, including increased coughing, wheezing, pneumonia, bronchitis, and asthma.

People who live with someone who smokes and are exposed to tobacco smoke on a regular basis have a 30 per cent increased risk of developing lung cancer and heart disease.

People who do not smoke will suffer from the effects of breathing second-hand smoke right away. Even as little as 8 to 20 minutes can cause physical reactions linked to heart disease and stroke, such as increased heart rate, less oxygen to the heart, and constricted blood vessels that increases blood pressure and makes the heart work harder.

Pregnant women exposed to second-hand smoke can have a greater risk of miscarriages and babies with low birth weight.

How does second-hand smoke harm infants and children?

Infants and children are exposed to second-hand smoke in one out of five BC homes every day. These children are at higher risk of getting sick because their lungs are still developing and are more easily damaged by second-hand smoke. Infants also inhale more of the smoke because they breathe faster than adults.

Second-hand smoke is harmful to infants and children in the following ways:

- Infants who breathe second-hand smoke have a greater chance of dying from Sudden Infant Death Syndrome (SIDS), also known as crib death. More than three times as many infants die from second-hand smoke-related

SIDS as from child abuse or homicide.
For more information, see BC HealthFile [#46 Sudden Infant Death Syndrome](#).

- Children who are exposed to second-hand smoke have double the risk of getting bronchitis and pneumonia. They also get more ear infections and suffer more from chronic coughing, wheezing and breathlessness.
- Second-hand smoke can affect children's behaviour and their ability to understand and reason. Studies have shown that children who are regularly exposed to second-hand smoke score lower on tests in reading, math, logic and reasoning skills.

Does second-hand smoke harm children with asthma?

Asthma is a chronic lung condition that causes problems with breathing. An asthma attack can involve wheezing, coughing, tightness, pressure or pain in the chest, and shortness of breath. In rare cases, asthma can be fatal.

- For children with asthma, exposure to even small amounts of second-hand smoke can trigger an asthma attack.
- Breathing second-hand smoke can increase the number of asthma attacks and can make the attacks worse in children with asthma.
- Exposing children with asthma to second-hand smoke in the home increases the number of emergency room visits and hospital stays.
- Exposure to second-hand smoke can cause children without asthma to develop it.

What can you do about second-hand smoke?

To protect your family from second-hand smoke, here are some things to consider:

- Make your home smoke-free. Remember, the smoke from one cigarette can stay in a room for hours, even if the window is open. Air purifiers and ventilation systems might remove some of the smoke, but cannot remove all the toxic chemicals.

- Do not allow smoking in your car. As most cars are airtight, the cigarette smoke has no place to escape. Opening a window can change the airflow and cause the smoke to be blown directly back at the people in the car.
- Talk to your family and friends about the dangers of second-hand smoke and encourage them to create smoke-free homes and cars.
- Do not let family, friends and babysitters smoke around your baby.
- Ask your family and friends to respect your smoke-free environment.

For more information:

For more information on second-hand smoke visit the following Web sites:

www.tobaccofacts.org
www.hc-sc.gc.ca
www.cctc.ca
www.smoke-free.ca
www.cleanaircoalitionbc.com

If you are thinking of quitting, call QuitNow toll-free in BC at 1-877-455-2233 or visit www.quitnow.ca.

For more BC HealthFile topics visit www.bchealthguide.org/healthfiles/index.stm, or visit your local public health unit.

Call the BC NurseLine to speak to a registered nurse, available 24-hours every day:

- In Greater Vancouver, call 604-215-4700
- In BC, call toll-free 1-866-215-4700
- Deaf and hearing-impaired, call 1-866-889-4700
- Pharmacist available 5pm to 9am every day
- Translation services in over 130 languages upon request.

Visit BC HealthGuide OnLine – a world of health information you can trust at www.bchealthguide.org