

The harmful effects of second-hand tobacco smoke and vapour

What is second-hand tobacco smoke or vapour?

Second-hand tobacco smoke or vapour is a mix of smoke or vapour released by burning or heating tobacco or vaping liquid. It's produced when using combustible tobacco products and electronic vaping devices. These include electronic or commercial cigarettes, hookahs and cigars. Second-hand smoke or vapour also includes the smoke or vapour exhaled by the person smoking or vaping. This smoke or vapour is harmful to the health of both the person who smokes or vapes, and those who are nearby, especially children. There are ways to reduce the risks, such as by making your home smoke-free.

How harmful is second-hand tobacco smoke?

Second-hand tobacco smoke is poisonous. It has over 7,000 chemicals, hundreds of which are toxic and at least 70 that can cause cancer.

There is no risk-free level of exposure to second-hand smoke or vapour.

How does second-hand smoke harm your health?

Regular exposure to second-hand smoke can cause harm. The risk and severity of the harm depends on the length of exposure and amount of smoke you are exposed to.

For some people, even low levels of exposure can cause physical reactions. These reactions include increased heart rate, less oxygen to the heart and constricted blood vessels that increase blood pressure and make the heart work harder.

In the long term, people exposed to second-hand smoke have a greater risk of suffering from:

- Breathing problems, such as increased coughing, wheezing, pneumonia and asthma
- Heart disease

- Stroke
- Nasal sinus cancer
- Lung cancer
- Emphysema

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

How does second-hand smoke harm babies and children?

Children are at higher risk of getting sick from second-hand smoke because their lungs and brains are still developing.

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

- Babies who breathe second-hand smoke have a greater chance of dying from Sudden Infant Death Syndrome (SIDS). For more information, please visit [HealthLinkBC File #46 Sleep related infant death](#)
- Children exposed to second-hand smoke have a greater risk of getting lung infections such as bronchitis and pneumonia. They also suffer more from chronic coughing, wheezing and breathing problems
- Second-hand smoke can cause fluid to build up in the middle ear which can cause an ear infection
- Children are more likely to get asthma when exposed to second-hand smoke. Second-hand smoke is harmful to children with existing chronic lung conditions and asthma because it makes the health conditions worse

What about vaping?

Research has found that second-hand vapour is not harmless. The vapour contains nicotine as well as potentially harmful substances, such as heavy metals and tobacco-specific nitrosamines.

Exposure to second-hand vapour may lead to more frequent asthma attacks among those with asthma and may have additional health harms that are not yet known.

Exposing children and youth to nicotine may impact brain development. Emerging research indicates that exposure to nicotine during pregnancy may impact fetal development.

How can I prevent exposure to second-hand smoke or vapour?

To protect your family from second-hand smoke and vapour, make your home and car vape and smoke-free. See that no one smokes or vapes near your child.

If you smoke or vape, make a plan to quit. If you are not ready to quit, ensure that you are not smoking or vaping near others, including near doorways, windows and vents. Dispose of cigarette butts and ashes in a designated container.

Encourage family and friends to create a smoke and vape-free environment. For tips on creating a smoke and vape-free home, please visit Health Canada at www.canada.ca/en/health-canada/services/smoking-tobacco/health-effects-smoking-second-hand-smoke/second-hand-smoke.html.

Air purifiers and ventilation systems cannot remove all the poisons, toxins, gases and particles found in second-hand smoke. This means that you will still be exposed to second-hand smoke.

Smoke from a cigarette can stay in a room for hours even with an open window. Many of the toxic chemicals remain in the air and the carpets, curtains, furniture and clothes. Residue from tobacco smoke, also known as third-hand smoke, is especially dangerous for children and for pets. Children tend to crawl around and put things in their mouths that may have third-hand smoke residue on them. The only way to protect them from third-hand smoke is to keep your home smoke and vape-free. Ask others to smoke or vape outside and then wash their hands, and if possible, change clothes.

Are there any laws to protect against second-hand smoking or vaping exposure?

It's against the law to smoke or vape:

- In a motor vehicle with anyone under the age of 16 years
- In the common area of apartment buildings, condominiums and transit shelters
- On school property at any time
- Inside or within 6 meters of a doorway, window or air intake of a public building or workplace. Work vehicles are considered workplaces and are to be smoke and vape-free

Your community may have additional rules that make parks, playgrounds and other public places smoke and vape-free or have smoke-free buffer zones that are bigger than 6 metres.

For more information

For more information, please visit:

- Health Canada – Health effects of smoking and second-hand smoke www.canada.ca/en/health-canada/services/smoking-tobacco/health-effects-smoking-second-hand-smoke.html
- Office of Housing and Construction Standards – Smoking in strata housing www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/operating-a-strata/bylaws-and-rules/non-smoking-bylaws
- Smoke Free Housing B.C. www.smokefreehousingbc.ca
- Tobacco and Vapour Products Control Act www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96451_01

Resources and supports to quit smoking and vaping

Getting help can make quitting easier. People who make a plan and combine nicotine replacement therapy with quit coaching generally are more successful in their quit attempts.

For more information, please visit [HealthLinkBC File #30c Quitting smoking](#).

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/more/resources/healthlink-bc-files or your local public health unit. For non-emergency health information and advice in B.C. visit www.HealthLinkBC.ca or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.