



## Outdoor Tobacco Smoke and Vapour

Commercial tobacco use is the leading cause of preventable death in Canada and has negative health effects for all ages. However, did you know, even short-term exposure to second-hand smoke (30 minutes or less) can cause health risks to non-smokers?

While all people are affected by physical exposure to outdoor tobacco smoke, certain groups are at greater risk. This includes the elderly, children, pregnant women, and individuals with heart and/ or lung disease. Furthermore, pedestrians and those passing through a building entrance way where tobacco users typically meet may also be exposed to outdoor tobacco smoke or vapour.

### What is second-hand smoke?

Second-hand smoke is smoke that comes directly from a burning tobacco product (cigarette, pipe or cigar) as well as the smoke exhaled by the person smoking. Over 4000 chemicals and toxins are found in second-hand smoke.

Exposure to second-hand smoke increases risk for:

- Breathing problems
- Cancer
- Heart disease
- Lung disease

### What is third-hand smoke?

Third-hand smoke, a term first introduced in 2009, is the residue that's left behind from second-hand smoke. Third-hand smoke contains more than 250 chemicals.

- Smoke doesn't just disappear. The residues from the outdoor smoke cling to items and are brought indoors on hands, hair and clothing. This smoke can be inhaled, ingested, or even absorbed through the skin long after the tobacco product has been extinguished.
- Exposure to third-hand smoke has been linked to liver, lung, and skin problems.

## What about vaping?

Currently, there are not enough studies to determine the health impacts of second and third-hand vapour. However, non-users can still be exposed to harmful chemicals found in vapour/aerosols.

## What is PM<sub>2.5</sub>?

Fine particulate matter (PM<sub>2.5</sub>) is an air pollutant that is a health concern when levels are high. PM<sub>2.5</sub> is made of tiny particles that reduce visibility and cause air to appear hazy when levels are elevated. Indoor PM<sub>2.5</sub> levels increase when there is exposure to lit tobacco products near the entrance ways of buildings, windows, and air intakes. Even when the tobacco product is used outdoors, research shows that the toxic air particles can find their way indoors from as far as 9 meters from the tobacco burning source.

## We now know that:

- Physical exposure to outdoor tobacco smoke can be hazardous.
- Third-hand smoke, carried in on hands, hair and clothing from smoking outdoors, can contaminate indoor environments.
- The long-term risks associated with second and third-hand vapour are unknown.
- Outdoor smoke can drift indoors and continue to circulate and be an occupational hazard.

If you or someone you know is interested in quitting or decreasing their tobacco or vapour use, encourage them to talk to their primary care provider (such as a doctor or nurse practitioner). The following cessation resources can also be accessed:

- [QuitNow](#) offers free information, support, and counseling by trained professionals by phone, text, or email.
- [BC Smoking Cessation Program](#) everyone in BC can access 12 weeks of free nicotine replacement therapy (gum, patch, inhaler and lozenges) per calendar year through their local pharmacy. Women who are pregnant or lactating are advised to consult with their doctor or pharmacist.
- [First Nations Health Authority Benefits](#) program offers supplementary coverage for nicotine replacement therapy.

*In this resource, as in most public health messages, "tobacco use" refers to the use of commercial tobacco products like cigarettes and chewing tobacco as opposed to traditional uses of tobacco.*