

Frequently Asked Questions about Vaping

Vaping has quickly grown in popularity in Canada, especially vaping nicotine. Vape products, including different types of devices and vape juices, have rapidly evolved in recent years. Whether you smoke or vape, or even if you have never used commercial tobacco products, you may have questions about vaping.

This resource provides answers to some of the most frequently asked questions about e-cigarettes and vaping, including information on health effects and tips for reducing harm. The following information is based on the latest scientific evidence and feedback from international experts on vaping.

What is vaping?

Vaping refers to the use of electronic cigarettes, also known as e-cigarettes, vaping devices, vape pens or electronic nicotine delivery systems (ENDS). These are battery-powered devices that heat up a liquid solution (also called “e-liquid” or “vape juice”) to form an aerosol that can be breathed in, often containing nicotine, flavouring, and other chemicals. Vape pens can also be used to vape cannabis oils containing THC, CBD, and other cannabinoids. However, this FAQ focuses on nicotine vapes.

Is vaping safe?

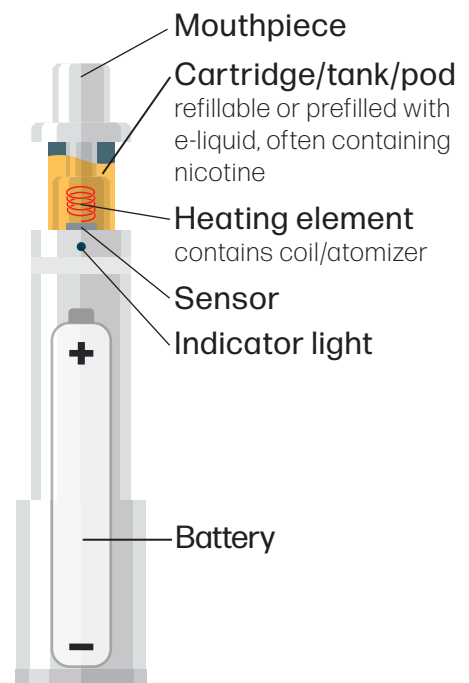
Vaping can have the following impacts on a person’s health:

- **Exposure to toxic and cancer-causing chemicals**, including formaldehyde, acetaldehyde, and heavy metals like nickel, tin, aluminum, and cadmium. These chemicals can have negative effects on different parts of the body.
- **Nicotine dependence**, which can lead to cravings and withdrawal symptoms
- **Nicotine poisoning**: Vaping nicotine too quickly and in high amounts can lead to nausea, dizziness, headaches, and other symptoms of nicotine poisoning. This is especially dangerous for people who do not have a tolerance to nicotine.

Some ingredients and flavour additives in vape juice may say they are considered food-safe or pharmaceutical grade, but the safety of heating and then breathing in these chemicals is unknown.

To learn more about how vaping can affect your health, read our resource [“How Does Vaping Affect Me?”](#) and speak with your healthcare provider.

What’s inside of a vape?



If you decide to vape or currently use e-cigarettes, read about [Vaping Harm Reduction Tips](#) to reduce risks to your health.

Learn more at intrepidlab.ca



What's in e-liquid? (or "vape juice")



- Chemical flavourings
- Nicotine
- Solvent
 - Propylene glycol (PG)
 - and/or
 - Vegetable glycerine (VG)



WARNING

Swallowing nicotine-containing vape juice or absorbing it through the skin or eyes can be toxic and lead to nicotine poisoning.

Children and pets are especially vulnerable. Securely store vape supplies away from their access.

Is vaping addictive?

Most vapes contain nicotine—the same addictive chemical found in cigarettes. The nicotine in these products has effects that make people want to use them over and over again. This continued use can lead to changes in the brain that result in a person feeling like they need nicotine in their body to feel 'normal'.

A person experiencing nicotine dependence can have:

- **cravings**, or urges to vape that are hard to ignore
- **withdrawal symptoms**, for example:
 - **irritability**
 - **headache**
 - **inability to fall or stay asleep easily**

Restricting the amount of nicotine in a vape and how often a person vapes can lower the risk of dependence. While switching to vaping from smoking can have health benefits, people who do not smoke should avoid using vape devices as it may lead to dependence.

Is vaping worse or better than smoking?

Vaping is significantly less harmful than smoking commercial tobacco products based on current evidence. Compared to cigarettes, a person is exposed to lower amounts of toxic and cancer-causing chemicals when they vape. This does not mean that vaping is completely safe as it can still cause harm to a person's health. People who do not smoke should avoid vaping.

If you use tobacco and are thinking about quitting, there are different options available to you for quit support.

*Take a look at **Pathways to a Smoke-Free Life** to help guide you on your next steps if you are unsure of where to start.*

Can vaping help me quit smoking?

Some of the best tools to help quit smoking include:

- **Cytisine**, a natural health product approved in Canada as a quit aid
- **Medication** (bupropion and varenicline)
- **Nicotine replacement therapy**, such as nicotine patches, gum, inhalers, or lozenges

These options are especially effective when combined with counselling. If you are thinking about quitting, ask your healthcare provider which option is right for you.

If these quit approaches don't work for you, switching completely to vaping can increase your chance of staying smoke-free. Compared to cigarettes, vaping exposes you to lower amounts of toxic and cancer-causing chemicals. This does not mean that vaping is completely safe as it can still cause harm to your health.

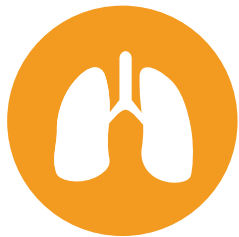
Can you smoke tobacco and vape at the same time?

Using both tobacco cigarettes and vape is referred to as 'dual use'. Dual use is discouraged since it exposes a person to more chemicals that increase the risk of harm.

If you are trying to quit smoking tobacco and unable to quit using all other methods, speak to your healthcare provider about switching completely to vaping.

Does vaping cause cancer?

It is too early for us to have enough evidence to know whether or not vaping causes cancer, because vapes have been widely available for a relatively short time. However, chemicals that have been shown to cause cancer (such as formaldehyde and acetaldehyde) have been identified in vape juice and vape aerosols. Other toxic chemicals, including metals like cadmium, lead, nickel, and chromium, are also found in e-cigarette aerosols.



Respiratory Health

Is vaping bad for your lungs?

Vaping can irritate the lungs and lead to symptoms like coughing and throat irritation. Vaping can worsen symptoms for people with respiratory conditions like asthma and chronic obstructive pulmonary disease (COPD), but far less than continuing to smoke.

Does vaping cause "popcorn lung"?

No. Popcorn lung (bronchiolitis obliterans) is an illness linked to exposure to diacetyl, a chemical used for flavouring. Some harmful ingredients in earlier vape juice products like diacetyl, are prohibited in Canada and no longer used. According to Health Canada, there have not been any confirmed cases of popcorn lung in Canada as a result of vaping.

Does vaping cause VALI or EVALI?

In 2019, several cases of Vaping-Associated Lung Illness (VALI) were reported in Canada. This was also referred to as E-cigarette or Vaping Use Associated Lung Injury (EVALI) in the United States. EVALI was largely associated with vitamin E acetate, an additive in some cannabis (i.e., THC, CBD) e-liquids. Vitamin E acetate is not found in non-cannabis vape juice.

Can I vape if I have asthma, COPD, or another respiratory condition?

Vaping can irritate the lungs and worsen symptoms of asthma, COPD, or other respiratory conditions, especially for adolescents and people who have never smoked. Vaping has also been shown to irritate the throat and mouth, along with other side effects such as cough.

Do you smoke and have a respiratory condition, but have tried quitting using all other scientifically-proven methods? Talk to your healthcare provider about potentially switching completely to e-cigarettes. This may improve your symptoms. Know your triggers and have strategies in place to prevent you from going back to smoking.



Cardiovascular Health

Can I vape if I have a cardiovascular condition or have had a heart attack(s) in the past?

Avoid vaping if you don't smoke, because this will prevent you from breathing harmful chemicals that can hurt your heart health. Vaping can impact arteries and blood vessels, and cause increases in blood pressure and heart rate similar to cigarette smoking.

Do you smoke and currently live with heart disease, but have been unable to quit using all other scientifically-proven methods? Talk to your healthcare provider before using vaping as a quit aid to stop smoking.



Oral and Dental Health

Is vaping bad for your teeth?

Currently, there is not enough strong evidence on the overall effects of vaping on dental health. Some evidence suggests that vaping may lead to gum disease. Vaping can lead to dryness in the lining of the mouth and nose.



Fetal Health

Can I vape if I'm pregnant?

You should avoid vaping if you are pregnant. Any nicotine use can increase the risk of harm to the developing fetus. Compared to using combustible tobacco (e.g., cigarettes), vapes can reduce the overall harms of exposure during pregnancy.

If you are pregnant or planning to get pregnant, talk to your healthcare provider if you smoke and/or vape to learn more about your options to quit.

Can I vape if I'm breastfeeding/chestfeeding?

Avoid vaping while breastfeeding/chestfeeding. Nicotine and other harmful chemicals can be passed to an infant through lactation. If you are breastfeeding/chestfeeding, talk to your healthcare provider if you smoke and/or vape to learn more about your options to quit.

A few ways to reduce harm:

- Do not smoke or vape immediately before breastfeeding/chestfeeding.
- Keep the time between smoking or vaping and breastfeeding/chestfeeding as long as possible to lower the concentration of nicotine in breast/chest milk.
- If a person vapes or smokes, they should do so outside or in a separate room from an infant to prevent exposing the infant to harmful chemicals.
- If you vape before breastfeeding/chestfeeding, remember to wash your hands thoroughly with water and change your clothes. This can prevent nicotine from being absorbed through the infant's skin.