



Let's
Talk
About...

Electronic Cigarettes (e-cigarettes)

What are electronic cigarettes?

Electronic cigarettes, also known as e-cigarettes, are battery-operated devices that have cartridges with liquid chemicals in them.

Heat from a battery powered atomizer turns the chemicals into a vapour that is inhaled by the user (called vaping). E-cigarettes look like regular cigarettes. There are other electronic smoking products that look like cigars and pipes.

Some e-cigarettes are reusable. The cartridges of reusable e-cigarettes can be replaced or re-filled with liquid (sold separately). The bottled liquid is often called e-liquid. Reusable e-cigarette kits include a battery charger. You can also buy disposable e-cigarettes.

What is in e-cigarette liquid?

There are no standards or labelling requirements for e-cigarettes. This makes it hard to know exactly what is in the liquid. Common contents include a mix of water and propylene glycol, a man-made product used in antifreeze and theatre fog. Many e-cigarettes also have chemicals in them that give the vapour a flavour.

Tests of some of the products labelled as "nicotine-free" have found nicotine in them.

Are they safe?

Although e-cigarettes are promoted as being safe, they haven't been tested for safety. There are no quality controls for making e-cigarettes.

Because chemicals in the cartridges vary, it's hard to know what e-cigarette users and people nearby are breathing in. Promotional materials for e-cigarettes describe the vapour as water vapour. However, the U.S. Food and Drug Administration found cancer-causing chemicals in some of the cartridges.

Propylene glycol is one of the common ingredients in e-cigarette cartridges. Propylene glycol is used as a food preservative and as antifreeze. It's not known if vapourized propylene glycol or other chemicals in the cartridges are safe to inhale.

Given that e-cigarettes don't seem to create the 7,000 chemicals (69 of which are known to cause cancer) found in cigarette smoke, they are likely safer than smoking a regular cigarette; however, that doesn't mean they are safe to use.

In one of the few studies done on the use of e-cigarettes, researchers found signs of the airways becoming narrow and inflamed after using the e-cigarette for only 5 minutes.

A group that supports using e-cigarettes did a study that suggests that the chemicals in e-cigarettes have little risk to your health. Research experts say there are faults with the study. To learn more about the poor standards used in the study, go to www.tobacco.ucsf.edu/new-e-cig-risk-assessment-uses-wrong-standard.



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Health Canada advises not to use e-cigarettes because they haven't been tested and may be harmful. Health Canada also warns that e-cigarettes cause nicotine poisoning and addiction. Health Canada reminds people to keep the products away from children to prevent nicotine poisoning and choking.

Are they legal?

E-cigarettes and e-liquids that contain nicotine or that are promoted with a therapeutic health claim (for example, that they help people quit smoking) are regulated health products which require Health Canada authorization before they can legally be sold in Canada. To date, no products have received authorization.

Please call Health Canada toll-free at 1-800-267-9675 if you would like more information about the regulation of e-cigarettes and e-liquids.

Can they be smoked anywhere, anytime?

There is a growing trend to ban smoking e-cigarettes indoors. Many health organizations support a ban on the sale of e-cigarettes until more research on the health effects is done.

E-cigarettes may not be used indoors at Alberta Health Services (AHS) sites until there is more information about their safety. E-cigarettes may be used outdoors on AHS property only at the risk of the user.

Do e-cigarettes help people quit smoking?

There is no evidence that using e-cigarettes help people quit smoking. Health Canada, the U.S. Food and Drug Administration, and the World Health Organization don't support e-cigarettes as stop-smoking products.

Health Canada has approved stop-smoking medicine, including over-the-counter nicotine patches, gum, lozenges, and the inhaler. Prescription medicine is also available. These products have been proven to be safe and to help tobacco users reduce or quit.

Alberta Health Services *AlbertaQuits.ca* gives support and information for people interested in quitting smoking. Call or text 1-866-710-7848 (QUIT) or visit www.albertaquits.ca.

More information on e-cigarettes, including the sources of the information in this document, can be found at www.albertaquits.ca.

For more information, please contact Alberta Health Services Tobacco Reduction Program at tru@albertahealthservices.ca or phone 780-422-1350 (Edmonton).