Substances At A Glance: Vaping & E-Cigarettes

Vaping products do not contain tobacco. However, nicotine used in vaping liquids is often sourced and extracted from tobacco plants.¹





What is vaping? Vaping is the act of inhaling the aerosol, or 'vape' from an e-cigarette or similar vaping device. While the output of the device may look like smoke, it is actually the vapor created by heating an oil or liquid. E-liquids in vaping products are most often made of propylene glycol or vegetable glycerin-based liquid with chemical flavorings. E-liquids may also contain nicotine and cannabis extracts like cannabis oils.



Vaping among youth: In Canada, 15.5% of youth in grades 7-12 report past 30-day use of e-cigarettes.² This rate is slightly less than post-secondary age students who report past 30-day use of vapes and e-cigarettes (17.5%).³



Why do youth vape? Reasons youth have cited for vaping include curiosity, to fit in, stress relief and enjoying the flavors of vape products. Some young people vape as an alternative to smoking cigarettes. Some young people report vaping as a way to quit smoking, however, vaping can also become addictive due to the high levels of nicotine.



Vaping and the law: Like smoking, vaping is legal for Canadians of differing ages based on the province where they live. However, while tobacco products cannot be flavored, vape products in several provinces are allowed to be flavored with a multitude of sweeteners and sugars, which makes them more attractive to youth and young adults. The laws surrounding vape flavorings are currently under review in Canada and may be subject to change.



Cannabis & Vaping: Vape products can also be used to heat and inhale either dry leaf or e-liquid cannabis products. Cannabis e-liquids are far more potent (with THC levels of up to 90%) than dried leaf products. Vaping cannabis e-liquids can increase the risk of overconsumption, cannabis poisoning, dependence, and other unwanted effects including hallucinations, heart palpitations, vomiting or psychotic episodes.⁴





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One third of Canadians report not knowing whether vaping is more or less harmful than cigarette use.¹





Short and long term effects of vaping: Vaping e-liquids may cause a person to feel more relaxed. Nicotine, an active ingredient in most vape cartridges, can cause feelings of pleasure and stimulation, contributing to its addictive quality. Vaping can also cause dizziness, sore throat, dry cough and nausea.



What are the risks of vaping? Vaping during teenage years can impair learning, memory and concentration. It can also cause or worsen symptoms of anxiety disorders and depression. Vaping nicotine products before age 25 increases the risk of addiction. E-liquids can include heavy metals, carcinogens (cancer-causing agents), volatile organic compounds and flavoring additives that can damage lung tissues. Other long-term health risks of vaping are unknown because vape products have only been available for a short time compared to cigarettes.



How can someone reduce the risks of vaping? Vape products were intended to help adults quit smoking, so people who vape should try to avoid the use of cigarettes and other tobacco products completely. If you are trying to quit smoking, speak with your doctor about additional strategies. Teens, young adults, pregnant or breastfeeding women should not vape. Since research about effects of vaping continues to evolve, it is also important to stay educated about possible risks of vaping.



How can I talk with my kids about vaping? Just like talking about smoking, conversations about vaping are very important to have with your pre-teen or teen; the earlier the better. You are in the best position to help them understand health consequences of vaping. By actively listening to what your teen is saying and asking open-ended questions, you can help to keep the dialogue going.



Do vape products cause people to quit or start smoking cigarettes? Vape products were initially marketed as a stop smoking aid. In 2021, 58% of adults over age 25 said they vape as a way to quit smoking. However, 61% of teens and 24% of young adults who vape have never tried tobacco in their life. Research even suggests that youth vaping could lead to cigarette use. Two thirds of teens and one third of young adults who smoke cigarettes report having vaped first.⁶

Reference List

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