

Vapour Products (Electronic Cigarettes)

What are vapour products?

- Vapour products (also known as e-cigarettes, e-cigs, vapes, vaporizers or mods) are electronic devices that are designed to heat a liquid solution and produce an aerosol when activated.
- They come in many colours, shapes and sizes; some are small and resemble everyday items like USB drives and pens, while others are much larger.
- Vapour products are made up a mouthpiece, a tank or cartridge that holds the vaping liquid, a heating element, and a battery. Depending on the model, a user can fill their own cartridge with vaping liquid (e-juice) or buy pre-filled, sealed cartridges or pods.
- The vaping liquid typically contains a variety of chemicals including a carrier solvent (usually propylene glycol and/or vegetable glycerin), chemical flavourings, and nicotine. Some devices do not contain nicotine, however, most do; the nicotine content varies from device to device.
- Some of the newer generations of vapour products use nicotine salts that deliver very high concentrations of nicotine to the user.
- Vaping companies are being bought by tobacco companies. Vapour products are being promoted to young people using sleek packaging, youth-friendly flavours, and savvy marketing strategies (broadcast media, online advertising, incentive-based promotion at retail, experiential and digital marketing, etc.).

What is vaping?

- Vaping is the act of inhaling and exhaling an aerosol that is produced by a vapour product.
- When a vapour product is activated, the heating element begins heating the vaping liquid stored in the cartridge. As the vaping liquid is heated, it becomes vapourized and then condenses into an aerosol. The aerosol is then inhaled through the mouth and into the lungs where it is absorbed into the bloodstream. The remaining aerosol is exhaled.
- The aerosol produced by a vaping device is not just harmless water vapour! It contains toxic substances such as formaldehyde and benzene, heavy metals such as nickel and lead, fine particulate matter, and nicotine.

Vapour products should never be used by youth, young adults, pregnant women, or adults who do not currently use tobacco products.

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What are the potential health risks of using vapour products?

- Vapour products and the aerosol they produce are not harmless, and the long-term health risk are unknown.
- Vapour products expose users to harmful toxins, including cancer-causing chemicals, diacetyl, volatile organic compounds, heavy metals, and ultrafine particles that can be inhaled deeply into the lungs. These substances have been linked to heart and lung disease.
- Nicotine alters brain development in youth and young adults. Exposure to nicotine before the age of 25 can “rewire” the developing brain and cause: nicotine dependence and addiction, mood disorders (such as anxiety and depression), impulse control issues, as well as changes in attention and learning.
- Nicotine is a highly addictive substance. Compared to the adult brain, a teen brain finds nicotine more rewarding and will progress faster to nicotine dependence and addiction.
- Young people who vape products with nicotine have an increased risk of ever smoking tobacco cigarettes.
- Vapour products can explode, causing serious injuries and burns. The risk of these types of injuries is significantly increased when batteries are of poor quality, stored improperly, or modified by users.
- Acute nicotine exposure is another concern; children and adults could be poisoned by unintentionally swallowing, breathing, or absorbing e-liquid through their skin or eyes.
- Vapour products are not an approved quit smoking aid in Canada. Currently, there is mixed evidence about whether e-cigarettes are effective as a cessation tool to help people break their addiction to nicotine. In fact, vapour products may make it harder to quit. Those who want to quit smoking should use methods approved by Health Canada, such as nicotine replacement therapy (NRT) or medications like Champix or Zyban. If you are a smoker using a vaping product to quit, speak to your health care provider to discuss other cessation options.

Those who vape are advised to monitor for symptoms of lung illness (e.g. cough, shortness of breath, and chest pain) and to seek medical attention right away if they have concerns about their health.

For more information:

- Contact the Middlesex-London Health Unit Smoke-Free Information Line at:
 - 519-663-5317 ext. 2673 or smokefreeinfo@mlhu.on.ca
- www.healthunit.com/e-cigarettes

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