

VAPING AND YOUTH

Information about health risks, laws and marketing influences.



What is the situation in our region?

More young people are trying and using e-cigarettes compared to tobacco cigarettes.

In South West Ontario, 16% of youth in grades 9-12 have used an e-cigarette in the past year compared to 14% for tobacco cigarettes.

It can be reassuring for youth to know that most youth are not vaping - in our South West region 84% of youth are not using any type of e-cigarette.

For more information, visit the [Ontario Student Drug Use and Health Survey](#) online.

What is an E-Cigarette or Vaping?

An e-cigarette is a battery-operated device that heats up a liquid chemical ("e-juice", "e-liquids") into an aerosol that is then inhaled.

This is often called vaping. E-liquids do not contain tobacco. However, most of these products contain substantial amounts of nicotine which is the addictive substance also found in cigarettes. Other chemicals and metals are found in e-liquids. Some of these chemicals are the same ones found in tobacco cigarettes.

It's just water vapour right?

False! E-cigarettes may be less harmful than tobacco cigarettes, but that does not make them safe!

A Puff of Truth

A recent study found that the teens tested who had been vaping had toxic organic compounds in their bodies.

Youth who were vaping had up to 3 times as many chemical organic compounds in their bodies as non-vaping youth.

Those who smoked and vaped (dual user) had up to 3 times as many than those who were only vaping.

What are the rules and laws at school?

School Boards in our region have policies that do not allow vaping in or on school property. This includes on school buses.

The *Smoke-Free Ontario Act* also makes it illegal to use tobacco products, vaping products or cannabis on or within 20 metres of school property. It is also illegal to share or supply someone under 19 with vaping products. Tip: Don't share vapes or e-juice!

(If you don't smoke, don't vape.)

Types of E-cigarettes

Common terms for e-cigarettes include vapes, tanks, mods, pods, e-hookah, e-pipe, vape pen, and more.

One of the most common types used by youth include mods or tanks. These units can be refilled when empty. They may allow the user to turn the heat up or down. Turning the heat up creates larger vapour clouds, but is known to also increase the amount of nicotine and chemicals inhaled. There are also products specifically on the market to vape cannabis.



Vape/Mod



Vape pen

Juul



NOTE: JUUL is now available in Canada.

Juul is a product which looks very similar to a USB stick and can be very small.

Each pod contains as much nicotine as a pack of cigarettes.. This product has captured half of the e-cigarette market in the U.S and the FDA has sounded the alarm about the numbers of youth and young adults using JUUL.

What is in E-liquids?

Most e-liquids include a mixture of:

- propylene glycol
- vegetable glycerin
- nicotine
- flavour ingredients

It is not just harmless water vapour, but an aerosol. Many vaping websites state that propylene glycol and vegetable glycerin have been considered safe food additives by the FDA. This is true, but there is no evidence to show that they are safe when heated and inhaled deeply into the lungs.

E-juice does not contain tobacco. However, most of these products contain nicotine which is the addictive substance also found in cigarettes. Even without nicotine, flavours affect the body causing cell damage in the mouth and lungs.

Some products are labeled as having zero nicotine, but many are not correctly labelled and do in fact contain some nicotine.

Even when labelled as containing nicotine, some e-liquids have been found to have a greater amount of nicotine than what is listed on the label.

E-liquids also contain chemicals and metals. Some of these chemicals and metals are the same ones found in tobacco cigarettes. When the ingredients in e-liquids are heated, they break apart into toxic organic compounds such as acrylonitrile, acrolein, propylene oxide, acrylamide, and crotonaldehyde.

Metals such as nickel, tin, and lead have also been found. This is likely because the e-liquid comes into contact with the metal coil used to heat the liquid into an aerosol.

It is also possible to add other substances to e-juice such as cannabis oil or "rosin".

(Safer does not mean safe.)



Health Concerns for Youth

Addiction

Youth who do not use tobacco are beginning to experiment with vaping believing that it is safer. Nicotine is highly addictive, especially for the growing teen brain. It may lead to difficulty concentrating, problems with impulse control and there is evidence that nicotine addiction can lead to use of other drugs.

<https://e-cigarettes.surgeongeneral.gov/>

Transition to Tobacco Cigarettes

The evidence is showing that vaping increases the risk of youth and young adults of ever using tobacco products. Also, there is moderate evidence showing that e-cigarette use increases the use and frequency of combustible tobacco products like cigarettes among youth and youth adults.

Cough/Wheeze

There is moderate evidence that vaping causes increased coughing and wheezing in youth. It also worsens asthma symptoms.

Dry Nose and Throat Irritation

One of the main ingredients in e-juice is called propylene glycol. It is a chemical that absorbs moisture. It can cause the sensitive lining of the nose to dry out. Bloody noses and throat irritation can also be a problem.

Dental Problems

With vapour drying out the mouth, it can affect how much saliva is produced. Saliva helps wash away bacteria in the mouth. Over time, people who vape may be at increased risk for dental problems. This includes periodontal disease or gum disease, which is an infection of the tissues that hold your teeth in place. <https://www.cda-adc.ca/en/services/essentials/2015/issue4/files/assets/basic-html/page34.html>

Germs and Infectious Diseases

Sharing a vape? Then your likely swapping some spit and maybe other nasty stuff! Cold and flu viruses, mono and strep throat are all passed through saliva.

Nicotine Poisoning

Nicotine is a toxic substance and too much can lead to serious health issues and even death. Nicotine poisoning is a risk if the e-juice is ingested, touches skin or if too much is inhaled.

Small children are most at risk for nicotine poisoning. Just like other toxic substances, all e-juice and vaping products should be out of reach and locked up as the bright packaging and fruity flavours get the attention of small children. Know the signs of nicotine poisoning and get medical help right away if it is suspected.

Long-term Health Effects

Many of the toxic chemicals found in e-cigarettes have been linked to various types of cancer. The long-term health effects of vaping may not be known for many years. Those vaping may be putting the health of their heart, lungs and other organs at risk. Vaping e-liquids

Allergic Reactions

The ingredients in e-juice can cause allergic reactions for some people. Signs or symptoms could be similar to other allergic reactions such as difficulty breathing, hives, and feeling unwell.

Device Safety Concerns:

There have been reports of explosions related to batteries in e-cigarettes and issues with charging cords.

For more about the health risks of vaping, visit

<https://e-cigarettes.surgeongeneral.gov/default.htm>

This tip sheet is a helpful resource to help discuss vaping with youth: <http://bit.ly/2DEDZCc>

Cloud Chasing: Vaping tricks and competitions have become popular in recent years. Many vapers post videos of their tricks on youtube. Many of these tricks involve blowing the vapour out of the nose, which can dry out the nasal cavity. Mods or Tank

systems are used so the heat can be turned up to achieve larger vapour clouds. This may increase the health risk to the user. Some e-cigarette businesses sponsor vapers to attend competitions adding to the allure of this activity.

Promotion of Vaping

Vaping is now a multi-billion dollar industry and all major tobacco companies have vaping brands. Slick advertising, fruity flavours and messages that convey fun and safe are contributing to the growth of use among youth.

The advertising for e-cigarettes is very similar to the messages and themes used by the Tobacco Industry to make smoking seem normal or to make some products seem less harmful.

Quitting Nicotine

E-cigarettes are not a proven quit aid. Also, it is against the law to purchase e-cigarettes or vapes for minors.

While some people may find success by vaping to quit, research is showing that e-cigarettes may not be that helpful for the majority of people. Many people end up smoking cigarettes and using e-cigarettes (also known as dual users).

Quitting Supports

A healthcare provider can help guide your family—some offer free quit programs and support as well as free Nicotine Replacement Therapy (nicotine patches, gum, and inhalers) for youth who are smoking cigarettes. These products do not involve heating nicotine and can support someone in their plan to cut down and quit. Youth who are ready to quit vaping should set a goal and make a plan to cut down and quit.

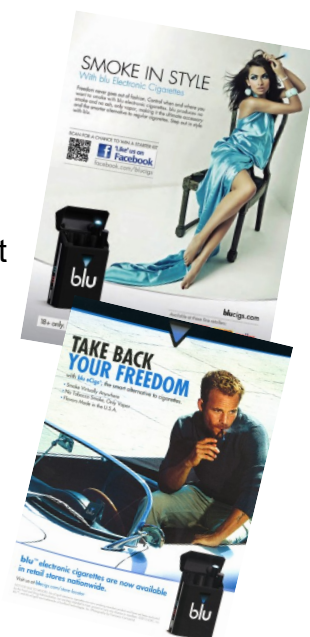
CHOICES Drug and Alcohol Counselling Program in Grey Bruce

The CHOICES program is for youth under 20 and their families. Counsellors can meet students at school or in their office. Call them at 519-371-5487 or 1-800-265-3133

For more information about resources for quitting tobacco or vaping in the Grey Bruce, visit www.publichealthgreybruce.on.ca/Your-Health/Smoke-Free-Living

www.smokershelpline.ca

Youth are also allured into becoming reviewers of products in video reviews on platforms like youtube. These unofficial spokespeople do not always state that they have received money to review and even endorse a product. This increases the promotion of vaping among young people and it makes it appear more popular than it really is.



Finding Credible Information on the Internet

The world wide web is a major source of information for young people when it comes to vaping, but much of it is not helpful or even credible.

Websites such as vaping forums, reddit posts, how to guides and social media, including youtube vaping video reviews contribute to various myths about the safety of e-cigarettes. They are also promoting a vaping culture to youth and young adults. It is a good idea to talk about and learn more about how to find credible information about health issues.

Learn about how to find good and credible information on the internet.

Check out this tip sheet from Media Smarts: <http://bit.ly/2DQFZlx> or visit their main site at www.mediasmarts.ca

www.publichealthgreybruce.on.ca
519-376-9420 | 1-800-263-3456

