# VAPING PRODUCTS

## INFORMATION FOR FAMILIES



The use of vaping products by youth is becoming increasingly common. There are some misconceptions about the aerosol (vapour or cloud) produced and currently the long-term health effects are unknown. As caregivers, you can connect and discuss issues around vaping products with the child or youth in your life. The information provided in this resource is designed to help you start the conversation.



BREATHE the lung association

## VAPING PRODUCTS AND HOW THEY WORK

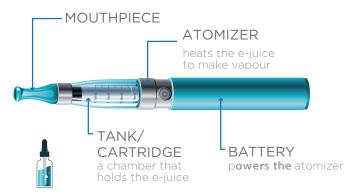
Vaping products are battery-powered devices that heat a liquid solution to create an aerosol.

Vaping products have many names such as: e-cigarettes, vapes, vape pens, mods (box or pod), tanks, e-hookahs and are also known by various brand names. These devices do not contain tobacco and do not involve burning. Most DO contain nicotine.

The act of inhaling and exhaling the aerosol produced by a vaping product is commonly called "vaping". When using popular brands (JUUL or Breeze), the term "Juuling" or "Breezing" is sometimes used.

#### VAPING PRODUCT COMPONENTS

- Mouthpiece
- Chamber (cartridge or tank or reservoir)
- Heating element (atomizer or cartomizer or clearomizer)
- Battery
- E-juice (vaping liquid or e-liquid)



E-JUICE usually contains nicotine and other chemicals

The e-juice typically contains a solution of propylene glycol (PG)\* and/or vegetable glycerin (VG)\*, flavourings, and varying amounts of nicotine (none to very high).

\*PG and VG are industry acronyms

## REASONS WHY YOUTH USE VAPING PRODUCTS

- Flavours are appealing (e.g. fruit, candy, mint)
- Trendy devices
- Their friends are vaping; it helps them fit in
- Curiosity and/or boredom
- They consider vaping to be harmless
- They like the "hit" from nicotine; it increases feelings of pleasure
- It makes them feel rebellious; some vape in places they are not allowed as it is easy to hide the vaping device
- To quit or cut down on smoking tobacco

### START A CONVERSATION WITH YOUR CHILD

Have honest conversations with your child. If you use tobacco or vaping products, this is an opportunity to discuss the risks, any regrets, difficulties and health effects you may have experienced.

Be patient and ready to listen when taking part in conversations with youth. Try to avoid criticism and encourage an open dialogue. Remember to keep the discussion going and do not expect to make an impact with just one conversation.

#### QUESTIONS YOU MAY BE ASKED

Following are some questions your child may ask about vaping products along with suggestions on how to respond.

#### "Why shouldn't I vape?"

Researchers have found that vaping products contain toxic and addictive ingredients that could harm your body. When people breathe in the vapour, they inhale tiny particles that get trapped in the lungs. Vaping e-juice that contains nicotine can be delivered to the brain and lead to nicotine addiction.

#### "Isn't e-juice just water and flavourings?"

E-juice typically contains chemicals as well as flavourings. These chemicals and flavourings may be safe for use in food, but the health effects of **inhaling** these chemicals are unknown.

Most e-juice on the market contains nicotine, which is highly addictive.

#### "What is the big deal with nicotine?"

Our brains continue to develop until approximately the age of 25. Nicotine use during this period can cause problems with concentration, learning and impulse control.

Once you start using nicotine, you can become addicted and physically dependent.

Over time, your body will want more nicotine to feel comfortable.

#### "Is vaping nicotine-free e-juice safe?"

Studies have found that many vaping products labelled "nicotine-free" still contain nicotine. Inhaling "nicotine-free" vapour is still a health concern.

## "Isn't the cloud produced when vaping just water vapour?"

Once e-juice is heated, a number of toxic chemicals are created. Many are cancercausing. These include:

Heavy metals: chromium, nickel and lead







- Carbonyls: formaldehyde, aldehyde
- Tobacco-specific nitrosamines
- Volatile organic compounds (VOCs):
   benzene, toluene, ethanol and alcohol
- Polycyclic aromatic hydrocarbons (PAHs): group of more than 100 chemicals (e.g. Benzo[a]pyrene)
- Tiny particles (particulate matter): mixture of all solid and liquid particles

If you are around people who vape, the cloud exhaled exposes you to chemicals that may not be safe to breathe.



## "Isn't vaping safer than smoking cigarettes?"

Vaping is less harmful than tobacco products such as cigarettes, but it is not harmless. There are still many

health concerns with vaping.



Short-term health effects are increased coughing and wheezin g, inflammation of the lungs and increased heart rate. The long-term health effects of vaping are currently not known.

Vaping products can explode and cause fires that may result in burns and injuries.

#### QUICK VAPING FACTS

- The vapour is not harmless
- Have high nicotine content very addictive
- Flavourings appeal to youth
- Can be easily hidden
- May look like a USB or a flash drive
- · Could recharge on a USB port
- Sometimes called "Juuling" or "Breezing"



Information credit: The Lung Association - British Columbia, Fraser Health and Vancouver Coastal Health