

LUNGS are for Life!

A vaping and smoking prevention program for students in Ontario elementary and secondary schools

Canadian Lung Association



With support from the Government of Ontario



Lungs are for Life! was developed by the Canadian Lung Association and funded by the Government of Ontario



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Introduction

Unit 1. How the lungs work

Activity 1.1 The respiratory system

Unit 2. Understanding vape products and cigarettes

Activity 2.1 What's in a vape? Activity 2.2 What are you exposed to when you smoke or vape?

Class discussion: What's in a vape?

Activity 3.3 Reducing the harms of vaping

Unit 3. How vaping and smoking hurt the body

Activity 3.1 Healthy lungs Activity 3.2 What do smoking and vaping do to your body?

Unit 4. How tough it can be to quit nicotine

Activity 4.1 Life goals Activity 4.2 Exploring the "why"

Unit 5. How to handle peer pressure

Activity 5.1 Reasons not to vape Activity 5.2 Escape the vape Class discussion: Escape the vape

Unit 6. Second-hand and third-hand smoke and vape emissions

Activity 6.1 Avoiding second-hand smoke

Unit 7. How the tobacco and vaping industries target young people

Activity 7.1 Deconstructing advertisements Activity 7.2 Where do you stand?

Unit 8. Nicotine and your mental health

Activity 8.1 What is stress? Activity 8.2 Identifying stress Activity 8.3 Mindful movement Activity 8.4 Guided visualization

Appendix: Additional resources

Canadian Lung Association B R E A T H E

Lungs are for life!

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Introduction

Thank you for your interest in Lungs are for Life!

Lungs are for Life! is a vaping and smoking prevention program for students in elementary and secondary schools, developed by the Canadian Lung Association and funded by the Government of Ontario Ministry of Education.

The aim of the program is to provide educators with an engaging, evidence-based resource to help students learn more about smoking and vaping so they can make healthy and informed decisions about whether or not to vape or smoke.

Why are we concerned?

Although youth smoking rates continue to decline (4.2% of 15-to-19-year-olds), the number of youth who vape is on the rise (13.6% of 15-to-19-year-olds). Plus many youth who smoke begin with vaping. Lungs are for Life! is just one part of a comprehensive effort to reduce nicotine use among youth in Canada.

Lungs are for Life! will inspire questions and discussion and help students learn that life is better when they are nicotine-free!

Questions? Comments? Concerns?

Contact us at info@lung.ca

Note that this program covers a broad range of topics related to smoking, vaping and health. It was developed for grades 5 through 10. Not all of the content will be appropriate for all grade levels. We believe that educators know their students best and can adapt these materials for use at different grade levels, if necessary.

The views expressed in Lungs are for Life! are the views of the Canadian Lung Association and do not necessarily reflect those of the Province.





Introduction

How this program is structured

Each of the eight sections include both INFORMATION and ACTIVITIES.

The INFORMATION pages are presented in a way that you can photocopy them to use as handouts.

The ACTIVITY materials are intended as a guide for educators. Each ACTIVITY includes the approximate amount of time it will take to complete. The activities range in length from 15 minutes to 30 minutes.

The **Appendix** includes quizzes that cover the material in the program, a template Quit Plan, additional information for educators, information on how specific sections and activities connect with the current curriculum expectations in the province of Ontario and a list of additional resources and sources of information that may be useful in the classroom or to grow your own knowledge of this subject.

A note about the difference between traditional tobacco and commercial tobacco

For many First Nations peoples, traditional tobacco is one of the four sacred medicines given to the people of Turtle Island from the Creator.

Traditional tobacco has many uses, including medicinal ones. Many First Nations people offer loose tobacco to Elders and Knowledge Keepers when seeking guidance or assistance. They burn or offer tobacco to the land to communicate with the Creator in prayer. They also offer tobacco back to the land in exchange for the medicinal plants they pick.

Traditional tobacco is sometimes also called sacred tobacco and is actually a different species of tobacco plant than what is used in cigarettes, and its uses are very different from commercial tobacco. Commercial tobacco means the store-bought packages of cigarettes or loose tobacco pouches.









Your lungs

Why do we need air? Because we could not survive without the oxygen in the air that we breathe.

You have two lungs, which together form one of the largest organs in your body. The lung on the left is a bit smaller than the lung on the right. Why? Because it has to leave a bit of room for your heart to fit into your chest. The lungs and heart are close to each other because they have to work together.

Your rib cage goes around your lungs and heart to protect them. Your ribs also move when you breathe in and out.

What do your lungs look like?

If you could see your lungs, they would look pink and rubbery. Inside they look a lot like sponges. Air comes in through your nose or mouth and goes down the trachea or windpipe, into two large tubes called the bronchi. One bronchus goes to the right lung and one goes to the left lung.

Each bronchus is like the trunk of a tree because it has what look like branches and twigs growing from it. The smallest twigs are called bronchioles. They are so tiny that they are like hairs.

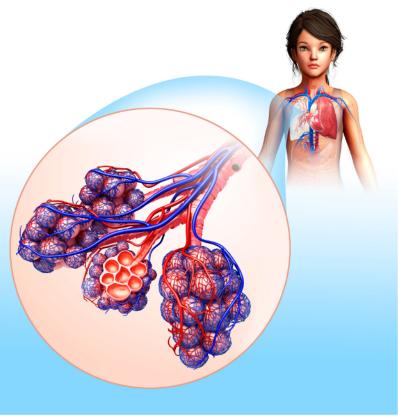
At the end of the bronchioles, there are little bunches of air sacs called alveoli. You would need a powerful microscope to see the alveoli. Each alveolus or air sac is covered in even tinier blood vessels called capillaries.

What happens when you breathe?

Below your lungs is the diaphragm. This is a big muscle that works with your lungs to get air into your body (inhale) and out (exhale). Despite how big your lungs are, they do not have muscles, so we need the diaphragm. The diaphragm makes the lungs move in and out.

Alveoli are tiny air sacs at the end of the bronchioles. They are covered in tiny blood vessels. This is where oxygen from the air enters your blood and carbon dioxide leaves your blood.





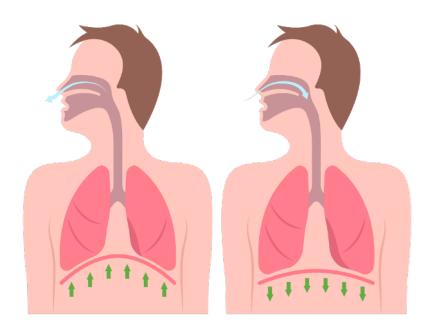
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Your diaphragm flattens out when you breathe in, your ribcage lifts up and air fills all the little air sacs. At that point, oxygen goes through the walls of the air sacs, into the capillaries, and into your bloodstream. The heart pumps that new oxygen to all parts of the body.

When you breathe out, the opposite happens. The diaphragm expands and pushes air out of the lungs.

Carbon dioxide is removed from the blood, and it is pushed out of the lungs and body through your nose and mouth.

Take a breath. Think about all the things that are happening in your body when you take just one breath!



Below your lungs is a large muscle called the diaphragm. When you breathe in, your diaphragm flattens out and your lungs expand. When you breathe out, the opposite happens: the diaphragm expands and pushes air out of the lungs.

Did you know?

- Lungs contain approximately 2,400 kilometres of airways. The lungs of three people contain enough airways to reach from one end of Canada to the other!
- There are 300 to 600 million alveoli in your lungs. If you stretched all of them out, they would be about the size of four and a half 18-wheelers parked next to each other!
- If stretched out, the total surface area of lungs would be about the same size as half a tennis court.

 $\begin{array}{c} \text{Canadian Lung Association} \\ \text{B} \ \text{R} \ \text{E} \ \text{A} \ \text{T} \ \text{H} \ \text{E} \end{array}$

How your body protects your lungs from dirt and dust

When you breathe in, the air goes in through your nose or mouth. The air you breathe in may have tiny particles of dust and dirt in it. On its way to your lungs, your body will clean the air to keep these particles from getting into your lungs. The mucus in your airway traps dust and dirt. Little hairs called cilia that line the inside of your nose and throat beat back and forth in waves to move the mucus like a conveyor belt up the airway so you can cough it up and out of your body.

Things you can do to keep your lungs healthy

- Don't vape or smoke
- Stay away from second-hand smoke and vape emissions
- Get plenty of exercise
- Eat nutritious food
- Stay away from chemicals that can irritate your lungs. Make sure doors and windows are open if you're using cleaners, especially ones that contain harsh chemicals. Limit your use of aerosols (spray cans), like hair spray or air fresheners.
- Stay away from fires, including camp fires. If there smoke in the air outside from nearby forest fires, don't spend a lot of time outside.





Activity 1.1



Materials

- flip-chart paper
- markers

The respiratory system

- 1. Pick one student. Have them stand against the poster board and with a marker, outline their body from waist up.
- 2. Draw in the brain, nose, mouth, windpipe, esophagus, lungs (including the main bronchi, smaller bronchioles, and alveoli, the diaphragm and ribs).
- 3. For the next five minutes, explain how we breathe. Include interesting factoids about lungs.





Vaping and smoking are similar in that they both involve a substance being heated up so that the "smoke" that results can be inhaled into the lungs.

Cigarettes

A cigarette contains dried and shredded leaves of the tobacco plant, along with many other chemical additives. When a cigarette is lit, the tobacco burns to create smoke.

Each cigarettes has more than 600 ingredients. When a cigarette burns, the heat can cause new chemicals to form. Cigarette smoke contains more than 5,000 different chemicals. One of these substances is tar. Particles of this sticky, brown substance are so small that they pass through the filter of the cigarette and into the lungs. Tar is what stains smokers' fingers and teeth. It also contains more than 40 different substances that are know to cause cancer in humans.

Vaping devices

Vaping devices (or "vapes") are sometimes called e-cigarettes, vapourizers, vape pens, mods, tanks, cigalikes, pods, e-hookahs or hookah pens.

A vape is an electronic device that uses a battery to heat up a liquid (e-liquid) that is in a tank or pod inside the device. When the liquid is heated up, it becomes an aerosol (a mixture of a gas and fine particles) that can be inhaled into the lungs. One of the things about vaping that makes it appealing for young people is that e-liquid comes in thousands of different flavours, including many fruit and candy flavours.

The basic parts of any vaping device are:

- the mouthpiece,
- the battery,
- the coil (the heating element) and
- the e-liquid tank or container.

Vaping devices come in a range of shapes, colours and sizes. Some have rechargeable batteries and refillable tanks, some come prefilled and pre-charged and are meant to be thrown away when empty. Some have larger batteries and tanks and are marketed to "advanced" vapers, and some are intended to be small so it's hard to see when they're being used.

Nicotine

Vaping products do not contain tobacco but most, but not all, vapes or e-liquid contains nicotine. Nicotine is the chemical that makes cigarettes and vaping so addictive. Nicotine occurs







naturally in the tobacco plant. Nicotine acts as a plant's defense system, helping keep insects and herbivores from eating its leaves. Nicotine was actually one of the first insecticides used in agriculture. Nicotine-based insecticides are banned in Canada because they are very harmful to bees and other insects that are important for the ecosystem.

The chemistry of vaping

Vegetable glycerin and propylene glycol are both ingredients in e-liquid. Propylene glycol is a synthetic (not found in nature) food additive. It is also (used as an antifreeze (but it is not to be confused with the antifreeze ethylene glycol, which is highly poisonous). Vegetable glycerin is made from plant oils. It is used in both cosmetics and food.

Both propylene glycol and vegetable glycerin are liquids that are described on vaping sites as "food safe". But beware! "Food safe" only applies when these liquids are added to food and ingested, not heated to high temperatures and inhaled into the lungs.

In addition to what's listed on the label, many new chemicals are produced when the e-liquid is heated. Some of these new compounds are known to cause cancer and other diseases in humans.

Vapour versus aerosol

One of the biggest myths about vaping is that it's not harmful because it's just water vapour and flavour. But the truth is, there is no actual "vapour" in vaping.

Just like with cigarettes, clever marketing and buzzwords can give the impression that vaping is not that big of a deal. The words "vaping" and "vapor" suggest that what's being inhaled when vaping is harmless water vapor. What vaping devices actually produce is an aerosol — a mixture of tiny liquid particles suspended in a gas.

When you vape, you're heating known and unknown chemicals to high temperatures to create an aerosol and inhaling that aerosol directly into the lungs.





There's nothing "green" about smoking or vaping

What else do smoking and vaping have in common? You probably know that smoking cigarettes is bad for you. You may even know that vaping is also very bad for your health. But you may not know that both cigarettes and vaping devices are also very bad for the environment.

Cigarette butts

Cigarette butts make up a big portion of the litter we see on the ground. In fact, every year in Canada, more than 8,000 tonnes are thrown on the ground (that's as much as 2,000 African elephants!). This is a problem because the filters are made out of a plastic material that can take years to break down. Research has also shown there are no health benefits of smoking cigarettes with filters compared to cigarettes without filters.

Vaping waste

When you throw a vaping device away, you're throwing out electronic waste, toxic waste and single-use plastic.

The plastic components of vaping devices will eventually break down (after hundreds of years) into microplastics, which can accumulate in and damage cells of living organisms. Disposable vaping devices create a lot of plastic waste every year. They cost less than refillable devices; this makes them especially popular with younger people. Some places, such as the United Kingdom, have banned the sale of disposable vapes.

Vaping devices use lithium batteries to create heat. Lithium is a non-renewable resource that is also used in batteries for electric cars or e-bikes. Lithium batteries can also be flammable, and discarded vapes have caused fires in garbage bins and at waste facilities.

Heavy metals in vaping devices, like nickel, cadmium, lead and mercury, are considered toxic waste. They can leech into water and soil.







When you throw a vaping device away, you're throwing out electronic waste, toxic waste and single-use plastic.



Activity 2.1



Materials

- flip-chart paper
- markers
- tape

What's in a vape?

- 1. Break up the class into groups of 5 and give each group 5 minutes to come up with the definition and examples of these three words: vapour, gas, and aerosol. This can be done as a class discussion instead for elementary students.
- 2. Have someone be the recorder for each group and have them put their definition and any examples on the chart paper
- 3. Ask the recorder to bring the chart paper to the front of the class to tape it to the wall so that everyone can review answers.
- 4. Have students present their definitions and examples.
- 5. Show the chart with definitions.
- 6. Next, ask students: What do you think vapes create: a vapour, a gas, or aerosol?
- 7. Based on the talking points below, discuss: Why does it matter that vapes create aerosols?
- 8. Listen to the students' answers. If time permits go to the CLASS DISCUSSION to continue the discussion.

DEFINITIONS

GAS: a form of matter that is neither liquid nor solid. A gas rapidly spreads out when it is warmed, and contracts when it is cooled. Oxygen, helium and carbon monoxide are examples of gases.

VAPOUR: a liquid or solid that has become a gas because of heat or a drop in pressure. Mist and clouds are examples of vapour.

AEROSOL: a mixture of liquid and/or solid particles suspended in a gas. Some examples of aerosol include spray paint, hairspray, and smoke from a cigarette.





Class discussion

What's in a vape?

The questions below are designed for you to initiate an essential conversation with your students.

It does not matter if you know the answer; you can research that together at a later time. What is important is that you are able to communicate with the students, to broaden their perspectives on this topic.

ASK:

- What do you know about the differences between the terms "vapour" and "aerosol?"
- What are your personal concerns regarding the safety of vapes, if any?
- What are some of the reasons that vapes are appealing to young people in particular?
- Where are the places that you hear information about vapes? What sources do you trust to give you accurate information about these products?
- What would you tell an adult who doesn't know anything about vaping?

TALKING POINTS: VAPOUR, GAS OR AEROSOL

- Vapes allow you to make large clouds that many think are just water vapour, but in reality, the 'cloud' is a mixture of many different chemicals that were either present in the e-liquid before or produced during the heating process.
- Even though we refer to it as vapour, vape devices actually produce an aerosol mist.
- Aerosol mist is not water vapour, it contains ultra-fine particles that are inhaled into the lungs.
- Instead of just mixing with the air like pure gas, aerosols can leave drops behind.

TALKING POINTS: VAPES CREATING AEROSOLS

- Vapes produce aerosol that often contain propylene glycol, glycerin, flavourings, and nicotine.
- Nicotine itself is a highly addictive compound, though not all contain nicotine.
- And while more research is being done, it is possible that many of the same chemicals found in commercial cigarettes are also in the aerosols.





• Some vape flavours can cause people to have anaphylactic allergic reactions especially nut flavours

TALKING POINTS: OTHER PLACES TO FIND CHEMICALS FROM VAPE AEROSOLS

- Although the chemicals that have been found in vape aerosols might seem unrecognizable, you are familiar with other places some of those same chemicals can be found.
- For example, propylene glycol can be found in antifreeze products or also used to winterize plumbing systems.
- Maybe the most important ingredient here is nicotine. Nicotine is a drug that's highly addictive and is the reason why smokers smoke even after they start getting sick. Of course, in high doses, it's a poison. In fact, nicotine naturally occurs in plants to keep insects from eating them.
- So now that you know that vapes produce an aerosol, and that those aerosols contain harmful chemicals, you can truly explain vape clouds to someone who believes that they are just water vapour.
- These aerosols are a greasy mist that can coat your airways and lungs. They can increase asthma symptoms in vapers and for bystanders.





Activity 2.2



Materials

- activity cards (2 copies per student or group)
- tape
- large sheet of paper with outline of a cigarette labelled with the words
 "What's in a cigarette or cigarette smoke?"
- large sheet of paper with outline of a cigarette labelled with the words "What's in a cigarette or cigarette smoke?"

What are you exposed to when you smoke or vape?

- 1. Each student (or pair) will receive two copies of a specific ingredient card. Ask each student to read the information shown on their card and then place one card inside the cigarette outline if they think it is found in a cigarette or cigarette smoke and one card inside the vaping device outline if they think it is found in a vaping device or vaping aerosol.
- 2. Confirm with the class that all of the ingredients shown on the activity cards are found in a cigarette and cigarette smoke and in vaping devices and vaping aerosols.
- 3. Ask the class to guess how many chemicals and poisons can be found in cigarettes and cigarette smoke and vaping devices and vaping aerosol. Tell the class that there are over 4,000 chemicals and poisons in cigarettes and cigarette smoke, of which 70 are known to be carcinogenic (a carcinogen is something that causes cancer). Research is still being done on what's in vaping aerosols, but approximately 140 compounds have been identified.
- 4. Explain that some of the chemicals are used to speed nicotine absorption or to reduce throat irritation when vaping or smoking.
- 5. Use the following questions to process the activity.
 - Were you surprised by the number of chemicals and poisons found in cigarettes and cigarette smoke and vaping devices and vaping aerosol?
 - Would you want to have any of these ingredients in contact with your body?
 - Would you want to have any of these ingredients inside your body?
 - Why do you think cigarette or vaping companies do not advise consumers about the chemicals and poisons? (Health Canada requires tobacco products to have graphic health warning messages; warning messages and ingredients on cigarette packs, and warning labels on individual cigarettes.
 - Do other products we buy have to have the ingredients they contain listed on the packet or container? (Yes. Health Canada requires products to be clearly labelled to show their contents).



Activity cards: What are you exposed to when you smoke or vape?



Acetic acid

Found in vinegar and hair dye

Eyes and throat irritation, can cause bronchitis, erode teeth



Acetone

Used in paint stripper and nail polish remover

Damages the nervous system in high doses



Acrolein

Used in grenades and artillery by France in WWI Used as a weed killer



Ammonia

Used in disinfectants and household cleaning products such as window cleaner or oven cleaner



Arsenic

Used in wood preservatives Can cause death from multi-organ failure in high

doses, can cause cancer



Benzene Found in crude oil and

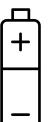
rubber cement Can cause leukemia and other cancers



Benzo[a]pyrene

Created by incomplete burning of organic matter Found in coal tar and

engine exhaust fumes



Cadmium

Heavy metal used in batteries Can build up in the body and cause cancer



Carbon monoxide

A byproduct of burning fuels (wood, propane)

Can cause brain damange, death if inhaled



Fibreglass

Made of glass fibres woven with plastic, used in insulation

Can cause respiratory irritation

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Activity cards: What are you exposed to when you smoke or vape?



Formaldehyde

Kills most species of bacteria and fungi Used in embalming fluid Can cause cancer



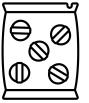
Lead

Found in car batteries Can damage the nervous system, cause cancer



Methanol

Used as a biofuel, in windshield washer fluid Can cause blindness if ingested



Napthalene

A pesticide used in mothballs

Can cause liver and neurological damage



Nickel

Heavy metal, used to make stainless steel, batteries and electronic devices Fatal at high dose**s**



Nicotine

A pesticide that occurs naturally in plants like tobacco Can be fatal if ingested



Nitrobenzene

Used to mask unpleasant odors in shoe and floor polishes Can cause skin irritation,

dizziness, fatal at high doses

Styrene

Used to make styrofoam takeout containers, cups

Can cause cancer



Turpentine Used in paint thinner, car wax, shoe polish Can cause lung damage



Vinyl chloride

Used in polyvinyl chloride to make pipes, packaging Can cause death if inhaled in

.

high doses, can cause cancer

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What it is, how it's used **Ingredient or** Can cause or may cause... by-proudct Acetic acid • Flavouring additive in cigarettes and e-liquid Skin damage and/or lung irritation at • Found in hair dye, vinegar, photographic film high doses Irritation of the nose and throat, Acetone • Found in cleaner, degreaser, nail polish remover damage to the nervous system at high doses Acrolein Used in grenades and artillery by France in WWI Strong irritant of the throat, eyes and skin, can cause blistering, likely • Used as a weed killer causes cancer Ammonia • Used in cigarettes and e-liquid to speed up Respiratory irritation, asthma nicotine's absorption in the body, attacks, lethal at high doses • Used as a cleaning solution (Windex) Arsenic Used to preserve wood products Cancer Benzene • Occurs naturally in crude oil Leukemia Benzo[a]pyrene • A polycyclic aromatic hydrocarbon (PAH) resulting Cancer, damage to the immune and from incomplete burning nervous systems Cadmium Found in batteries Lung cancer Carbon monoxide • A by-product of burning/heating Death if inhaled in high concentrations • Found in car exhaust Fibreglass • Plastic mesh reinforced with glass fibers **Respiratory irritation** Used to make septic tanks Used in vaping wicks, cigarette filters

Activity: What are you exposed to when you smoke or vape?



Ingredient or byproduct	What is it, how it's used	Can cause or may cause
Formaldehyde	 By-product of burning/heating Used in plywood, embalming fluid 	Cancer
Lead	Used in car batteries	Cancer, long-term neurological problems
Methanol	Purest form of alcoholUsed to reduce the throat irritation from smoking	
Naphthalene	Used as a pesticide (mothballs, etc.)	Liver and neurological damage, possibly cancer
Nickel	 Heavy metal, used to make stainless steel Used in batteries and electronic devices 	Nausea, vomiting, headache, fatal at high doses
Nicotine	 A pesticide that occurs naturally in plants like tobacco Highly addictive Can act as a stimulant and a depressive 	Nausea, vomiting , irregular heartbeat, ingestion can be fatal in children, pets
Nitrobenzene	 Used to create rubber, plastics Used to mask unpleasant odors in shoe and floor polishes 	Skin irritation, dizziness, inability to breathe and death at high doses
Styrene	Used to make disposable cups, take-out containers	Cancer
Turpentine	• Used in car wax, shoe polish	Lung damage
Vinyl chloride	Used in polyvinyl chloride to make pipes, packaging	Cancer, death if inhaled at high doses

Activity: What are you exposed to when you smoke or vape?







We know a lot about what smoking cigarettes can do to your body. Vaping hasn't been around very long and researchers are still learning about how it affects the body.

This can cause many young people think that vaping isn't a big deal and can't hurt them. But there are many things we do know, including that vaping IS harmful. Both vaping and smoking can damage the brain, the lungs and airways, the heart and blood vessels and the teeth and skin.

Smokers' cough

You've probably heard or seen someone who smokes coughing up sticky, green/yellow mucous (phlegm). This is sometimes called "smoker's cough" and it's pretty gross.

Smokers cough happens when the cilia in the lungs are damaged. Remember: cilia are the tiny, hair-like structures lining the airways that help clean out particles and pollutants from the air we breathe.

The tar in cigarettes smoke can damage the cilia. When cilia aren't able to properly clear out tobacco smoke and other particles from the lungs, the bacteria and debris can stay in the lungs and airways and can make you more susceptible to lung infections and lung disease. Without the cilia to help move mucous out of the airways, it can build up in your chest and airways.

Smokers aren't the only ones who can develop a phlegmy cough from their bad habit. Researchers have discovered that some of the chemicals found in flavouring in vaping devices can also damage the cilia in the airways.

Nicotine poisoning

Too much nicotine in the body can be poisonous. This can be caused by inhaling the nicotine, ingesting (swallowing) the nicotine or absorbing it through the skin or eyes.

It's hard to know for sure if there is nicotine in e-liquid. Some e-liquids that are advertised as "nicotine free" can actually contain nicotine. E-liquid and "smokeless" tobacco products like chewing tobacco or nicotine pouches are responsible for the majority of cases of nicotine poisoning in young people. Because of their small size, it doesn't take much nicotine to poison a child. For example, a small child can become become ill from consuming one cigarette.

Within the first 15 to 60 minutes following exposure, symptoms include: dizziness, increased heart rate and elevated blood pressure, upset stomach, a bad headache, vomiting, cold sweats, confusion and anxiety, blurred vision, weakness or fainting and rapid breathing. During the later phase of nicotine poisoning, other symptoms, blood pressure drops and the heart rates slows.

It is possible to die of nicotine poisoning, although it is uncommon in adults. With enough nicotine, the muscles that control breathing become paralyzed, fluid builds up in your airways and heart and blood vessels can fail.

Did you know?

The tar from burning cigarettes can stain your fingers and rot your teeth and gums.

Smoking a pack of cigarettes a day for one year deposits 1/2 cup of tar in your lungs!



Asthma

Asthma is a lung disease that can cause the muscles around your airways to get tighter and your airways to swell and fill with mucous, making it harder to breathe.

Many people with asthma may not experience symptoms until they have a cold, they exercise hard or they're around something that can irritate their lungs — like cigarette smoke or vaping aerosols. This is what people call an "asthma attack". To help the muscles around their airway relax, they can take medication using an inhaler or a "puffer".

There is no cure for asthma. There are medications to treat asthma but someone can die from asthma if they don't take their medications properly or if they have severe asthma.

Almost 1 million children in Canada have asthma. Asthma is more common in children who grow up around people who smoke. If you have asthma, make sure you take any medicine the doctor has given you.

Chronic obstructive pulmonary disease (COPD)

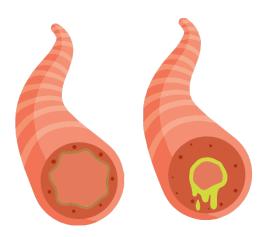
Chronic obstructive pulmonary disease (COPD) is a disease that causes your airways to become swollen and fill with mucus and causes the air sacs (alveoli) in your lungs to break down, trapping air in your lungs. This can make breathing very difficult.

Someone with COPD may not realize that they are becoming more short of breath until it becomes very hard to do simple tasks like walking up stairs. Some people with COPD need to use oxygen tanks to get enough oxygen into their blood because their lungs are so damaged. There is no cure for COPD. COPD can get worse over time and can be fatal.

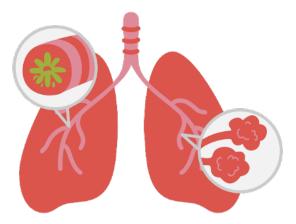
Lung cancer

Lung cancer is another deadly disease that is often caused by smoking. More people in Canada die from lung cancer than any other type of cancer. Lung cancer kills more than 20,00 people in Canada ever year. This is because many people don't know the symptoms of lung cancer and they don't go to the doctor until the cancer has spread. Smoking is the #1 risk factor for lung cancer.

Thanks to new treatments, technologies and medicines, fewer people are getting lung cancer and more people who have lung cancer are living longer. Getting diagnosed early can make a huge difference!



The airway on the left is a healthy airway. Asthma causes the airway to tighten and fill with mucous, like the airway on the right. This makes breathing difficult.



COPD can cause airways to swell and fill with mucus. It can cause the air sacs (alveoli) in the lungs to break down, trapping air in the lungs. People with COPD can get out of breath very easily.



Symptoms of lung cancer

- A cough that doesn't go away and gets worse over time
- Chest pain that doesn't go away
- Coughing up blood
- Feeling short of breath
- Wheezing
- Losing your voice (hoarseness)
- Frequent episodes of pneumonia and/or bronchitis
- Swollen neck and face
- Not hungry, losing weight without trying
- Feeling tired

Do you know someone who may be at high risk of lung cancer?

If someone you love, like your grandparent or another family member has smoked for many years, they are at a much higher risk of developing lung cancer. If you know someone who:

- has smoked for at least 20 years,
- still smokes or quit within the last 15 years, and
- is between 55 and 74 years old

you should talk to them about getting screened for lung cancer.

The Ontario Lung Screening Program uses CT machines to take detailed pictures inside the lungs of people who are at high risk of lung cancer from cigarette smoking. These tests can help catch lung cancer before it spreads. Lung cancer is much more treatable when it's caught early.

Encouraging someone you love to get screened can help save their life!

Ontario Lung Screening Program locations

HAMILTON: St. Joseph's Healthcare 905-522-1155 ext. 32115

OSHAWA: Lakeridge Health 1-905-576-8711 ext. 34449

OTTAWA: The Ottawa Hospital

(affiliated with the Renfrew Victoria Hospital and Cornwall Community Hospital) 1-844-394-1124

SUDBURY: Health Sciences North 1-844-703-0164

TORONTO: University Health Network 416-340 - 4154



Activity 3.1



Materials

- straws
- balloons

Healthy lungs

- 1. Ask for two volunteers to participate in an activity that shows how difficult it is to breathe when your lungs aren't healthy. This can be done in small groups in middle school classes.
- 2. Have one student blow up the balloon normally. Tell the other student to blow up a balloon, but through a straw. Have them note how much more difficult that is!
- 3. Describe asthma, COPD and/or lung cancer. Discuss the difficulties of breathing when you suffer from these illnesses and how you can take care of your lungs.





What vaping and smoking can do to your...

Lungs and respiratory system

- Coughing
- Sore throat
- Breathlessness
- Scarring of the lungs
- Narrowing of the airways
- Asthma or worsening asthma symptoms
- Less endurance and stamina (you can't run as far or as fast, it's harder for you to catch your breath when you're playing sports)
- More likely to get sick from infections like a cold, the flu or COVID-19

Teeth and skin

- Dry mouth
- Tooth decay
- Gum disease
- Dry, irritated skin
- Black, hairy tongue





Brain and nervous system

- Problems with memory
- Problems with impulsivity
- Problems with cognition (gaining and understanding new information)
- Problems with executive function (planning ahead, following directions)



Heart and circulatory system

- Heavy metal build up in blood and organs
- Heart arrhythmias (when your heart beats faster than normal or skips beats)
- Increased blood pressure
- Damage to blood vessels
- Increased risk of vascular disease (stroke, heart attack)

Canadian Lung Association BREATHE

Activity 3.2



Materials:

- markers
- Post-it notes
- flipchart (or a large sheet of paper) with the outline of a body

What do vaping and smoking do to your body?

- 1. Divide the class into four teams:
 - Team Lungs and Respiratory System
 - Team Heart and Circulatory System
 - Team Brain and Nervous System
 - Team Teeth and Skin
- 2. Give each team different colour of Post-it notes and their own flipchart paper with an outline of a human body.
- 3. Ask each team to come up with as many different ways that vaping is harmful to the system or body parts they've been assigned.
- 4. Once they're finished, ask a representative from each team to place their Post-it notes on their paper in the right location.





Activity 3.3



Materials:

 "Actions to Reduce Vaping" activity sheet (one per group)

Reducing the harms of vaping

- 1. 'Event Changers' are situations that may influence or change a young person's decision not to vape. Have students identify what these situations may be and write them on the board. Examples are provided below.
- 2. Ask the class which of the situations listed could be managed by someone their age if they knew about the potential harms of nicotine and the statistics that show most young people don't vape.
- 3. Distribute a copy of the Activity sheet Actions to Reduce Vaping to each group (or write on the board, the different smoking situations shown on the activity sheet).
- 4. Ask students to identify two or three actions that could be used by the person described in each scenario to help them to reduce vaping-related harms. Some actions could include:
 - Remain vape-free and don't be tempted to try.
 - Feel confident to say 'No thanks, I don't want to vape'.
 - Support others to stop vaping.
 - Avoid situations where vapes might be offered or experimentation might be encouraged.

Examples of "Event Changers"

- feeling that others want them to vape
- wanting to fit in with a peer group
- most of their friends vape
- a belief that most young people vape
- thinking that vaping makes them look cool
- someone they are dating vapes
- older siblings suggest they try vaping
- are too afraid to say no
- living with family members who vape

Activity sheet: Actions to stop vaping (Reducing the harms of vaping)

A person who doesn't vape but is experiencing pressure to vape

Someone who uses a vape once or twice a day

Someone who only vapes at parties

Someone whose friends all vape





"I'll try vaping just once," you think to yourself. "What's the harm in doing it one time? It's not like I'm going to get addicted."

Young people who use vapes with nicotine can develop an addiction. The more someone vapes, the more their brain and body become accustomed to nicotine, making it harder to quit.

Nicotine is the chemical that makes tobacco products so addictive. Nicotine is highly addictive even after just a few tries, especially for youths' developing brains. It is as addictive as heroin or cocaine.

As you introduce nicotine to your body, you will begin to crave more. Vaping, smoking cigarettes and other forms of tobacco that contain nicotine (like

cigars, pipes, chewing tobacco and nicotine pouches) can lead to nicotine dependence.

Nicotine in your body

Nicotine is found naturally in the tobacco leaf. It is present in tobacco products such as cigarettes and in most e-liquid. When you smoke, nicotine is absorbed through the lungs and then moves through the bloodstream and into the brain and other organs of the body.

It can take as little as 10 seconds for nicotine to reach the brain after being inhaled. When you first start to vape or smoke:

- you may cough, feel dizzy and get a dry, irritated throat
- you can also feel nauseous, weak, get stomach cramps, headache, and gag

That will stop as your body becomes more dependent on nicotine, and then each time you vape or smoke:

- your heart rate and blood pressure will increase
- your blood vessels constrict (tighten), causing your hands and feet to feel cold
- your brain waves become altered, and muscles relax

How your body becomes dependent on nicotine

Nicotine may cause you to temporarily feel good or energized. It also causes the release of natural chemicals in your brain that may make you feel more alert and calm. Over time, your body builds a tolerance to some of the effects of nicotine. This means you need more and more nicotine to have the same effect.

Withdrawal

When you stop smoking or vaping, the nicotine levels in your body drop and you may have withdrawal symptoms. It is good to know that these symptoms are temporary and are often signs your body is healing.

Withdrawal symptoms can be difficult to cope with, and many people who smoke and people who vape might not be able to quit on their first try because they are not prepared. If you know what to expect you can think of ways to manage the symptoms.





Most withdrawal symptoms happen within the first week. Symptoms are usually gone after two to four weeks.

Withdrawal symptoms may include:

- dizziness and shakiness
- headaches
- anxiety and irritability
- nervousness and restlessness
- difficulty concentrating and sleeping
- increased appetite
- slight depression or feeling down
- cravings for a smoke or to vape

Side effects, like tiredness and coughing, show that your body is in a state of repair and healing.

You may crave cigarettes or to vape for months, even once the other withdrawal symptoms are gone. The desire to vape or smoke can be especially strong when you are under stress, although some people crave cigarettes or to vape when out with friends or when bored.

Dependence and addiction

When you experience tolerance and withdrawal, this is a sign that your body is physically dependent on nicotine. "Addiction" and "dependence" are not the same thing. Addiction occurs when you lose control over the urges to smoke or vape, even when you know it's bad for you and want to quit.





Activity 4.1



Materials:

• index cards

Life goals

- 1. Distribute an index card or paper square to each student.
- 2. Ask students to take 1-2 minutes to jot down what defines them as a person and their goals. These could be short-term goals or long-term goals.
- 3. Ask students to flip the index card over and record their answer to the following question: How would smoking and/or vaping affect the goals that you have made for yourself?
- 4. Ask students to share their responses.





Activity 4.2



Materials:

• index cards

Exploring the "why"

- 1. Distribute an index card to each student.
- 2. Ask students to independently record responses to the following question on the front side of their index card: Why might young people experiment with vaping?
- 3. On the backside, record responses to the following question: What are some positive things young people can do instead of vaping?
- 4. Collect the index cards and read responses aloud to the class.
- 5. Make a list of the responses on the board. Possible answers are provided below.

Reasons to try vaping	Positive alternatives	
To relieve stress	 Do something active. Exercise reduces levels of stress hormones in your body and increases the production of "feel good" hormones. Talk to your friends/parents/teachers about how you're feeling. Make sure you're getting enough rest. Go to bed earlier or take naps. 	
Wanting to be accepted by friends	 Be yourself. Figure out your passion and join a sports team or a club. Invite friends to a movie. 	
Curiosity	Ask lots of questions and research the facts.	
To taste the flavours	 Make your own smoothie with a variety of fruits Eat or drink something tasty. 	
To rebel, to appear older	Volunteer to take on more responsibility.Make mature choices.	
To feel less tired	 Go to bed earlier. Take a nap. Spend less time on screens, especially before bed. Workout/exercise (it gives you more energy). Visit your doctor to rule out any illness. 	





What is peer pressure?

Peers influence your life, even if you don't realize it, just by spending time with you. You learn from them, and they learn from you. It's only human nature to listen to and learn from other people in your age group.

Peers can have a positive influence on each other. You might admire a friend who is always easy to get along with and try to be more like him or her. But, sometimes peers influence each other in negative ways. For example, a few students in your class might try to get you to skip class with them, your teammate might try to convince you to be mean to another player and never pass her the ball, or a friend at a party might ask you to vape with them.

Why do we give in to peer pressure?

Some youth give in to peer pressure because they want to be liked, to fit in, or because they worry that their friends might make fun of them if they don't go along with the group. Others are curious to try something new that people around them are doing. The idea that "everyone's doing it" can influence some children to leave their common sense, behind.

Walking away from peer pressure

It's tough to be the only one who says "no" to peer pressure, but paying attention to your own feelings and beliefs about what is right and wrong can help you know the right thing to do. Inner strength and self-confidence can help you stand firm, walk away, and resist doing something when you know better.

It can really help to have at least one other friend who is willing to say "no," too. This takes a lot of the power out of peer pressure and makes it much easier to resist. It's great to have friends with values similar to yours who will back you up when you don't want to do something.



If you choose friends who don't vape or smoke cigarettes, then you probably won't do these things either, even if other youth do. Try to help a friend who's having trouble resisting peer pressure. It can be powerful for one person to join another by simply saying, "I'm with you – let's go."

Even if you're faced with peer pressure to vape or smoke while you're alone, there are still things you can do. You can simply stay away from peers who pressure you to do stuff you know is wrong. You can tell them "no" and walk away. Better yet, find other friends and classmates to hang around with.

If you continue to face peer pressure and you're finding it difficult to handle, talk to someone you trust. Don't feel guilty if you've made a mistake or two. Talking to a parent, teacher, or school counsellor can help you feel much better and prepare you for the next time you face peer pressure.

 $\begin{array}{c} \text{Canadian Lung Association} \\ \text{B} \ \text{R} \ \text{E} \ \text{A} \ \text{T} \ \text{H} \ \text{E} \end{array}$

Unit 5. How to handle peer pressure

Activity 5.1



Reasons not to vape

- 1. Select a student and have that student come to the front of the classroom.
- 2. Explain: We have just found out their friend (the child in the front of the class) has started vaping. We are worried about their health, so we need to think of the TOP TEN reasons not to vape.
- 3. Write their answers on the board.

Possible responses:

- Your parents will be mad at you
- You may lose your friends
- You'll become dependent
- You won't be as good at sports, no endurance
- If you have asthma you'll need more medicine
- Your heart will have to work harder even after one inhale
- The stuff in e-liquid with nicotine is like taking small doses of poison
- It costs money to buy a vape and e-liquid
- You have to be outside in the rain and cold
- You will be a bad role model for little children





Unit 5. How to handle peer pressure

Activity 5.2



Materials:

offer cards (one set)

Escape the vape

- 1. Explain: students need to know a range of ways to refuse offers to vape and other substances such as alcohol, and to have the confidence to apply these techniques requires practice.
- 2. Invite 6 students to play a game of 'Escape the Vape'. Have five of these students stand in a line.
- 3. The last student stands in front of the line with a card that has an offer to vape. The student is to give the offer to the first student in line who must then refuse the offer before moving to the end of the line. If a student uses the same response or can't give a refusal quickly enough, they are out of the game. The winner is the last student in the line.
- 4. Repeat the game with a new group of students and 'Offer Cards' until all students have participated.
- 5. Listen to the students' answers, then if time permits, continue the discussion with the CLASS CHAT questions below.

Class discussion

The questions below are designed for you to initiate an essential conversation with your students. It does not matter if you know the factual answer; you can research that together at a later time. What is important is that you are able to communicate with the students, to broaden their perspectives on this topic.

- How do you usually feel when your friends behave in a certain way and you think you should try to be like them?
- How difficult is it to resist someone when they won't take 'no' for an answer or they make fun of you or reject you?
- Does being confident in your opinion and standing by your decision help you to refuse these pressures?
- How can young people influence each other's decision whether or not to vape?
- Based on your personal experiences, who or what influences your opinion about vaping? What are some reasons you would not want to vape?

Unit 5. How to handle peer pressure

ACTIVITY SHEET: Offer cards (Escape the vape)

Do you want to vape?	Do it. It'll calm you down.
lt won't kill you. Try it!	C'mon, it's so cool!
Here, your turn. Try to blow a cloud.	Try it! I thought you were my friend.
lf you're really my friend, you'll vape with me.	C'mon, everyone else is doing it.
Everyone's watching you. C'mon.	Everyone will think you're a loser if you don't try it.
l got this just for you.	Just blow one cloud. It won't kill you!



Unit 6. Second-hand and third-hand smoke and vape emissions

What is second-hand smoke? Why is it dangerous?

Second-hand smoke is a mix of two kinds of smoke: one is breathed out by a person who smokes; the other comes from the burning tip of a cigarette. They mix in the air to make second-hand smoke. Second-hand smoke is very dangerous for young people.

Second-hand smoke is dangerous because it contains many chemicals such as cyanide, carbon monoxide, arsenic and benzene.

Many of these are poisons or toxins and have been shown to cause cancer. Some of these toxins can also cause heart disease, lung disease (like COPD or asthma) and stroke.

Second-hand smoke can make your eyes sore and give you headaches, coughs, sore throats, dizziness and make you feel sick.

Second-hand smoke and children

Children can get very sick if they breathe in second-hand smoke because their lungs are smaller and still developing. They also often have no way of getting away from the smoke.

They are more likely to go to hospital, get coughs, colds and miss school. Young people exposed to second-hand smoke are at higher risk of bronchitis, asthma, bacterial meningitis and pneumonia.

Smoke spreads around the home and car, even if you open the windows, and bits stick to and build up on surfaces, seats and carpets. Second-hand smoke, and the toxins in it, can reach very high levels in cars because they are small, confined spaces.

Second-hand smoke can also affect your pets

Cats, dogs, birds, and other pets are all at risk if they live with people who smoke. They will breathe in the toxins

from second-hand smoke. They will also be exposed to toxic particles in the room and surfaces around them, and from being in direct contact with their owners. Toxins can get on their fur or feathers and be taken-in when they are grooming themselves, or absorbed directly through their skin.

Animals can develop breathing problems, allergies, asthma, and can even get cancer from being exposed to tobacco smoke.







Unit 6. Second-hand and third-hand smoke and vape emissions

Second-hand vape aerosols

Similar to second-hand smoke, exhaled vape aerosol contains dangerous particles toxins. Aerosols from vaping are dangerous to inhale because they include chemicals such as benzene, cadmium and formaldehyde.

Exposure to ultra-fine particles may:

- make respiratory illnesses like asthma worse
- over the longer term, put you at risk of developing asthma or having a heart attack
- irritate your eyes, throat and airway

Experts emphasize that young people's environments should be 100% vape-free. To protect young people from second-hand and third-hand exposure, vaping should be prohibited, at all times, in homes, cars and any enclosed space.

Third-hand smoke and aerosols

Smoke or vaping aerosols can also be absorbed into fabrics, walls, furniture, clothing, household dust, and even on our skin, and it can stay there for a long time. This is called third-hand smoke or exposure to aerosols.

This is why it is strongly recommended to not allow people to smoke inside your house or car as the poisons in tobacco smoke and aerosols are left everywhere and collect over time. This can hurt your body and is linked to poorer health.

It is particularly bad for children. Children can even end up with poisons in their digestive system from touching household items that have these toxins on them and putting their hands in their mouth.





Unit 6. Second-hand and third-hand smoke and vape emissions

Activity 6.1



Materials:

 Activity sheet (one copy per group)

Avoiding second-hand smoke

- 1. Brainstorm a list of things that the class do not like about second-hand smoking (e.g. smelly hair and the smell of the smoke). Rank the items from most disliked to least disliked.
- 2. Talk about ways students can avoid some of the harms from second-hand smoke (e.g. open a window, move away and ask the person to stop smoking).
- 3. Reflect with students that while many choices in life are individual choices (e.g. the way we style our hair or the type of clothes we like to wear) some choices, such as smoking, can affect others.
- 4. Place students in small groups and distribute copies of What Would You Do? Explain that groups are to determine two ways that the character in each story could deal with a second-hand smoking situation and identify the positive (good) and negative (not so good) outcomes for each option. After considering the outcomes of each option, students are to decide which option the character should choose.
- 5. All answers are to be written on the sheet. Consensus for decisions does not have to be reached in each group as it is the sharing of different options that is the most useful part of this experience.
- 6. Lead a chat to hear the findings of each group. Discuss how the students' responses involved doing something (e.g. winding down a window) or saying something (e.g. ask Mom if they'd mind smoking after the meal, not during). Use the following questions to further process this part of the activity

ASK:

- How do you think you'd feel if you just ignored the problem?
- Would it be scary to ask someone not to smoke near you in real life? Why?
- Would it be easier to move away from the second-hand smoking than saying something?
- Would it be easier or harder to make this decision if you had a friend, parent or trusted adult around? Why?





Unit 6. Second-hand and third-hand smoke and vape emissions

Activity sheet: What would you do? (6.1 Avoiding second-hand smoke)

1. Isabella and Li are friends. Li often walks home with Isabella and her mom, but Isabella's mom always smokes during the walk, and it makes Li feel like he can't breathe.

What could Li do?	What are the good things that might happen?	What are the not-so-good things that could happen?
l think Li should		

2. Samira loves playing with her friend Sylvie. Samira doesn't like playing inside Sylvie's house because her mom and dad both smoke and the house smells of old smoke.

What could Samira do?	What are the good things that might happen?	What are the not-so-good things that could happen?
I think Samira should		

3. Zac is playing in his backyard with his older sister. While their mom is out, a neighbour comes by for a chat. She lights up a cigarette when she enters the backyard, but there is a "no smoking" rule at Zac's.

What could Zac do?	What are the good things that might happen?	What are the not-so-good things that could happen?
I think Zac should		



Vapes have become very popular worldwide, all thanks to some stealthy marketing tricks. Vaping companies have taken a page out of the tobacco industry's book, using flashy packaging, social media influencers and sponsorships to get a whole new generation hooked on what they're selling.

They use things like making you feel connected emotionally with advertisements showing colourful images of friendship, fitting in, having fun, or feeling powerful. Plus, they get famous people to promote their products online.

How vaping appeals to youth

When vapes first entered the market, one of the marketing appeals was to create large clouds. This trend led young people to compete for larger clouds without considering the substances they were inhaling. Today, these products have evolved to be sleeker, smaller, and less noticeable. Some products include youth-friendly features like fidget spinners and designs that make them easy to hide. Most of these products also include flavours that clearly appeal to a younger generation. Flavours like birthday cake, strawberry watermelon, gummy bear, and raspberry fizz are aimed at young people.

- Do you know of any flavours of e-liquids?
- How do the names chosen for these flavours make you feel?

Vaping advertising is hard to monitor online

In Ontario, regulations like the Smoke-free Ontario Act, 2017 have slowed down tactics like flashy ads, discounts, and bold displays for smoking and vaping. But a big chunk of the marketing is happening where it's not as easy to see: online.

Some influencers are posting almost every day, showing off "smoke tricks" with vapour clouds, talking about new e-liquid flavours and promoting or giving away products. This is happening even though federal rules say it's illegal for companies to use people in any vaping promotions.

Some young people see vaping not just as a trendy lifestyle choice, but believe it's a safer option to smoking. Certain Canadian companies have posted on Instagram suggesting that vaping has health benefits and that play down potential risks. For instance, an e-liquid manufacturer in Canada shared a post that says, according to the federal government, vaping is less harmful than smoking. This is despite the fact that the federal government has created laws that prohibiting making any health claims about vaping.

It's important to look closely at the ads you may see online. Ask yourself what the advertiser is really selling.





Activity 7.1



Materials:

- Ads printed on poster paper or displayed on screen
- Activity sheet

Deconstructing advertisements

- 1. Pass out copies of the ads and the activity sheet.
- 2. Looking at the first activity sheet with the ads, explain:
- 3. "Companies spend millions of dollars figuring out how to get the attention of the people whom they would like to buy their product, especially through social media advertising! Let's deconstruct an advertisement to see what messages they are selling."
- 4. Then using the second activity sheet, discuss each/any questions regarding one or many ads, for 5-10 mins.
- 5. If time permits, 'reconstruct' the advertisements using a healthier or more appropriate message.







Ad 2



Ad 3



Ad 4







ACTIVITY 7.1: Deconstructing advertisements

AD 1. DISCUSSION STARTERS/HINTS:

- Product: McDonald's meal in collaboration with Korean group BTS
- *Imagery*: A high-fat, high-salt fast food meal on a BTS-purple background, the BTS logo and the word "BTS" used twice.
- *Messaging*: BTS appeals mainly to young women, this ad implies they can feel closer to their favourite pop stars by eating a meal chosen by them.
- *Reconstruction* (example): It's very unlikely that the active, healthy members of BTS want their fans to gorge on a McDonalds meal of 740 calories and 40 grams of fat!

AD 2. DISCUSSION STARTERS/HINTS:

- Product: Whimsy skincare and makeup designed for children
- Imagery: The child looks like she's at a spa, ready for a day of beauty pampering.
- *Messaging:* Some makeup can look "unnatural" on young people or harm their skin; your "natural look" isn't good enough and needs to be "elevated"
- *Reconstruction* (example): The safest, most natural look is to go makeup-free!

AD 3. DISCUSSION STARTERS/HINTS:

- Product: Enrollment in the US Army
- *Imagery:* Army personnel involved in combat using large artillery and technology, similar imagery to a first-person shooter video game
- *Messaging*: Appealing to youth who view themselves as "warriors", a word popularly used in video and other gaming areas
- *Reconstruction* (example): Joining the US Army will put you in potentially dangerous real-life situations that are nothing like the video games you play from the comfort of your couch.

AD 4. DISCUSSION STARTERS/HINTS:

- Product: Prime Energy Drink
- *Imagery*: Vibrant colours, popular YouTubers (Logan Paul, KSI) holding an array of drink options
- *Messaging*: Young, wealthy influencers use trendy energy drinks to give them an edge *Reconstruction* (example): The effect of sugar-rich energy drinks is only temporary, make longer-term investments in your health with exercise and healthy eating.



ACTIVITY 7.1: Deconstructing advertisements

Who paid for the ad?

Who is the target audience? Why do you think that?

What story is this ad telling (messages)? How do you know? (text, images, etc)

What strategies did the company use to make their product appealing?

Was the ad successful? If yes, why? If no, why not?





Activity 7.2



Materials:

- Two to four pieces of paper
- marker
- tape

Where do you stand?

- 1. Before starting the activity, place signs on opposite walls, one saying "Agree" and the other saying "Disagree." You could use four signs indicating "Strongly agree, "Somewhat agree", "Somewhat disagree" and "Strongly disagree".
- 2. Read a statement to the students from the list below. Based on their opinion, they will move to stand by the appropriate sign. A discussion about their opinions follows.
- 3. Students are encouraged to move to a different sign if they hear something during the discussion that alters their opinion.
- 4. After students take their positions along the wall, ask different students to explain their choices. Even if all students gather in one place, inquire about the reason.
- 5. Make sure to correct any misinformation during the discussion.
- 6. Ask questions that prompt consideration of overlooked factors or information.
- 7. Remind students they can change seats if their opinions change.
- 8. Use your judgment to determine when to proceed to the next statement based on student engagement and the quality of discussions.
- 9. After the activity, students can complete one of the two activity sheets to demonstrate their learning.

Discussion statements:

- a. Vapes should be banned until there is evidence that they are safe.
- b. Vaping will "re-normalize" or make smoking more acceptable.
- c. There still isn't enough evidence that vaping is an effective way to quit smoking.
- d. E-liquid flavours lure young people into vaping.
- e. Vaping is still smoking.
- f. It's better to use more proven methods to quit smoking.



ACTIVITY 7.2 Where do you stand? - Option 1

1. What are three new things you learned during our lessons on vaping?

1.	
2.	
3.	
2. Do you think we sh public? Why or wh	nould require that products be tested for safety before they are available to the ny not?
3. Do you think comp product? Why or w	anies should have to inform customers of the dangers involved with using their hy not?

4. Should we have regulations (laws) to ensure kids cannot get ahold of harmful products? Why or why not?



ACTIVITY 7.2: Where do you stand? - Option 2

1. Explain something new that you learned OR during our lessons on vaping.

Explain something that you already knew about vaping that has been reinforced during our lessons.

- What is something that you changed your opinion about during today's discussions?
 Explain what information or viewpoint influenced this change.
- OR Share information or viewpoints that you heard during today's discussions that reinforced an opinion you already had.

- 3. Where do you stand? Choose one of the following questions and write one or two paragraphs to convince the reader of your stance. Be sure to use information from our lessons on vaping to support your arguments.
 - a. Should we require that products be tested for safety before their release?
 - b. Should companies have to inform customers of the dangers involved with using their product?
 - c. Should regulations be in place to ensure kids cannot get hold of harmful products?







Nicotine, stress and anxiety

One of the most common reason youth report vaping or smoking is to relieve stress. Using nicotine to cope is NOT effective and in fact it can do more harm than good to your mental health (not to mention all the ways it can harm your physical health).

What is stress?

Stress is the uncomfortable feeling you get when you're worried, scared, angry, frustrated, or overwhelmed. Everyone experiences stress, and some stress is okay. It can give you the motivation to get things done. For example, feeling stressed about an upcoming test can motivate you to study. But too much stress can affect your emotional and physical health.

If you have to much stress, you can experience:

- tense muscles headaches tight jaw
- teeth grinding
- racing heart
- sweaty palms

trouble sleeping

lack of motivation

- low energy
- feeling overwhelmed
- nausea. diarrhea

Causes of stress

Stress can be caused by many different things.

- listening to parents argue
- an upcoming test or exam
- applying to jobs or university
- being pressured to do something you know is bad for you, like vaping
- not having money to do things or buy things you want
- dealing with interpersonal relationships

your parents expectations

difficulty concentrating

- an upcoming game or other sporting event
- wanting to fit in

Anxiety

Anxiety can cause you to feel tense, irritable and much the same as you feel when you are stressed. The difference is that stress is often caused by something external, and when that trigger goes away, so does the stress. Anxiety is feeling worried, nervous, or panicky, often without an obvious cause. It's normal to experience anxiety from time to time, but it can be a problem if it's a frequent part your daily life and/or it affects your schoolwork, your relationships or your health.





- 96

51

How nicotine affects mental health

When youth who choose to vape are asked why, "To reduce stress" is one of the most common reasons. Recent studies have actually found a link between vaping and worsening mental health issues.

Why do people think vaping or smoking relieves stress? Nicotine can provide an immediate sense of relaxation. This is because it causes the release of dopamine in your brain. Dopamine is a "feel good hormone", meaning that it causes you to feel pleasure. But once this feeling wears off in an hour or two, you're faced with a new stress: your body's desire for more nicotine.

Over time, it takes more and more nicotine to release the amount of dopamine you need to feel pleasure. Regular nicotine use can worsen anxiety and stress and leave you more susceptible to experiencing symptoms of depression. People who vape are more likely to be diagnosed with depression compared with people who have never vaped. Having symptoms of depression increases the likelihood of a teen vaping.

Quitting nicotine has been linked to improvements in mental health, including less anxiety and stress, reduced depression and better mood.

Other ways to deal with stress

Nobody can avoid all stress, but you can learn ways to deal with it. When you're stressed, it is normal to want to feel better. Anything that makes you feel better is called a coping strategy.

Negative strategies can be quick fixes, but they're harmful because they can be dangerous and make stress worse in the long run. Negative coping strategies include fighting, vaping, isolating yourself from family and friends. They are especially worrisome if they are a major way you deal with stress because you may turn to these behaviours more often during hard times. Think about some of the other ways people cope with stress that can really hurt them.

Using negative coping strategies is one of the ways substance use starts. If you are using negative coping strategies, ask yourself, "Why?". If it is to deal with problems, consider other ways of dealing with the same problems. There are many healthy ways of coping. Healthy coping strategies are safe and can help you feel better without causing disruptions in your life. See "10 tips for managing stress and anxiety".





10 tips for managing stress and anxiety

Skills to "de-stress" and calm yourself work best when they're practiced ahead of time, not just when the pressure's on. Some may work better than others, it's about finding the ones that work for you so you won't think about reaching for a vape, smoke or other substance to manage.

1. Stop and breathe.

Conscious breathing is the body's natural antidote to stress. Pause what you're doing, and take a deep breath in through your nose and out through your mouth. Concentrate on the inhale and the exhale of your breath; it will help you calm down and think clearly.

2. Avoid over-scheduling.

If you're feeling stretched, consider cutting out an activity or two, choosing just the ones that are most important to you.

3. Be present.

Life can be overwhelming, especially when you get caught up in worrying about what's next. Instead, focus on what you can control in the present moment and try to stay in the moment.

4. Move your body.



Any form of exercise, from hitting the gym to yoga, can act as a stress reliever. When you exercise, your brain releases chemicals that make you feel good. Just walking 20 minutes a day or taking a few minutes to do a stretching routine can help!



5. Eat and drink well.

Good nutrition makes you healthier, keeps you alert through the day and keeps your mood steady. When you're stressed out, it's easy to eat on the run or eat junk food. Eating healthy and drinking lots of water will cut down the toxic effects of stress. Keep healthy snacks like fruit, trail mix and yogurt nearby, and don't skip meals.



6. Decaffeinate.

Caffeine can help you stay awake, but it also makes your body feel more tense, jittery and stressed. Cutting back on or gradually eliminating caffeinated products (like coffee, energy drinks, and soda) will make it easier for you to fall asleep and lessen your feelings of stress and anxiety.



10 tips for managing stress and anxiety

7. Get a good night's sleep.



If you get enough sleep, your body won't tolerate stress as well as it could. Go to sleep about the same time every night. Take power naps when you need them. When you get into bed, don't do homework, read, or use the phone, and don't solve your problems in bed. When you think about all the things that bother you, you have trouble falling asleep and wake up in the middle of the night to worry more. Give yourself plenty of time to think things through, make a list if you need to, and then set it aside! You can also try visualization before bed to relieve stress.

8. Reach out.

Share what you're going through with people who make you feel good about yourself and want to help you. If you're trying to quit nicotine, talk to your friends, family, teachers, school counsellors, and other important people in your life who support you and your decision to stop vaping/smoking.

9. Let some things go.

It's important to try to fix problems, but sometimes there's nothing you can do to change a problem, so don't waste your energy worrying about it. If you use your energy worrying about things you cannot change, you won't have enough left over to fix the things you can.



10. Make time for fun.

Build time into your schedule for activities you enjoy — read a good book, play with your pet, do a hobby, make art or music, spend time with positive people, or be in nature.



Activity 8.1



• Pen and paper (optional)

What is stress?

Ask the students:

- To start by thinking about the word stress. What does it mean?
- What do you think a stressed person looks like?How do stressed people move and act?
- Close your eyes and get into the character of a 'stressed person' at school. Now sitting in or standing next to your desk, act out how this person would behave (let students act out a "stressed person" for 1 minute).
- Now stop. Close your eyes and become yourself again. Take 5 slow, deep breaths.

Ask students to write down their ideas or discuss them:

- Let's think about the activity.
- Why did you choose these movements? What feelings and thoughts did you want to show?
- How does stress change someone's body and actions?
- Is this how you show your stress?

After the reflection, share:

- Stress can mean lots of things to different people and affects everyone differently.
- Things like change, pressure and challenges can cause us to feel"'stressed".
- Some people might show stress in their body, some might just feel it inside.
- Understanding how stress affects you can help you to manage your stress better.

Students explore the concept of stress, what their own stress patterns look like, and reflect on how stress affects everyone differently.





Activity 8.2



Materials:

- coloured pens (3-4 different colours, like red/blue/black)
- paper for drawing

Identifying stress

1. Start the activity by telling students:

"Now it is time to think more about your experiences of stress. Imagine you are looking at your stress as an outside investigator, try to imagine it is someone else's body and feelings. You are looking at it so you can understand it better."

2. Next, ask the students to:

Draw an outline of a person in the centre of the paper, (it should be about the size of a lemon).

Using your red pen, write all the things that might cause you to feel stressed around the outline. Aim for 5 to 8 things.

Next, think about how you feel, and use a different colour pen(s) to answer the following questions:

Where in your body do you feel the stress?

Using your red pen, mark the place(s) inside the outline of the person.

Think about how stress affects your emotions.

Answer the question: When I am stressed I feel ______.

Using your blue pen, write at least 5 words around the outline of the person.

Think about how stress makes you act.

Answer the question: When I am stressed I tend to _____.

Using your black pen, write those words around the outline.

Being kind to yourself can make a big difference in getting rid of stress.

Now that you have a drawing of your own stress pattern look at it carefully.

What are your signs of stress? What feeling can you watch out for so you know you are stressed?

How can you manage your stress?

Look at the list of 'Tips for Managing Stress' pick 1-2 activities that makes you feel calmer. Can you do these whenever you feel stressed?

This activity will help students explore their own stress patterns and reflect on which 'tips' they can put into practice to feel better.

To finish, write your calming activities around the outline.





Activity 8.3



Materials:

Bell or chime

Mindful movement

- 1. Read the script below OR you can pre-record yourself. In guiding the students through the sequence, use a calm, relaxed tone of voice.
- 2. Begin by asking students to stand next to their desks.
- 3. Turn off the light in your classroom.
- 4. Ask students whether they feel tension in their bodies? If so, where?
- 5. Ask students to close their eyes as you go through the movements.
- 6. Explain about mindful movement:

"Mindful movement is similar to yoga or Tai Chi. It's a practice of moving your body slowly, and with great care and attention to what's happening in the present moment. You are also not competing with anyone near you. What you do with your body doesn't matter as much as simply noticing your body, your movements, and your breath."

7. Invite them to listen carefully to your directions:

"As you go through each movement, pay attention to the messages that arise in your body. Any time you notice stress or tension, breathe deeply in and out through that part of your body—just noticing whether that allows your body to release any of the stress. If any particular movement causes pain, do not force yourself to do it. Instead, modify the movement so that it works for your body, or just practice mindful sitting or standing instead. Remember, what's most important is staying present with your body—not trying to get any certain kind of workout."

Note: You don't need to read verbatim from the script, but rather to learn the practice yourself. Use the script as an example of the steps as well as the spirit of the practice. But in leading the practice, you can guide students using your own words, from your own moment-to-moment experience.

This activity encourages students to notice their body sensations and breath as they move through a sequence of seven different stretches to relax parts of their body.





ACTIVITY 8.3: Mindful movement

Stand like a mountain.

"We'll begin with standing like a mountain. Standing tall, feeling your feet firmly rooted on the ground, your head reaching towards the sky—stable, solid, grand.

We'll hear one sound of the bell, breathing in and out deeply and mindfully, allowing the breath to fill the entire body. Breathing in—I am breathing in. Breathing out—I am breathing out. In. Out."

[Ring the bell or chime, pause for 2 to 3 seconds]

Roll your shoulders.

With the next breath in, roll your shoulders forward and up. As you breathe out, bring your shoulders back and down.

Breathing in, roll your shoulders up. Breathing out, roll your shoulders down. Continuing at your own pace, noticing the sensations in your shoulders. Notice if there's any stress or tension, or if your shoulders feels light, loose, and relaxed.

Continuing to breathe mindfully, reversing directions, rolling your shoulders forward as you breathe. Rolling my shoulders—I am aware that I am rolling my shoulders. [Pause]

Then allowing your shoulders to relax. Come back to neutral.

Roll your neck.

Breathing in, breathing out. Roll your neck forward and down, looking toward the floor.

Breathing in, roll your head to the right, so your right ear is close to your right shoulder.

Breathing out, roll forward and down. Breathing in, roll to the left. Breathing out, continue to roll your neck. Breathing out, continue to roll your neck to each side. Gently notice any sensations in your neck. [Pause] Coming back to neutral, relax and check in with your body. Maybe shaking it out a bit to loosen up.

Stretch your arms.

With your next breath in, stretch your arms out to your sides, and slowly swing them up over your head, fingers pointing up.

Breathing out, bring your palms down in front of you, palms facing down, so your arms are by your side again.

Breathing in, arms coming around and up over your head in a big circle. Breathing out, gathering the breath through the middle of your body, hands coming down.

Continue to breathe, moving your hands and arms in circles, gathering your breath at your own pace. As best you can, stay with your breath, stay with your body. Notice when your mind wanders. Notice where your mind has wandered, and bringing it back to the breath and to the body. [Pause]





Activity 8.4



Guided visualization

- 1. Read the script below OR you can pre-record yourself. In guiding the students through the visualization, use a calm, relaxed tone of voice.
- 2. Begin by turning off the light in your classroom.
- 3. Explain what's involved in the technique of visualization:

"Visualizations can quickly calm your body and relax your mind. It can help you to de-stress in minutes so that you're ready for bed, and can also be a useful way to recover from stress during difficult times.

4. Ask students to close their eyes as you guide them through the visualization:

"In a relaxed position, you are going to use your inner voice and imagination to help you get into a deep state of relaxation.

Breathe from your belly and close your eyes, focusing on breathing in peace and breathing out stress. This means letting your belly expand and contract with your breath.

If you find your shoulders rising and falling, you are likely carrying tension in your body and not breathing in the most relaxed way.

Once you feel more relaxed, begin to envision yourself in the midst of the most relaxing environment you can. For some of you, this might be floating down a slow moving river, or wading in a lake, or laying on the beach in the sun.

For others, this might be sitting by a camp fire, deep in the woods, sipping hot chocolate and marshmallows.

You may want to remember a time and place when you felt wonderful and relaxed, a "happy place" in your memory.

As you imagine your scene, try to involve all of your senses. What does it look like? How does it feel? What special scents are involved? Do you hear the crackle of a fire, moving water, or birds chirping?

Stay here for as long as you like. Enjoy your 'surroundings', and let yourself be far from what stresses you.

When you're ready to come back to reality, count back from ten, and tell yourself that when you get to 'one', you'll feel calm and refreshed."

This activity will teach students the basics of using visualization to relieve stress and get into a more positive frame of mind.



Appendix: Additional resources 2 Truths and a Lie - Lungs are for Life!

Name

In each set of statements below, two statements are true and one is a lie. Can you pick the lie? Circle the statement that's a lie, then change the sentence so that it becomes true.

- 1. Vapes do not contain nicotine.
- 2. People can experience second-hand exposure to the aerosol released from vapes.
- 3. Vaping nicotine can lead to physical dependence and addiction.

- 1. Vapes only produce vapour.
- 2. In addition to what's listed on the label, the aersol from vaping devices contains new chemicals are produced when the e-liquid is heated.
- 3. The aerosol from vapes contains toxic chemicals.

- 1. It's possible to get addicted to nicotine after using it only a few times.
- 2. Smoking and vaping are bad for your lungs, but research shows they don't harm your brain.
- 3. People think vaping and smoking can help relieve stress, but it actually makes stress worse over the longer term.

Appendix: Additional resources 2 Truths and a Lie - Lungs are for Life!

- 1. In Ontario, it is illegal to sell or provide vaping products to anyone under the age of 19.
- 2. More and more schools are banning vapes.
- 3. Unlike cigarettes, vapes can be used anywhere.

- 1. When using vapes, there is a risk of explosions of electronics and batteries.
- 2. Health Canada currently regulates the chemical ingredients in e-liquid.
- 3. Children have been poisoned due to accidental exposure and consumption of e-liquids.





Appendix: Additional resources 2 Truths and a Lie - Lungs are for Life!

- 1. Vapes do not contain nicotine. (LIE)
- 2. People can experience second-hand exposure to the aerosol released from vapes. (TRUTH)
- 3. Vaping nicotine can lead to physical dependence and addiction. (TRUTH)

Many vapes do contain nicotine.

The amount of nicotine can vary from none or low levels to levels similar to 3 packages of cigarettes.

- 1. Vapes only produce vapour. (LIE)
- 2. In addition to what's listed on the label, the aersol from vaping devices contains new chemicals are produced when the e-liquid is heated. (TRUTH)
- 3. The aerosol from vapes contains toxic chemicals. (TRUTH)

Vapes produce aerosol, not vapour

Canadian Lung Association BRFATHF

Despite what the industry says, there is no "vapour" in vaping.

- 1. It's possible to get addicted to nicotine after using it only a few times. (TRUTH)
- 2. Smoking and vaping are bad for your lungs, but research shows they don't harm your brain. (LIE)
- 3. People think vaping and smoking can help relieve stress, but it actually makes stress worse over the longer term. (TRUTH)

Smoking and vaping are bad for your lungs as well as your brain and nervous system, your heart and circulatory system and your teeth and gums.

Even though vaping is relatively new, there is plenty of research evidence showing how it can harm the body, just like smoking cigarettes.

- 1. In Ontario, it is illegal to sell or provide vaping products to anyone under the age of 19. (TRUTH)
- 2. More and more schools are banning vapes. (TRUTH)
- 3. Unlike cigarettes, vapes can be used anywhere. (LIE)

Vapes cannot be used everywhere. In fact, regulations in Ontario require people who vape to respect the same laws as people who smoke.

According to the Smoke-Free Ontario, 2017 there are many places you cannot vape (or smoke), including on and within 20 metres of school property, playgrounds and sporting and spectator areas and in motor vehicles while another person who is less than 16 years of age is present.

- 1. When using vapes, there is a risk of explosions of electronics and batteries. (TRUTH)
- 2. Health Canada currently regulates the chemical ingredients in e-liquid. (LIE)
- 3. Children have been poisoned due to accidental exposure and consumption of e-liquids. (TRUTH)

Health Canada does not currently regulate the toxic additives in e-liquids.

The concern with unregulated e-liquids is that they may contain substances that could pose health risks when heated and inhaled.



Appendix: Additional resources True or false? - Lungs are for Life!

	Name		
1.	Vapes are battery-operated devices that come in many forms.	True	False
2.	It is legal for retailers to advertise on billboards, buses and pop-up stores in Canada.	True	False
3.	It is legal to vape in enclosed public places.	True	False
4.	Vaping is less harmful than smoking tobacco.	True	False
4.	Nicotine is a stimulant drug that speeds up the messages travelling between the brain and body	True	False
5.	Some of the effects of smoking cigarettes include dizziness, headaches, fast heartbeat and bad breath.	True	False
6.	It is illegal to sell vapes that contain nicotine.	True	False
7.	The liquid form of nicotine used in vapes has a risk of poisoning.	True	False





Canadian Lung Association B R E A T H E

Lungs are for life!

Appendix: Additional resources True or false? - Lungs are for Life!

1. Vapes are battery-operated devices that come in many forms.

Vapes are battery-powered devices which heat a cartridge containing nicotine, flavouring and other chemicals into an aerosol which is inhaled through a mouthpiece, and then exhaled by the user as a visible aerosol.

It is legal for retailers to advertise on billboards, buses and pop-up stores in Canada.	False
In Canada, there are severe restrictions on advertising or promoting vapes and vape products. The law forbids it.	
3. It is legal to vape in enclosed public places.	False
It is against the law in Ontario to use a vape inside public spaces, including workplaces and restaurants, and other places where smoking is already prohibited.	
4. Vaping is less harmful than smoking tobacco.	False
Any drug has the potential to cause harm. Vaping may expose you to potentially harmful chemicals. Young people should avoid vaping: it is not risk-free.	
5. Nicotine is a stimulant drug that speeds up the messages travelling between the brain and body	True
6. Some of the effects of smoking cigarettes include dizziness, headaches, fast heartbeat and bad breath.	True
As with any drug, the effects may differ for each person; however, these are some effects that are usually experienced.	
7. It is illegal to sell vapes that contain nicotine.	False
Regardless of whether they contain nicotine or not, vapes may only be sold by a retailer with a license, and may only be purchased by persons 19+ in Ontario.	
8. There is a risk of nicotine poisoning from the liquid form of nicotine used in vapes.	True

Children have been poisoned by ingesting vaping liquid as it is often flavoured, making it more appealing; ingesting even a small amount of liquid nicotine can be serious and even life-threatening for a child.

Answer key

True

Appendix: Additional resources Quiz - Lungs are for Life!

- 1. Which advertising techniques have been used by vaping companies?
 - a. Well-known online influencers
 - b. Claims that vaping is healthier than smoking
 - c. "Big cloud" competitions
 - d. All of the above
- 2. Vapes are also referred to as:
 - a. E-cigs
 - b. E-hookahs
 - c. Mods
 - d. All of the above
- 3. The term "vaping" is inaccurate because:
 - a. Vaping devices actually produce smoke
 - b. E-cigarettes/vape pens produce a water vapour
 - c. Vapes produce an aerosol, not water vapour
 - d. Vaping is only a "hipster" term
- 4. Second-hand smoke:
 - a. Can affect young children and pets
 - b. Can affect an entire apartment building
 - c. Is smoke released by those smoking
 - d. All of the above
- 5. Small children are at risk of what when it comes to vaping?
 - a. Second-hand vape aerosols
 - b. Third-hand vape aerosols
 - c. Nicotine poisoning from e-liquid
 - d. All of the above

Canadian Lung Association B R E A T H E

Name

- 6. Nicotine is highly addictive. The easiest way to prevent an addiction to nicotine is:
 - a. Not to smoke or vape in the first place
 - b. Use nicotine only once a week
 - c. Switch from smoking cigarettes to vaping
 - d. None of the above
- 7. Eye, throat, and _____ irritations are common among vape users.
 - a. Skin
 - b. Hair
 - c. Ear
 - d. None of the above
- 8. Which of these substances is safe for your lungs?
 - a. Mould
 - b. Smoke
 - c. Oxygen
 - d. Nitrobenzene
- 9. Vaping can expose you to many cancer-causing, toxic substances from:
 - a. Ingredients in the flavouring
 - b. Materials used to make the device
 - c. By-products of heating
 - d. All of the above
- 10. What makes vape products so addictive?
 - a. Candy or fruit flavouring
 - b. Nicotine
 - c. Heavy metals
 - d. The design and toppes taree for life!

Appendix: Additional resources Quiz - Lungs are for Life!

11. Nicotine:

- a. Can be fatal in high doses
- b. Can be addictive after only a few uses
- c. Changes the chemistry of the brain
- d. All of the above

12. What is third-hand smoke?

- a. Smoke that comes from a chimney
- b. Chemicals left in the environment after smoking
- c. A term made up by healthcare providers
- d. Occurs when people share cigarettes

13. Vapes _____ have nicotine.

- a. Never
- b. Sometimes
- c. Very often
- d. Always
- 14. In Ontario, vaping is permitted:
 - a. Outside of schools
 - b. In "Vaping" sections of restaurants
 - c. In cars with children
 - d. None of the above

15. When throw away a vaping device, you are throwing

- away:
 - a. Single-use plastic waste
 - b. Electronic waste
 - c. Hazardous waste
 - d. All of the above
- 16. Things that might help you deal with stress include:
 - a. Making time for fun
 - b. Not exercising
 - c. Eating a diet high in fat
 - d. None of the above
- 17. Smoking can cause:
 - a. lung cancer
 - b. chicken pox
 - c. bloating
 - d. freckles
- 18. People who vape are more likely to be _____

compared with people who have never vaped.

- a. athletes
- b. diagnosed with depression
- c. tall
- d. Toronto Maple Leaf fans





Appendix: Additional resources

Quiz - Lungs are for Life!

1. Which advertising techniques have been used by vaping companies?

- a. Well-known online influencers
- b. Claims that vaping is healthier than smoking
- c. "Big cloud" competitions
- d. All of the above

2. Vapes are also referred to as:

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3. The term "vaping" is inaccurate because:

- a. Vaping devices actually produce smoke
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- c. <u>Vapes produce an aerosol, not water vapour</u>
- d. Vaping is only a "hipster" term

6. Nicotine is highly addictive. The easiest way to prevent an addiction to nicotine is:

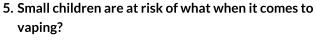
- a. Not to smoke or vape in the first place
- b. Use nicotine only once a week
- c. Switch from smoking cigarettes to vaping $% \left({{{\mathbf{x}}_{i}}} \right)$
- d. None of the above
- 7. Eye, throat, and _____ irritations are common among vape users.
 - a. <u>Skin</u>
 - b. Hair
 - c. Ear
 - d. None of the above

8. Which of these substances is safe for your lungs?

- a. Mould
- b. Smoke
- c. <u>Oxygen</u>
- d. Nitrobenzene

- 4. Second-hand smoke:
 - a. Can affect young children and pets
 - b. Can affect an entire apartment building
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 - d. All of the above
- 10. What makes vape products so addictive?
 - a. Candy or fruit flavouring
 - b. <u>Nicotine</u>
 - c. Heavy metals
 - d. The design and colour of the device



- a. Second-hand vape aerosols
- b. Third-hand vape aerosols
- c. Nicotine poisoning from e-liquid
- d. All of the above



Answer key

Appendix: Student quizzes Quiz - Lungs are for Life!

Answer key

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- d. All of the above

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- a. Smoke that comes from a chimney
- b. <u>Chemicals left in the environment after</u> <u>smoking</u>
- c. A term made up by healthcare providers
- d. Occurs when people share cigarettes

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- b. In "Vaping" sections of restaurants
- c. In cars with children
- d. None of the above

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- a. Single-use plastic waste
- b. Electronic waste
- c. Hazardous waste
- d. All of the above

16. Things that might help you deal with stress include:

- a. <u>Making time for fun</u>
- b. Not exercising
- c. Eating a diet high in fat
- d. None of the above

17. Smoking can cause:

- a. <u>lung cancer</u>
- b. chicken pox
- c. bloating
- d. freckles

18. People who vape are more likely to be _____ compared with people who have never vaped.

- a. athletes
- b. diagnosed with depression
- c. tall
- d. Toronto Maple Leaf fans





Appendix: Additional resources More activities

Activity

The time machine

Acting impulsively and making short-sighted decisions is part of the learning process for youth as they prepare for adulthood. But youth who are consistently unable to think about and plan ahead for the future tend to experience more negative outcomes, including deliquency and substance abuse.

Encouraging youth to picture and describe their desired future can help them learn to consider longer-term consequences when making important decisions, such as the decision to be nicotine free.

Writing a letter to their future selves is a way for them to acknowledge the difficulty of this choice, to congratulate themselves for making it and to remind themselves the reasons they chose not to vape or smoke.

Have the students seal their letters in an envelope with their name and date on the outside. Let them know that only they can open the envelope. Gather the envelopes and return them to the students at the end of the year (or at another time that you feel will be valuable for them).

Instructions for students

There are many reasons to choose to be nicotine free. For some young people, it's not worth the harm to their lungs, brain and other parts of their body. For others it might be the affect it has on mental health, or it could be the cost. Some youth worry about how smoking or vaping would affect them as an athlete or maybe they've seen the negative affects that smoking or vaping has had on a family member.

Consider what's important to you in your life and how these people or activities would be harmed by your choice to vape or smoke. What would you want to say to your future self if they're tempted to try vaping or smoking?

Write a letter to remind yourself what's important to you and why you've made this choice. Include both the reasons behind your choice and also <u>why</u> this matters to you. For example "Because vaping is expensive" could be one of your reasons, but why does this matter? Is there a hobby or activity that's important to you that you'd rather spend your money on?

And remember: this is not always an easy choice to make. Make sure to congratulate yourselves for saying 'no' and remaining committed to a vape-free and smoke-free future.





Appendix: Additional resources More activities

Activity

Advocating for change

To advocate is to publicly speak up for change. Effective advocacy involves identifying a specific change or changes that you want to see, gathering evidence to support that change, identifying who has the authority to make that change and communicating with those individuals or groups about the changes you would like to see and why.

- 1. What is a change you'd like to see when it comes to vaping and/or smoking? This could be something within your own school, something in your town or province, or even a change you want to see across Canada.
- 2. What information supports your position?
- 3. What can you say or do to address any misinformation or arguments from vaping companies or others?
- 4. Sharing your message in more than one way can make your advocacy more effective. Using social media can help bring attention to your issue and can inspire others to become advocates themselves. Communicating directly with decision makers by writing e-mails or letters is a way to make sure your message reaches the right person. Select at least two of the following ways to share your message:
 - a letter to a decision maker
 - a 30-to-45-second video
 - a poster
 - a social media campaign (3-4 different posts)
- 5. For each item, be prepared to answer the following questions:
 - Who is the target audience?
 - Why did you choose this way to communicate your message?
 - Are there any ways in which this change might benefit your target audience?
 - What action do you want them to take? Is it clear in your campaign?





Quitting nicotine

Many young people want to quit vaping or smoking, but have reasons they think they can't.

"I can't cope without it."

Are you sure? You could look for different ways to cope with stress. Many young people who quit say they feel a huge sense of freedom afterwards.

"I enjoy vaping."

Do you really? Most young people can't actually say why they enjoy vaping or smoking. Many also feel they would be happier if they quit. Nicotine is such an addictive substance, it tricks your brain into thinking you want to vape or smoke. Luckily you can re-train your brain so you don't have the urge any more.

Getting off of nicotine can positively impact how you feel everyday. It's true that there are many factors that affect your daily mental health, however, if you've noticed your anxiety increasing, or worsening depression symptoms since you started vaping, it's probably not a coincidence. Quitting nicotine can reduce your stress, anxiety, and depression. Studies show that stopping the intake of nicotine from vaping or smoking may have as strong an impact on your mental health as taking antidepressants!

If you're considering quitting vaping or smoking it can be easier when you prepare in advance, have a plan, and talk to your healthcare provider.

Handling setbacks

It's not easy, and setbacks happen. Don't let a slip be a reason to give up on quitting. It can feel discouraging, but remind yourself how far you've come. Be proud of all the times that you didn't reach for your vape or smokes. You have not failed, and you're not back to square one.

Figure out why it happened, and come up with a plan to prevent it from happening again. Think about what you will do differently the next time you find yourself in the same situation. Re-commit to the quit.

Asking for help

Talking to your teacher or school counsellor is a great first step. Here are some other ways to get support:

Be specific about what you need from your family and friends.

Whether you need tough love or something softer, describe what type of support you want, and how often you want their help. For example, if you are feeling stressed or anxious after school, ask a friend to help keep you distracted.

Talk to a healthcare provider.

Talk to your doctor or another healthcare provider about how to quit vaping or smoking. Ask how they might be able to help you. They can offer support and resources.





Steps you can take to help you quit vaping or smoking

1. List your reasons for quitting

Make a list of all the reasons that you want to quit vaping or smoking and put it in a place where you will see it often. It might help to keep the list on your phone. It will help you to stay on track. Possible reasons include:

- *I want to have more money.* No money, no funny. Save the cash you spend each week, month, or year on vaping or smoking.
- *I want my dating life to be better*. Up your kissing game. People often say that they prefer dating and kissing people who don't vape or smoke.
- *I want a job.* Make the job hunt easier. You have a better chance of being hired if you're don't vape or smoke.
- I want to feel better. You won't get tired as quickly and will have more restful sleeps. Good vibes only.
- *I want to be in control my life.* No more racing outside between classes or at lunch because you need to vape or smoke. Fill up your own cup.

When you feel the urge to vape or smoke, take a look at the list to remind yourself why you want to quit.

2. Pick a quit date

Take a look at your calendar and be strategic about when it would be a good time to quit. Choose a date that is no more than a week or two away. Try not to pick a quit date that will be stressful, like the day before a big test, or where there's too many temptations, like a party.

3. Imagine your vape or smoke-free self

Start thinking of yourself as someone who doesn't vape or smoke. This will help separate you from vaping or smoking and give you the confidence to quit and stay quit.

4. Build your team

Spend time with people who make you feel good about your decision and who want you to quit. Friends, family, and others can be there to listen, boost your mood and distract you from using your vape or smoking.

5. Deal with people who don't get it

Some important people in your life may not understand your decision to quit. If you have friends who vape or smoke, ask them not to do it around you. You can also say why you don't want to: "I'm trying to quit smoking," or "I have asthma, and vaping makes it worse."

Also, ask the person not to ask you again: "I'm cool with my decision, so don't ask me again." If they pressure you, ask them to respect your opinion: "I don't give you a hard time, so why are you giving me a hard time?"

If that doesn't work you may need to take a break from them when you first quit. Let them know that you need to make quitting vaping or smoking your priority right now.



6. Cut back your nicotine use

Limit the number of time(s) you use any nicotine product. Try to use less than daily. If using daily, try not to use more than once every 3 to 4 hours.

7. Learn your triggers

You may crave nicotine. But certain people (friends who vape or smoke), feelings (stressing about an exam), or situations (a big party), can also cause you to want to vape or smoke. It's important to know your triggers.

8. Beat your triggers

Think about how you'll fight cravings and deal with withdrawal symptoms. Having strategies for handling thoughts about vaping or smoking or uncomfortable feelings will help you stay quit in those tough moments.

Do something else.	Get active.
When a craving hits, stop what you're doing and do something different. Sometimes, just changing your routine helps you shake off a craving.	Take a quick walk, or do 10 pushups, or go up and down the stairs a few times. Physical activity, even in short bursts, can help boost your energy and beat a craving.
Stop and breathe.	Text with or talk to someone.
Breathe in slowly through your nose and breathe out slowly through your mouth. Repeat this 10 times to help you relax until the craving passes.	Supportive people in your life can help you stay strong in moments when the urges are tough to handle
Play a game on your phone.	Revisit your list of reasons for quitting.
Tune out of your troubles with a game to distract you from a craving.	Look back at your list and remind yourself to keep calm and remember all the awesome reasons you're quitting.

RenGrelate Viouting Linapilags are temporary and will fade over time the longer you stay quit.

Create a personalized quit plan to help you stay confident and motivated to quit vaping or smoking. Having a plan for handling the tough times can help you stay on track and increases your chances of quitting successfully.





My quit plan

Quitting vaping or smoking can be easier if you have a plan. Making your personalized quit plan will keep you on track, help you through hard times, and increase your chances of quitting. Making a plan takes you through the steps that will get you ready for quitting and it can get you motivated too.

Step 1. Set your quit date

Choose a day that is no more than a week or two away. Picking a day too far away gives you time to change your mind. Set yourself up for success. Try not to pick a date that will be stressful, like the day of a test, concert, or big game.



I've picked my quit date. My quit date is:



I'm not ready yet (that's okay, you can still start a plan)

Step 2. Figure out how much money you spend on vaping and/or smoking.

Estimate how much, on average, you spend per week. Include everything: vapes, pods, vape juice, etc.

I spend about \$ _____ on vaping/smoking a week.

Step 3. Think about how vaping and/or smoking affects your life.

Thinking about how vaping or smoking is affecting your life can help you understand why you want to quit and motivate you when times get tough.

Since I've started vaping/smoking, I've noticed that:

It's affecting my health	I don't feel like myself
l'm spending too much money	It's hard to concentrate
It's hard to get vapes/smokes	l'm getting in trouble for vaping/smoking
It's hurting my sports performance	Some of my relationships have changed
l'm losing control over my life	

Step 4. Think about your reasons for quitting.

Knowing your reasons for why you want to quit can help you stay motivated and on track, especially in difficult moments. If you don't see your reason for quitting on this list, write your reason in your phone and revisit it when times get tough.

I want to quit:

To take back control.	For my health
To do better in school	To feel better about myself
To set a good example	Because my parents want me to quit
Because my friends are quitting too	To save money

Step 5. Think about what makes you want to vape or smoke.

After you stop vaping or smoking, certain places and situations can remind you of vaping or smoking and make it hard to stay vape-or smoke-free. Use this list to find out what makes you want to vape or smoke. These are common situations, but there are more.

Social situations	Everyday situations
Seeing someone else vape/smoke	Going into the school bathroom
Smelling aerosol from a vape	Seeing ads for vapes throughout the day
Hanging out with friends who vape, smoke or use another tobacco product	Studying or doing homework Watching TV or playing video games
Going to a party or other social event	☐ Walking or driving
Studying with friends	
Being offered a vape or new flavour	
Seeing vapes or smoking on social media	
N	Nemotions
Waking up in the morning	Stressed or overwhelmed
Feeling like I need to vape or smoke all the time	Anxious, worried, or nervous
Feeling irritable if I haven't vaped or smoked in a while	Lonely
Having a hard time concentrating	Bored
Feeling restless or jumpy	Sad, down, or depressed
Step 6. Plan ahead for when a craving hits.	Frustrated or upset after an argument
	Happy or excited

Now come up with a strategy to fight the urge. Knowing what you'll do ahead of time will help you until the feeling of wanting to vape or smoke goes away. Come up with more ideas to try on your own. Keep trying new things until you find what works for you.

Distract myself by changing my focus on what I'm doing or	Drink a glass of water.
thinking about.Look back at my reasons to quit for motivation.	Notice the craving, take some deep breaths, then feel it pass away over time.
Have a mint or chew some gum.	Text or call a friend or family member who supports me in quitting vaping or smoking.
Play a game or make a video on my phone.	
Go somewhere people are not vaping or smoking, or that it is not allowed.	Call or have an online chat with a trained quit coach, or members of a peer support group.





Step 7. Get support to help you quit

Thinking about who can support you and being prepared to handle hard times can keep you on track and increase your chances of saying goodbye to vaping or smoking forever. Pick as many options as you want.

For support, I will:

Tell a friend that I am quitting.	Share my plans to quit with a trusted adult, like a teacher, school counsellor, or close family member.
Talk to my parents, elders or guardians.	
Ask for help from a doctor, nurse, respiratory therapist or pharmacist.	Call or chat online with a quit coach to get confidential help with quitting.
	I don't need support right now.

Step 8. Prepare for your Quit Day.

Thinking about how you'll get ready to quit and how you'll handle difficult situations can help you stay committed.

To help me succeed, I will:

Throw away my vapes, e-liquid bottles, pods, and	Ask my friends to not offer me their vape or smokes.
chargers on or before Quit Day. Throw away my smokes and matches.	Practice what to do or say if I am around other people who are vaping or smoking.
Hide lighters and ashtrays on or before Quit Day.	Switch up my routine to avoid reminders of vaping or smoking.
Distract myself.	I'm okay not planning right now.

Step 9. Quit all products that contain tobacco or nicotine.

Some people who vape or smoke use other tobacco and nicotine products. To give yourself the best chance for quitting, it's important to quit using everything.

If I use other tobacco or nicotine products, I will plan to stop using those too.





Additional resources - Alignment with Ontario curriculum

HEALTH & PHYSICAL EDUCATION

A. Social-Emotional Learning Skills, D. Healthy Living

	Stress management & coping	Personal safety & injury prevention	Substance abuse, addiction & related behaviours	Mental health literacy
Grade 7	A1.2	D2.2	D2.3	
Grade 6	A1.2	D2.3	D1.2, D2.4	D1.4
Grade 7	A1.2		D1.2, D2.3, D3.2	
Grade 8	A1.2	D2.2	D1.3	D2.4

C: Healthy Living

Personal safety & injury prevention		Substance abuse, addiction & related
Grade 9	C3.2	C1.3, C3.4
Grade 10	C1.1, C2.3, C3.2	C1.2, C2.4, C3.3

LANGUAGE

A. Literacy Connections & Applications

Grades 5-9	A2. Digital Media Literacy A2.3 Research & information literacy	
	A2.3 Research & information literacy	
	A2.4 Forms, conventions & techniques	
	A2.5 Media, Audience & production	
	A2.4 Forms, conventions & techniques A2.5 Media, Audience & production	

ENGLISH

Strand: Media studies

Grade 10	1. Understanding media texts 2. Understanding media forms, conventions & techniques	
SCIENCE		
B. Life Systems, C. Matter & Energy		
	Human health & body systems	Properties of & changes in matter
Grade 5	B1.1, B2.1, B2.3, B2.4	C1.2, C2.2, C2.5, C2.6, C2.7

Appendix: Additional resources Smoking and vaping laws



Where you can't smoke or vape in Ontario

If you smoke or vape where it is not allowed, you risk a \$1,000 fine. If you get caught again, you could be fined up to \$5,000.

According to the Smoke-Free Ontario Act, 2017, you <u>cannot</u> smoke or vape:

• in any public or private school's indoor space, outdoor grounds including playgrounds and sports

fields and public areas within 20 metres of the school's grounds.

- on a patio of any bar or restaurant, including the public areas within 9 metres of the patio.
- in a car or other motor vehicle if anyone inside is age 15 years or younger.
- in the entire premise of any child care centre or place that provides an early years program or service.
- on children's playgrounds or public areas within 20 metres of children's playgrounds.
- on publicly owned sporting areas, their fan/viewing areas and public areas within 20 metres of these places
- in the reserved seating area of outdoor sports arenas or entertainment venues.
- in an outdoor shelter that has more than two walls and a roof if the public or employees are invited to use it (for example, a bus shelter).
- on the outdoor grounds of a community recreational facility and any public areas within 20 metres of its grounds.
- in an enclosed workplace, such as an office building, a trailer office on a construction site or in a delivery truck.
- in an enclosed public place. An enclosed public place means any part of a building, structure or vehicle that is covered by a roof and where the public is invited or has access.
- in any common indoor areas of condos, apartment buildings or college and university residences. This includes elevators, stairwells, hallways, parking garages, laundry facilities, lobbies, exercise areas or party or entertainment rooms.





Appendix: Additional resources Smoking and vaping laws



Vaping laws in Canada and around the world

Flavour bans

E-liquid other than tobacco flavor is banned in Nova Scotia, Prince Edward Island, New Brunswick, Northwest Territories, Nunavut and Quebec.

All flavours other than tobacco are also banned in Finland, Estonia, Hungary, the Netherlands, the Ukraine, Lithuania and Latvia.

Only tobacco or menthol flavour is available in Denmark, Estonia, and Slovenia.

The sale of flavoured vaping liquids is restricted to specialty vape shops where children are not permitted to enter in British Columbia, Ontario and Saskatchewan.

Vaping bans

Disposable vapes are banned in both the United Kingdom and New Zealand.

In Australia, all vapes, whether they contain nicotine or not, can only be sold in a pharmacy for the purpose of helping people to quit smoking or manage nicotine dependence. Disposable vaping devices cannot be imported into the country

More than 30 countries around the world have banned e-cigarettes or vapes, including Mexico, Brazil, India and Thailand.

The Canadian Lung Association has been advocating with the federal government for a country-wide ban on all flavoured vapes in an effort to reduce youth vaping.



Additional resources - Other nicotine products



A new kid on the block

5 things you should know about nicotine pouches

Nicotine pouches are the latest product from Big Tobacco that can lead to nicotine addiction in children and teens — and they're even more accessible than vaping products.

- Nicotine pouches are the latest evolution of smokeless tobacco products. Sold under the brand name Zonnic and made by Imperial Tobacco, nicotine pouches were approved for sale in Canada in July 2023.
- 2. Nicotine pouches are used similarly to chewing tobacco and snus, however they contain no tobacco. Each small teabag-like pouch contains powdered nicotine and flavouring. A pouch is placed between the cheek and gum for a gradual release of nicotine.
- 3. Each pouch contains 3 to 4 mg of nicotine. That's as much as 3 to 4 cigarettes.
- Nicotine pouches are classified as a natural health product for nicotine replacement therapy (smoking cessation). As such, there is currently no legal minimum age to purchase this product.
- 5. Nicotine pouches come in a variety of flavours that appeal to youth. They are popular with athletes (especially in hockey and football) as they are a stimulant that doesn't affect lung capacity.

In November 2023, the Canadian Lung Association, along with Action on Smoking and Health, Canadian Cancer Society, Coalition québécoise pour le contrôle du tabac, Heart & Stroke, and Physicians for a Smoke-Free Canada held a press conference on Parliament Hill in Ottawa to call for urgent action to prevent these products from being sold to children. Read more on our website.

Canadian Lung Association B R E A T H E



Additional resources - For more information

Canadian sources

The Canadian Lung Association www.lung.ca

How to talk to your child about vaping : A vaping conversation guide from the Canadian Lung Association www.lung.ca/smoking-vaping/how-talk-your-child-about-vaping

Smoke-free Curious www.smokefreecurious.ca

Tobacco control. Canadian Cancer Society www.cancer.ca/en/get-involved/advocacy/what-we-are-doing/tobacco-control

Smokers Helpline. Canadian Cancer Society www.smokershelpline.ca

Consider the consequences of vaping. Health Canada www.canada.ca/en/services/health/campaigns/vaping.html

Tobacco and e-Cigarettes. Public Health Ontario www.publichealthontario.ca/en/Diseases-and-Conditions/Mental-IIIness-Substance-Use/Tobacco

Regulating tobacco and vaping products. Government of Canada www.canada.ca/en/health-canada/services/smoking-tobacco/regulating-tobacco-vaping.html

US sources

Kids and smoking. American Lung Associaiton www.lung.org/quit-smoking/helping-teens-quit/kids-and-smoking

Truth Initiative www.truthinitiative.org

The real cost of vaping. US Food & Drug Administration (FDA) www.fda.gov/tobacco-products/public-health-education-campaigns/real-cost-campaign

The Tobacco Prevention Toolkit. Stanford University School of Medicine. www.med.stanford.edu/tobaccopreventiontoolkit.html

Take Down Tobacco. Campaign for Tobacco-Free Kids. www.takedowntobacco.org











