

Youth Vaping in Schools:

A Collaborative Approach

PRESENTED BY:

Tanya Matthews, BSc

Health Promotion and
Community Well-being
Consultant

Provincial Lead: Tobacco &
Nicotine Alternatives NLHS



**NL Health
Services**

Melissa Moore, BA, BEd

Program and Education
Coordinator, ACT



The Current Nicotine Landscape

Youth nicotine use has changed significantly in **visibility, frequency** and **delivery method**.

CIGARETTES



- Visible use
- Distinct odour
- Use naturally interrupted
- Easier to detect

VAPES



- Easy to conceal
- Frequent “grazing” use
- High nicotine exposure
- Flavoured products

NICOTINE POUCHES



- Invisible use
- Smoke-free & device-free
- Easy to use anywhere
- Increasing youth curiosity

Nicotine products are evolving.
Nicotine is now available in formats that are cheap, sweet and discreet.

How Vaping Works

Vapes are highly efficient, electronic nicotine delivery devices that heat a liquid to create an aerosol that is inhaled into the lungs.



MOUTHPIECE

Aerosol is inhaled through the mouthpiece.

E-LIQUID (POD)

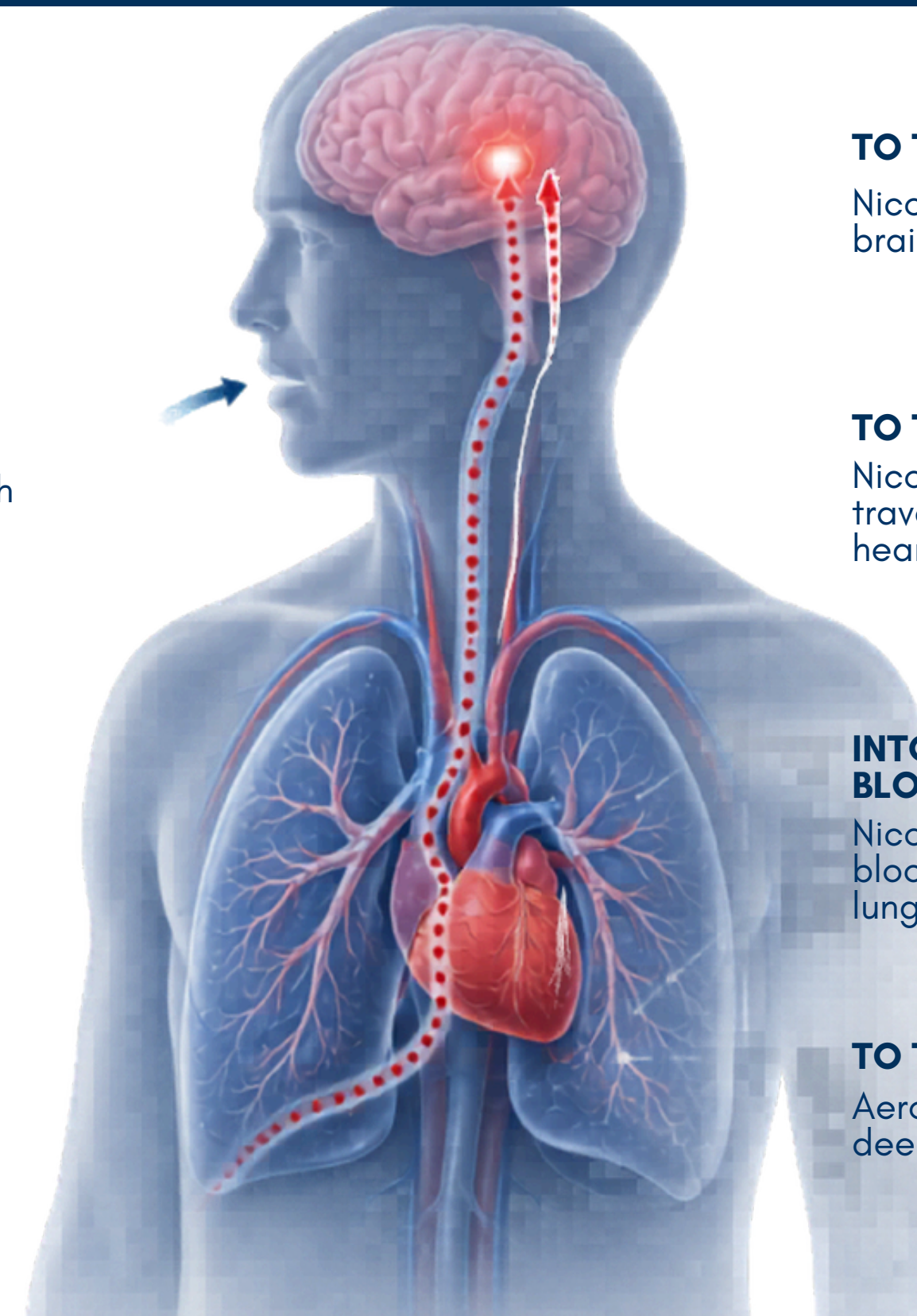
The pod contains e-liquid with nicotine, flavourings, and other chemicals.

HEATING COIL

The coil heats the e-liquid to create an aerosol.

BATTERY

The battery powers the device and heats the coil.



TO THE BRAIN

Nicotine reaches the brain within seconds.

TO THE HEART

Nicotine-rich blood travels directly to the heart.

INTO THE BLOODSTREAM

Nicotine enters the bloodstream through the lungs.

TO THE LUNGS

Aerosol is inhaled deep into the lungs.

Inside E-Liquid

Propylene Glycol & Vegetable Glycerin

Carrier liquids used to create the aerosol.

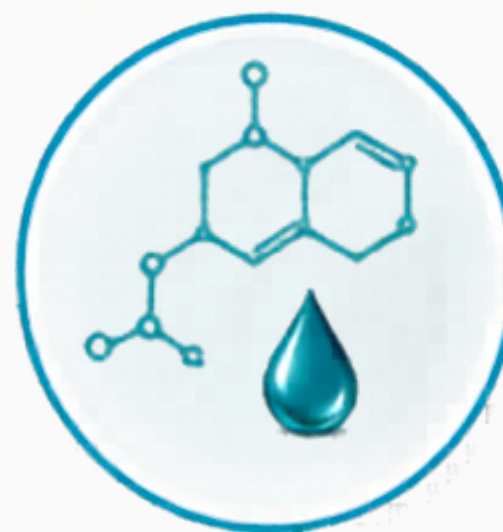
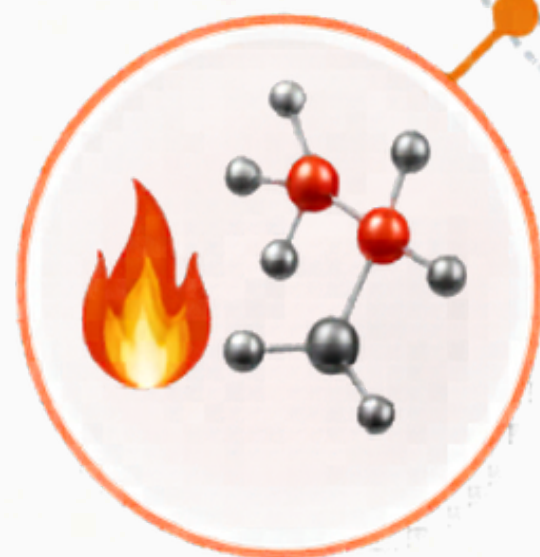


CHEMICALS FORMED DURING HEATING

Some chemicals can form when e-liquid is heated.

- Formaldehyde
- Acetaldehyde
- Benzaldehyde
- Acrolein
- Other VOCs*

*Volatile Organic Compounds



NICOTINE

A highly addictive drug.

E-LIQUID

A mixture of ingredients.



FLAVOURINGS

Fruit, candy, mint, dessert, and other chemically designed flavour profiles.



ULTRA-FINE PARTICLES & METALS

Heating and aerosol generation can introduce:

- Nickel
- Lead
- Tin
- Aluminum
- Other ultra-fine particles

These particles can be inhaled deep into the lungs.



E-liquid is a sophisticated nicotine delivery system.

Data: Only Part of The Story

What the Data Tells Us



40%

NL students gr. 7-12
have tried vaping



58%

NL students gr. 10-12
have tried vaping



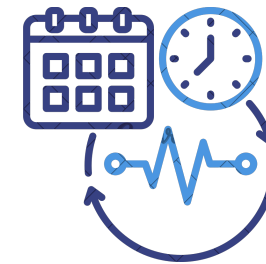
61%

Youth report using
fruit/candy flavours

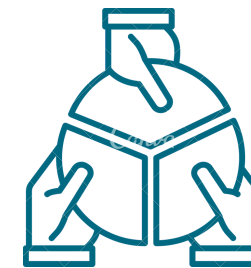
What Schools are Seeing



Longitudinal observations of
a micro-sample



Vaping frequency & locations



Access, sharing & social
dynamics

The Nicotine Concentration Calculation

For a relative comparable, cigarettes deliver 1 mg /cigarette

Nicotine Concentration is capped at 20mg/ml in legal products sold in Canada

Even small devices contain large amounts of nicotine.

Concentration



20 mg/ml

x

volume



2.0 ml

=

40
mg

of nicotine

Multiply concentration (mg/ml) x volume (ml)

FOR COMPARISON

40
mg/ml

=



2 packs of cigarettes (40)
= 40 mg of nicotine

Nicotine salts and **cooling additives** have changed nicotine consumption by making high levels of nicotine easier to inhale and less irritating to the throat.

Nicotine & Vaping – Known Health Effects



RESPIRATORY EFFECTS

- **Airway irritation**
- **Coughing / wheezing**
- **Reduced exercise tolerance**



CARDIOVASCULAR EFFECTS

- **Increased heart rate**
- **Increased blood pressure**
- **Stress on the cardiovascular system**



Not all long-term effects of vaping on physical health and well-being are known at this time.

Nicotine & The Young Brain

The human brain is not fully mature until about age 25.



Young brains are very sensitive to nicotine.

Dependence develops quickly, even with low dose and low exposure. Earlier use increases the likelihood of long-term nicotine dependence.



Chemical and physical changes occur.

The brain rapidly builds more nicotine receptors in response to exposure, thereby increasing tolerance and dependence.



Nicotine is a neuroteratogen.

Neuroteratogens interfere with normal brain development, causing long-term effects when exposure happens during critical growth stages.



Nicotine generates positive and negative reinforcement.

Nicotine dependence is driven by rewarding use and the onset of strong withdrawal symptoms when nicotine levels drop.



The adolescent brain faces two challenges:

Maturation and ongoing development, and nicotine's interference with that process.

Imbalances Caused by Nicotine

COGNITIVE DISRUPTIONS

- Impaired critical thinking, decision making & impulse control
- Negative impact on moods & mood regulation
- Compromised concentration, learning & memory
- Intensified feelings of anxiety, stress, and symptoms of depression & ADHD



CHEMICAL DISTORTIONS

- + **Dopamine**
Feel-good chemical
- + **Endorphins**
Creates the buzz
- + **Serotonin**
Calming effect and mood regulation
- + **Norepnipherine**
Increases feelings of alertness, attention & causes a short energy boost

Broader Implications of Youth Vaping



Vaping devices
are small, easy
to conceal, and
hard to detect.

Students have difficulty getting through a full class without vaping.

Students experience
Increased irritability,
restlessness, or
distraction.

Students vape
everywhere –
inappropriate
spaces & times.

Leads to
frequent use,
more nicotine
dependence.

4 C's of Addiction:

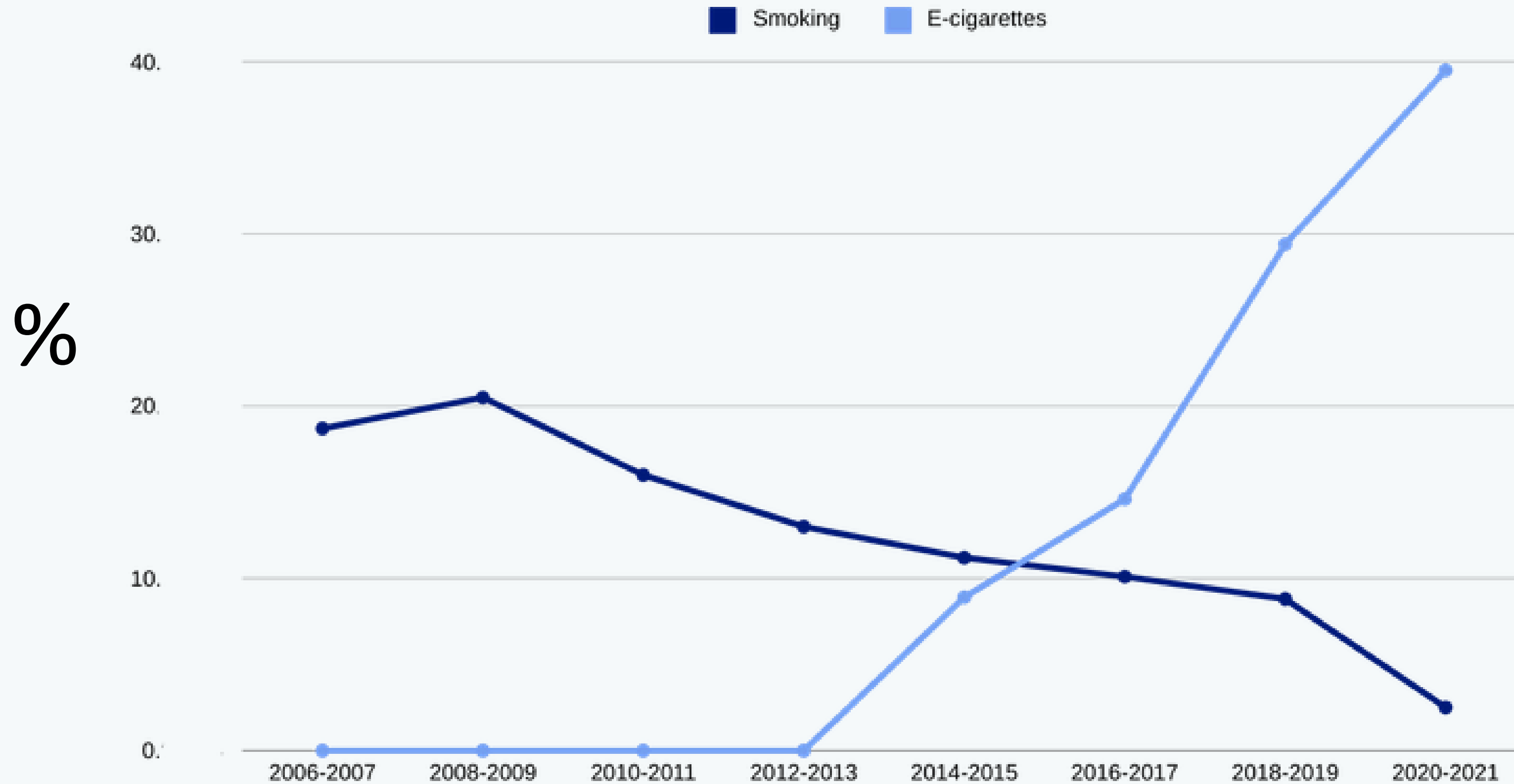
- Craving
- Compulsion
- Consequences
- Control

Symptoms of withdrawal, that are relieved by nicotine use.

Supervision and enforcement issues means managing vaping-related behaviours.

Smoking & E-cigarette Use, Past 30 Days.

Grades 10-12 students NL (CSTADS)



Schools: A Powerful Place to Begin



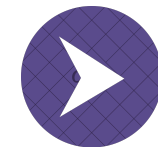
Schools can:



Support early **prevention**.



Reduce **normalization** of nicotine use.



Build student **awareness** and skills.



Connect students to **support**.

Schools are one of the few places where all youth can be reached consistently over time.



A Consistent Approach to Classroom-Based Vaping Education

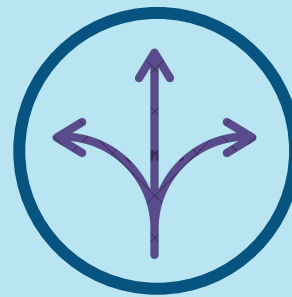
Designed to support Teachers:



Ready-to-use
classroom
materials



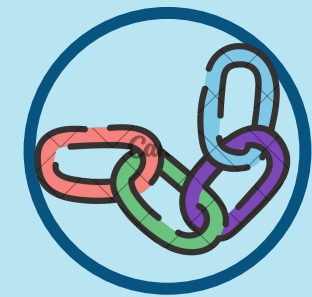
Minimal
preparation
required



Flexible
implementation



Student-centred
learning



Curriculum
Connected

Every grade includes:



Educator
Handbook



Lesson
Plan



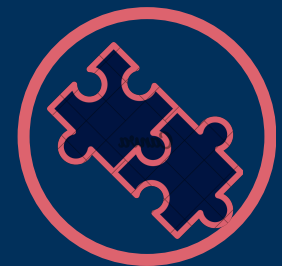
Interactive
PowerPoint /
Kahoot Game



Student
Workbook



Teacher
Notes &
Answer Key



Extension
Activities

Rooted in Best Practice

Substance use education should:



Begin before onset of use and continue as use increases or becomes normalized.

Provide a series of structured sessions and reinforced across multiple years.

Shift and expand as the focus changes from safety and protection in earlier years to guidance, self-regulation and autonomous decision-making in later years.

The Joint Consortium for School Health's Addressing Substance Use in Canadian Schools - Effective Substance Use Education : A Knowledge Kit for Teachers (2009)

Drug Education Best Practice for Health, Community and Youth Workers: A Practical and Accessible Tool-kit (Darcy, C., 2021)

Include skill development focused on:

- personal and social
- coping
- decision-making
- resistance/refusal

For the Classroom

Evidence-informed educational resources designed to support prevention, awareness, and student well-being throughout NL's K-12 schools.



Practical. **Flexible.** **Classroom-ready.**

Vaping: The EX-Files



Vaping: The EX Files



Explain

Grade 4: Explain Grade 5: Examine Grade 6: Expose

Let's EXPLAIN Vaping

Explaining vaping through activities that build awareness and vocabulary.

Vaping: The EX Files



Examine

Grade 4: Explain Grade 5: Examine Grade 6: Expose

Let's EXAMINE Vaping

Examining health effects, nicotine dependance, and refusal skills.

Vaping: The EX Files



Expose

Grade 4: Explain Grade 5: Examine Grade 6: Expose

Let's EXPOSE VAPING

Building decision-making and media literacy skills, and exposing industry tactics.

Vaping: The EX Files

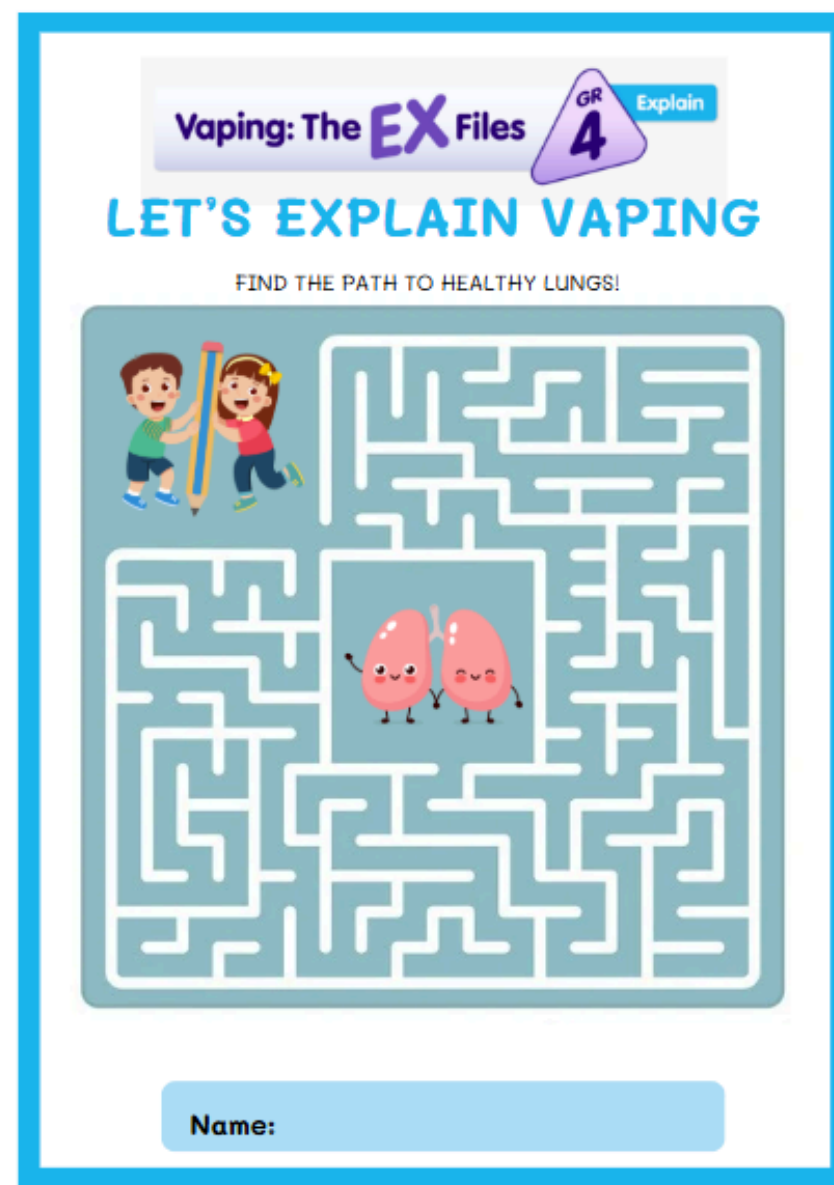
GR
4

Explain

Grade 4: Explain

Grade 5: Examine

Grade 6: Expose



LET'S EXPLAIN VAPING POWERPOINT GAME

Question 9:



What does nicotine do to your heart?

A. Makes it pump faster

B. Makes it pump slower

C. Has no effect



STUDENT WORKBOOK ACTIVITIES

1. FIND THE PATH TO HEALTHY LUNGS
2. LET'S EXPLAIN VAPING
3. WORD SEARCH
4. JAMIE'S CHOICE
5. LUNGS ARE FOR LIFE

KEY CONCEPTS

Grade 4 introduces students to vaping in an age-appropriate way, building foundational knowledge and preparing them to recognize vaping products and related messaging.

KEY LEARNING AREAS

- ✓ **What vaping is**
- ✓ **Healthy living, vape-free**
- ✓ **Basic health awareness**
- ✓ **Vocabulary & understanding**

Building foundational awareness before misinformation and social influences take hold.

Vaping: The EX Files

GR
5

Examine

Grade 4: Explain

Grade 5: Examine

Grade 6: Expose

Vaping: The EX Files

GR
5

Examine

Grade 4: Explain

Grade 5: Examine

Grade 6: Expose

LET'S EXAMINE VAPING

STUDENT WORKBOOK

Names: _____

Living Vape Free

They say, "Just try," but I say no,
I've got my strength, I let it show.
No need for vapes with toxic haze,
Just clear blue skies and brighter days

My heart is strong, my lungs are clear,
No whispers filled with doubt or fear.
I run, I laugh, I live vape-free,
I choose the best of life for me.

So stand up tall, make choices wise,
Don't let the haze block out your skies.
Breathe easy, live bold, and you will see -
The best life is always lived vape-free.

1 Stanzas & Sketches

In the space below, draw and colour a picture to reflect the message of this poem.



LET'S EXAMINE VAPING POWERPOINT GAME

QUESTION 4



How can the aerosol from vapes affect people immediately?



A. Cough

D. Upset stomach

B. Itchy/watery eyes

E. Sore throat

C. Headache

F. All of the above



STUDENT WORKBOOK ACTIVITIES

1. Stanzas & Sketches
2. Think First
3. Foul Play: The Truth About Vaping
4. Nicotine and Your Brain
5. Vape Smarts
6. Vape Escapes

KEY CONCEPTS

Students examine how nicotine affects the body and why some products can be difficult to stop using. This approach encourages critical thinking about choices that affect health and well-being.

KEY LEARNING AREAS

- ✓ **Health effects of vaping**
- ✓ **Nicotine dependence**
- ✓ **Refusal skills**
- ✓ **Making healthy choices**

Moving beyond awareness towards healthy decision-making and understanding risks.

Vaping: The EX Files



Expose

Grade 4: Explain

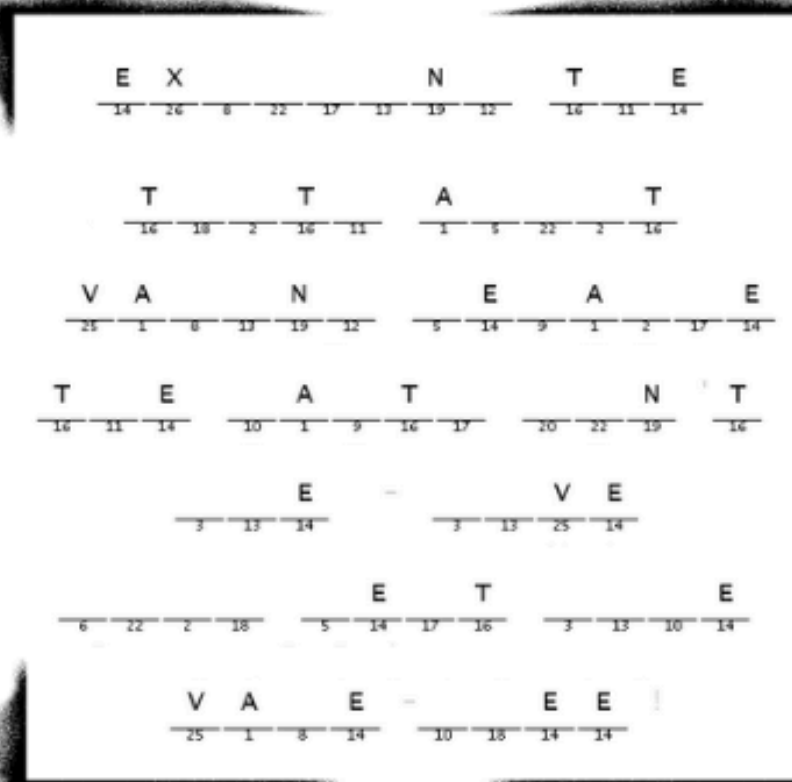
Grade 5: Examine

Grade 6: Expose

Vaping: The EX Files



Grade 6 Student Workbook



A	B	C	D	E	F	G	H	I	J	K	L	M
1				14								
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
19						16		25		26		

MEDIA LITERACY ACTIVITY



<https://www.youtube.com/watch?v=d3aPiGnSe2I>

STUDENT WORKBOOK ACTIVITIES

- Vaping- Big Risks in Small Devices
- Crossword Challenge
- Vape Facts Exposed: Tell Truth from Lie
- Vape IQ – Show what you Know
- Flavoured Vapes Hook Kids
- Youth Voices Loud & Clear: Letter Campaign
- Eight Seconds of Truth

KEY CONCEPTS

Students examine why vaping products appeal to young people and expose marketing and other external influences that can affect choices and behaviours.

KEY LEARNING AREAS

- ✓ **Media Literacy**
- ✓ **Industry tactics**
- ✓ **Decision-making skills**
- ✓ **Social influences & peer pressure**

Preparing students to critically evaluate vaping influences before entering junior high

As students move into Junior & Senior High...

As students progress, learning shifts from awareness to investigating real-world issues, examining evidence, and making informed decisions.



Resources are designed to support students as they encounter more complex influences and situations.

Nicotine Exposé Kits



Nicotine **Exposé** Kit

1

Grades 7 & 8

Builds foundational knowledge about vaping, nicotine dependence, health risks, peer pressure, coping strategies, and personal decision-making.

Nicotine **Exposé** Kit

2

Grades 9 & 10

Deepens critical thinking about vaping through health impacts, nicotine dependence, marketing, media literacy, industry influence, environmental concerns, & evidence-based decision-making.

Nicotine **Exposé** Kit

3

Grades 11 & 12*

Focuses on nicotine dependence, quitting, self-awareness, managing cravings and triggers, peer support, and connecting with trusted quit supports.

*Not curriculum connected

Nicotine **Exposé** Kit

1

Grade 7&8

GRADE 7 Building Foundations for PREVENTION

Activity 2 - Reading Comprehension

The Brain That Vapes

Have you ever wondered what vaping does to a young person's brain? Vaping is the act of breathing in the aerosol from an electronic cigarette or other vaping device. These devices heat a liquid called e-liquid or vape liquid, which usually contains nicotine. It's important to understand that there are risks to your health and your growing body. Scientists are concerned about how vaping can affect the teenage brain.

Research has shown that vaping can have negative effects on the brain, especially in teenagers. Nicotine, which is found in most vapes, is a highly addictive substance that can affect brain development. It can make learning, concentration, and impulse control more difficult. Some of these changes in the brain can be permanent and affect how we feel, think and act.

Teenagers who vape are more likely to try other tobacco products and may develop other addictions in the future. Teenagers who vape are three times more likely to report problems with attention, memory, and decision-making compared to their peers who don't vape.

The effects of nicotine on the young brain can be long-lasting and have serious consequences. Nicotine is toxic for adolescents, because at this stage of development, their brains are more sensitive to both the addictiveness and harm of nicotine. Nicotine can change brain cell activity in the parts of the brain that control attention, learning, and memory. It can also worsen anxiety and depression.

Remember, nicotine use can have detrimental effects on the developing teenage brain. The effects of nicotine on the adolescent brain can be long-lasting and increase the risk of addiction to other substances. It's important for teenagers to understand the potential dangers of vaping in order to make good choices about their health.

Reading Summary

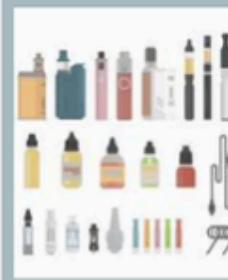
- Vaping can harm the developing teenage brain and cause long-lasting effects.
- Nicotine found in vaping products can interfere with memory, learning, focus, impulse control, and brain development.
- Vaping can increase the risk of attention disorders and future substance abuse.

Activity 5 - Discover & Report

VAPING LIFT THE CLOUD & FIND THE TRUTH

The What & How

Vaping is when you puff on a battery-operated device, often called a vape. They are also called e-cigarettes, mods, vape pens, or tank systems. Vapes contain "e-liquid" which is heated to create an aerosol that can be inhaled through the mouth into the lungs.



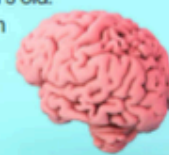
Inhale what...??

Vaping devices contain e-liquid. Some devices are pre-filled, some can exchange pods, others have a tank to fill. People who vape aren't breathing in "water vapour". They are breathing in an aerosol which is a combination of substances and chemicals that may cause harm. Most e-liquids contain nicotine, which is a very addictive drug. Vaping liquids come in many flavours that young people find appealing.

Nicotine & Your Brain

Vaping liquids may have high levels of nicotine. Using nicotine can affect brain development, which continues until you are about 25 years old.

- affect your learning, memory, attention and concentration
- affect your behaviour
- lead to the development of learning and anxiety disorders
- make symptoms of depression and anxiety worse
- lead to long-term use of cigarettes or e-cigarettes.



Building awareness and critical thinking before
nicotine dependence becomes established.

Students investigate, discuss, analyze, and reflect
rather than simply receiving information.

Nicotine **Exposé** Kit

1

Grade 7&8

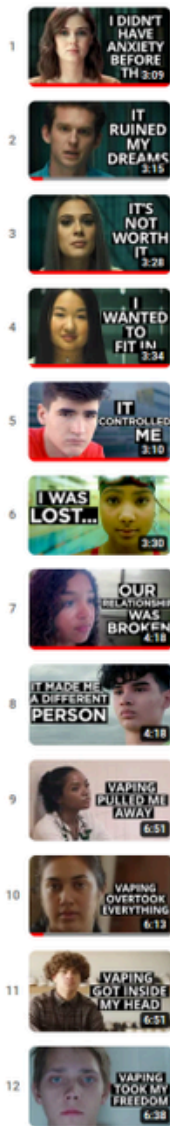
GRADE 8

Building Foundations for PREVENTION

Activity 7 - My Vaping Mistake

Reading and hearing about the risks of vaping is one way to learn, but how about hearing real people share their personal experience?

These video are presented by The Real Cost. All episodes can be found here: <https://bit.ly/VapingMistake>



Watch as many as you like, but choose 2 to answer the following questions. The videos I chose for this exercise are:

My choice for Video 1:

My choice for Video 2:

How did vaping affect the people sharing their vaping stories?

Video 1

Video 2

Did these videos change the way you think or feel about vaping? Please explain in 2-4 sentences or points.

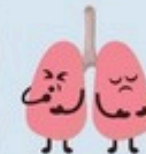
What part of your life would you want to protect from being negatively affected by vaping?

There's something fishy about those flavours...

Hooking the next generation of nicotine customers!

1 Just for your delicate lungs...

Many vape flavours are safe to eat in food but the flavourings have not been tested enough to know if they are safe to heat up and inhale.



specially and deviously designed...

2



The vape/tobacco industry knows that flavours attract young people to try their products.

3 and made just for you,

This industry targets young people. Millions of dollars are spent to design the device, the package, the colours and the flavour names with you in mind.



...this is heart breaking.

4



Flavoring chemicals can damage your heart and blood vessels, increase heart disease risk, and damage lung tissue.

Choice Board

Instructions: Pick one activity from the choice board below. Highlight or circle the activity you plan to complete. Be respectful with your words and imagery of Indigenous culture and ceremonial tobacco.

 Write a Poem Write a poem about ceremonial tobacco in Indigenous cultures.	 Create a Kahoot Game Create a Kahoot Game that reviews the differences between ceremonial and commercial tobacco. Include at least 8 questions minimum.	 Write/rewrite a Song Write /rewrite the lyrics of a song to convey a tobacco and or vape free message.
 Create a Collage Create a collage of at least 5 images distinguishing between ceremonial tobacco and commercial tobacco. On the bottom of the collage, explain your collection in 2-3 sentences.	PICK <u>ONE</u> ACTIVITY TO COMPLETE	
 Make a Video Make a 15-30 second video that shows or explains the differences between ceremonial and commercial tobacco. You may include an interview with an elder or indigenous person/organization.	 Write a Speech Write a speech on the purpose and meaning of a pipe ceremony	 Make a Slideshow Create an 8-10 slide presentation that explains the differences between ceremonial and commercial tobacco. Include thevarious ways that sacred tobacco is used by indigenous peoples.

Activities move beyond information delivery and actively engage students in examining vaping-related influences, risks and real-life decision making.

GRADE 9

Strengthening Critical Thinking and Decision-Making

Activity 4

Nicotine by the Numbers

Nicotine is a very addictive drug. Vape liquids often contain very high amounts of nicotine. The more nicotine a young person uses, the higher the risk for addiction and other negative effects on the brain.

- How much nicotine a vape liquid contains must be printed on products and shared with people who purchase/use vapes – this is called the Nicotine Concentration.
- The maximum nicotine concentration for e-liquid products legally sold in Canada is 20 mg/ml which means that there are 20 milligrams of nicotine in each milliliter of e-liquid.
- Products can have lower concentrations, or claim to be nicotine free. Sometimes products labeled as nicotine free have been found to actually have nicotine in them.
- To compare, one cigarette delivers approximately 1 mg of nicotine, so a regular pack of 20 cigarettes provides 20 mg of nicotine to smokers. While we can calculate how much nicotine is in a vape, we don't know for sure how much of that nicotine is absorbed into your body.
- To calculate the amount of nicotine in the following vaping products:

multiply the nicotine concentration x the volume of e-liquid.

VUSE Banana Ice  Nicotine Concentration = 18 mg/ml Volume of pod = 2.0 ml 2 pods per package	Calculate the total amount of nicotine in this package :	
	How many packages of cigarettes would deliver the same amount of nicotine?	
	Why do you think the names of many vaping products have references to fruit and ice?	

Activity 3

Vaping in the Bathroom

Watch this short video and answer the following questions.

<https://www.youtube.com/watch?v=elieorX7eKo>
Your paragraph text



1. Define Toilet Plume.
2. What contents from the toilet become aerosolized (4 things)?
3. In this study, how high were toilet plumes projected into the air after flushing? Where is this in relation to your nose and mouth?
4. After learning about toilet plume, what do you think about hanging out in the bathroom longer than necessary?

Schools report that students are vaping in the bathrooms. Now that you know about toilet plume and that:

- Vaping is an exercise that requires deep breathing.
- Vaping in bathrooms means that students are staying in there for an extended period of time.
- While hanging out in the bathroom, people may be leaning on and touching more surfaces.
- Talking and laughing may trigger deeper inhalations.

Complete one of the following activities:

Digital or hand-drawn Poster
Create a poster with a message to discourage vaping in your school's bathrooms.

Slide show
Create a slide show that explains to a lower grade why vaping in bathrooms is not appropriate.

Poem or song
Write a poem or song that shares a message about how unwise it is to be vaping in the school's bathrooms.

<https://www.youtube.com/watch?v=elieorX7eKo&t=27s>

Activity 8

Meet Morgan



Meet Morgan

Vaping has emerged as the new, cool and popular nicotine product, especially among teens and young adults. Marketed with attractive designs, with sweet flavours such as fruit, candy and desserts, vaping has surpassed traditional cigarettes as the most commonly used nicotine products among youth. Vaping isn't harmless though - it is costing youth much more than they may have bargained for when those first few puffs were taken. Let's meet Morgan and see what vaping is costing them.

Financial Costs: A Drain on Your Wallet

How do teens afford things they want? Some may get an allowance, others may have to work. Money is either spent or saved. Some people are very goal-focused and can save a long time for a big purchase, such as a PS5, the latest phone, university tuition or even a car. Vaping will cost you those dollars. A reusable vape requires the initial purchase of the device and then the e-liquids, pods, or cartridges need regular replacement. Others may be buying disposables. Either way, for anyone who is vaping regularly, these costs add up quickly.

Morgan purchases one disposable vape each week, at \$21 each.
How much will Morgan spend in a year?

What would you do with this amount of money?

Health Costs - Cause it's Not Just Water Vapour!

Inhaling anything other than fresh air puts your health at risk. E-liquids contain nicotine, an addictive substance that can harm adolescent brain development. Beyond addiction, there's growing evidence that vaping can cause respiratory issues, lung damage, and cardiovascular problems. The long-term effects are still being investigated, but as more evidence becomes available, it is clear that vaping is causing harm and youth are paying a price with their health.

Morgan's disposable vape device has a nicotine concentration of 20mg/ml, and a 5 ml volume. This means that Morgan is exposed to 100mg of nicotine per week (equal to 100 cigarettes). Do you think this is a lot of nicotine for a young person? Why or why not?

Young people who vape are showing early signs of heart disease. What are the effects of nicotine on the heart and circulatory system?

Vaping is analyzed beyond the individual's choice, connecting it to social and school environments, industry influence, living with nicotine dependence and real-world implications.

GRADE 10

Expanding the Lens to Social and Global Impacts

Activity 4 Little Butts Big Problems



Little Butts Big Problems

Cigarette butts threaten our health – and our planet – with microplastics.

The tobacco industry has known all along that cigarette filters don't make smoking safer. Filters do not block all the bad chemicals in smoke. Filtered smoke feels milder on the throat, making it easier to take bigger and deeper puffs. This can actually increase the intake of dangerous chemicals and draw them deeper into the lungs. Cigarette butts are made of microplastic fibers and filter practically nothing. This puts us all at risk, even if we don't smoke. Microplastics from cigarette waste are contaminating our soil, food, and water around the world. Research suggests that when they wind up inside of us, microplastics are linked to intestinal damage, infertility, and DNA mutations. The tobacco industry is making the global plastic crisis worse.

Microplastic butts put us all at risk.

Tons of cigarette butts are tossed into the environment every year, where they leach toxic chemicals before turning into microplastic pollution that never decompose. Cigarette butts are made of thousands of tiny plastic fibers that are too small to clean up – and they end up everywhere. Cigarette butts are the number one source of litter. How does plastic in a cigarette butt biodegrade? That's the problem: it doesn't. It's how the tobacco industry became a top contributor to the global plastics crisis.

(Cigarette) filters are the deadliest fraud in the history of human civilization. They are put on cigarettes to save on the cost of cigarettes and to fool people – in the U.S., 400,000 people a year die from cigarettes – and those cigarettes almost all have "filters."
Robert Proctor
Professor, The History of Science,
Stanford University

E-Cigarette Wastes

- Disposable e-cigarettes are single-use plastic products and reach their end-of-life very quickly.
- Discarded e-liquid cartridges and refills contain nicotine salts and heavy metals, which leach into soil and waterways or can be ingested by wildlife.
- According to the Bureau of Investigative Journalism, at least five disposable e-cigarettes are being thrown away every second in the United States, amounting to 150 million devices per year – which together contain enough lithium for about 6,000 Teslas.



Investigate & Report

- Find and record a definition of microplastics.
- How many cigarettes are produced annually worldwide?
- What is the estimated mass of cigarette butt litter worldwide?
- Over 400,000 people die in the US each year from smoking. How many Canadians die each year as a result of smoking?
- What is one thing you can do to reduce microplastics in our environment?
- The International Energy Agency estimates the world will face lithium shortages by 2025.
 - What other products require lithium?
 - How do you feel about people using lithium resources for vaping?

Activity 10 Vaping: Data Speaks Louder Than Words

- Statistics Canada has monitored tobacco use for decades.
- Monitoring e-cigarette use began in 2013.
- Prior to 2018, e-cigarettes were unregulated yet available for sale.
- E-cigarettes were approved for legal sale in Canada in 2018.
- The federal minimum age to purchase is 18, however in NL the legal age is higher at 19 years of age.

Percentage of students reporting e-cigarette use	NL Youth: Grades 7 – 12 Total	Gr 7- 9 only	Gr 10- 12 only
2016-17	22.4	12.2	31.9
2018-19	29.9	17.0	42.1
2021-2022	26.6	15.3	39.5

Percentage of students reporting cigarette use	NL Youth: Grades 7 – 12 Total	Gr 7- 9 only	Gr 10- 12 only
2016-17	8.0	2.5	13.3
2018-19	5.0	1.6	8.4
2021-2022	2.5	1.2	4.0

Source: Canadian Student Tobacco, Alcohol and Drug Use Survey

- Using the data sets above, draw two graphs to demonstrate the trends in cigarette use and e-cigarette use for the time frames provided. (graph paper is on the following page)
 - Graph 1 (bar graph) - show the rates of e-cigarette use and cigarette use for the total population and each grade group. (HINT: you will have 6 categories on the x-axis, and each year will be a bar column)
 - Graph 2 (line graph) - Using the total **population data only**, plot the data sets for e-cigarette and cigarette use on a line graph to compare and see trends in the student use of each nicotine product.
 - Label the x and y axis of each graph.
 - Use colour to display the graph data (coloured columns and lines)
 - Title each graph and provide a legend for each one.
- Due to Covid, data was not collected during 2019 -2020 or 2020-21. Based on your line graph, what estimates can you infer for youth cigarette use and e-cigarette use during those years?
- Provinces in Atlantic Canada, including NL, have already or are considering raising the legal age to purchase cigarettes and vape products to age 21. Do you think this will change the trajectory of the graph for NL youth? Why or why not?

Activity 9 Vaping: You Tell Me

Read *'Exposing the Facts About Vaping.'*

Complete one of the following options based on the facts presented there. You may focus on just one or two categories, or complete a more comprehensive summary.

Create a slide show:

- 7 - 10 slides
- Include images to reinforce your points
- Include speaker's notes

Write a 500-700 word essay:

- Focused on one or two concerns about vaping
- Introductory paragraph, 2-3 subject paragraphs, and a concluding paragraph



<https://truthaboutvaping.ca/wp-content/uploads/2024/11/Exposing-the-Facts-about-Vaping-ENGLISH.pdf>

Create an Infographic

- Use Canva or other program
- Focus on one aspect of vaping: health, environment, effects of nicotine, etc.
- Be creative - use images, fonts and colours to deliver your messages

Activities at this level broaden the conversation by examining vaping as a public health, environmental, and social issue shaped by systems, industries, and communities.

Nicotine **Exposé** Kit

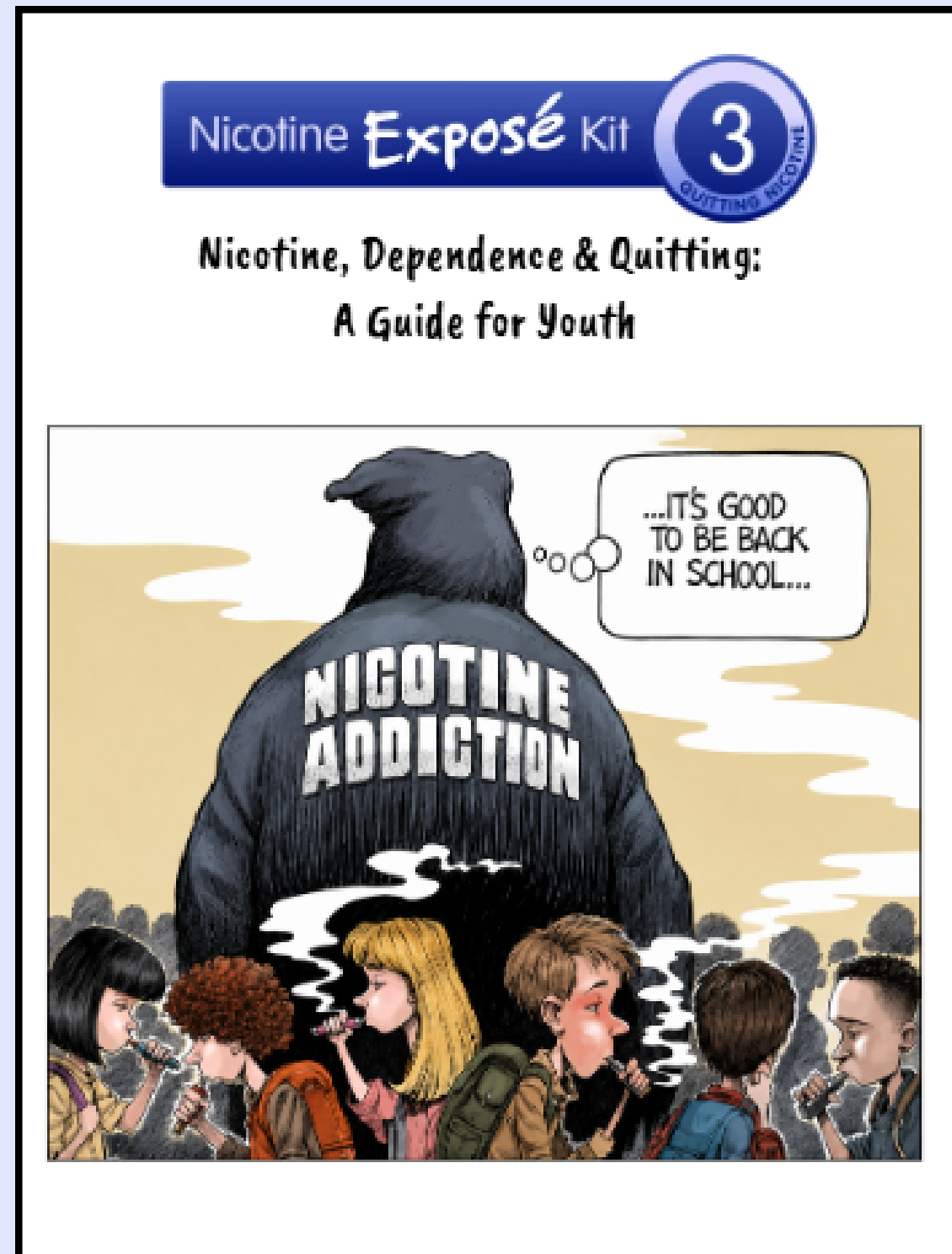


GRADE 11 & 12

Supporting Self-Awareness, Autonomy, and Change

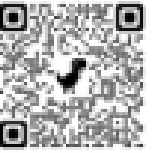
The Nicotine Exposé Kit 3 differs slightly from the other grades in that the workbook actually contains three different yet important elements:

1. Activities focused on nicotine dependence
2. Quitting support for friends
3. A self-help downloadable tool



4 Exit the Vaping Experience

Scan the QR code to find the site. If you don't vape explore this page and answer the following questions as if you were helping a friend or family member.



As you scroll, what catches your attention?

- ☐ The tone feels supportive
- ☐ It feels realistic for teens
- ☐ The ideas seem practical
- ☐ The page feels judgment-free
- ☐ Something surprised me

One thing that stood out:

What kinds of support did you notice were available? (Check any you remember seeing.)

- ☐ Text-based support
- ☐ Online chat
- ☐ Talking to a real person
- ☐ Support without a phone call
- ☐ An app or digital tool

Which option would you be most likely to use?

Which benefits of quitting seem most relevant to people your age?

- ☐ Better focus or concentration
- ☐ Feeling more in control
- ☐ Less stress around cravings
- ☐ Saving money
- ☐ Physical benefits (breathing, energy, sleep)
- ☐ Not planning life around vaping

One reason that feels meaningful:

Which statement fits you best right now?

- ☐ I'm not thinking about quitting, but it's useful to know support exists
- ☐ I'm curious about quitting someday
- ☐ I've thought about quitting before
- ☐ I'm trying to quit or cut back
- ☐ I don't vape, but this helped me understand support options

One thing you want to remember from this page:

Helping a Friend Quit Vaping

Your support matters

What Helps

- Listen more than you talk
- Let your friend lead conversations
- Be patient, change takes time
- Keep things judgement-free
- Remind them they're not weak for finding this hard

What support sounds like:

- "I'm here if you want to talk."
- "You don't have to quit all at once."
- "It makes sense that this is harder than people think."

Boundaries

- You are not responsible for your friend's choices or actions
- You do not have to be available all the time
- If you have safety concerns, it's ok to involve an adult
- It's ok to step back if this affects your own mental health

What Usually Doesn't Help

- Telling them to "Just quit."
- Nagging, checking in constantly, or tracking behaviour
- Scare tactics or health lectures
- Joking about addiction or lack of control
- Comparing them to someone else

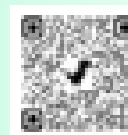
QUICK TIPS

- Check in, not check up
- Encourage, don't pressure
- No judging
- No timelines
- Respect their pace
- Just talking about quitting vaping is progress

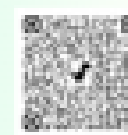
Helpful Sites



bridge the
gap



Exit the
vaping
Experience



I Quit for Me



"A friend is one of the nicest things you can have
and one of the best things you can be." - Douglas Pagels

YOU DECIDE

If quitting has crossed your mind...
you get to choose what happens next.

YOU CAN BEGIN AT ANY POINT.
IF YOU ARE:

- Not thinking about quitting
- Feeling unsure or mixed
- Tried before
- Trying quietly
- Making some progress towards quitting

YOU CAN START FROM THERE.

*It's normal to feel
unsure, curious,
stuck, or ready -
sometimes
all at once.*

*Nicotine is addictive,
which means
quitting often
requires more than
just willpower.*

If you decide you want to change,
It can help to:

- ✓ Know what support actually exists
- ✓ Have plans for tough moments
- ✓ Replace behaviours, build a new routine
- ✓ Use practical tools that meet your needs

Is it time for a change?

Scan into V-SHIFT

A private space to explore
your vaping, reflect, and
decide what comes next.



Vaping: Self-Help, Insights & Post Tool



9:32

Camera

truthaboutvaping.ca

Nicotine: Dependence by Design



Nicotine is designed to reach the brain quickly to trigger the release of feel-good chemicals.



With repeated use, your brain starts to expect then demand nicotine more often (this is a craving).

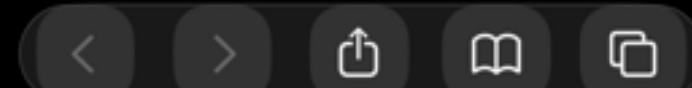


Cravings can feel strong or come out of nowhere. It's a brain reaction, not your willpower.



Your brain can reset over time, and even small steps away from nicotine helps it get there.

More about that reset...



Student Workbooks: Our Thoughts on Evaluation

Positions vaping education as part of curriculum

Places value on learning and conveys that this is not an optional health message.

Increases engagement and accountability

Requires students to apply, interpret and explain their learning.

Makes understanding visible and highlights class-wide themes.

Helps teachers identify common misconceptions, learning gaps and topics that may need further discussion.

Creates opportunities for feedback, correction and deeper learning

Provides a private way to clarify misunderstandings and reinforce accurate information.

Supports progressive learning across grade levels

Ensures students build the foundations needed for increasingly complex content.

Support for the Classroom Teacher



Recorded On-Demand Learning

Watch anytime, at your own pace.



Resource Implementation Support

Educator Manuals and lesson plans included



Ongoing Educator Support

Continued connection and access to new materials.

Professional learning helps educators feel confident addressing vaping, nicotine dependence, and quitting with students.

ACT Needs Teacher Feedback

Teachers are asked to complete a brief Google Form evaluation after using the resources.

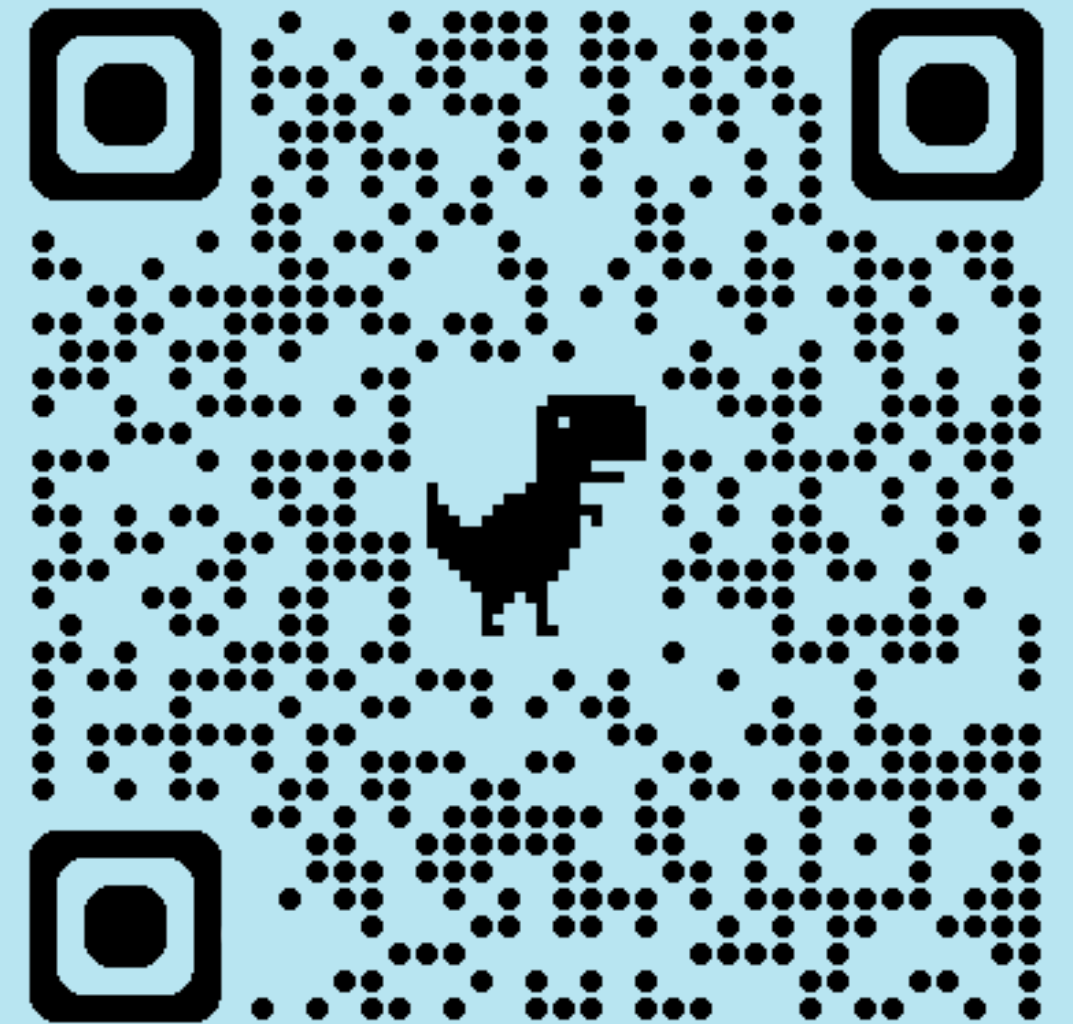
This feedback helps us:

- Understand how the materials worked in the classroom.
- Identify what was most useful for teachers and students.
- Improve activities, instructions and supporting materials.
- Guide future updates and resource development.

As a thank-you,
Teachers who complete an evaluation will be entered into an
annual draw for **one of three \$100 Amazon gift cards.**



Discussion



thank you

