



Module 2

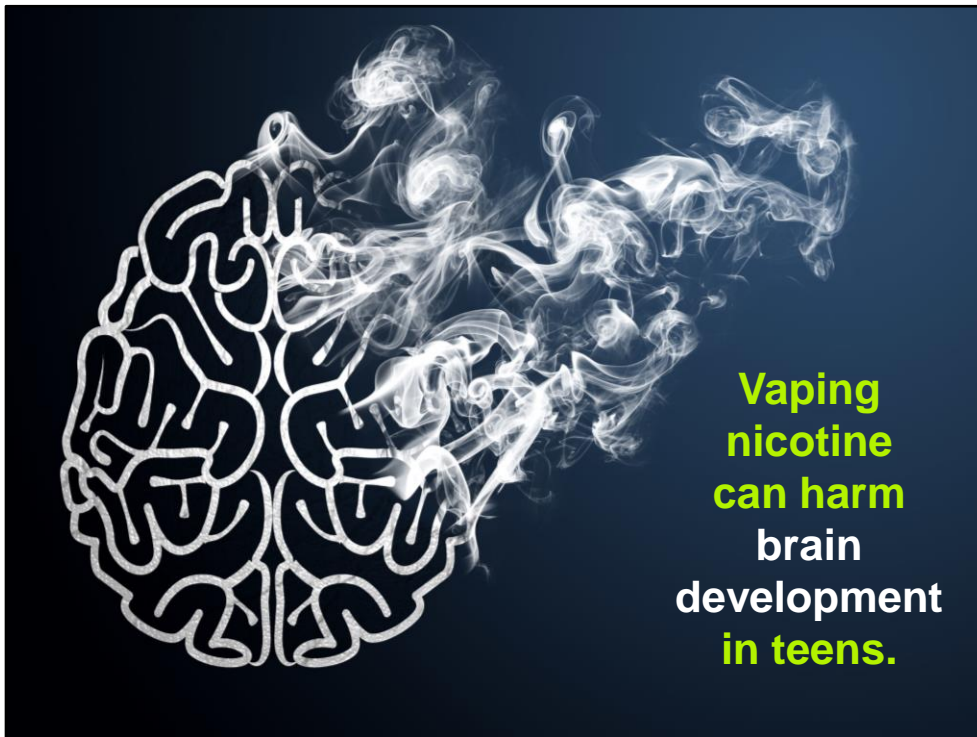
Harmful Effects of Nicotine



Health Canada

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/awareness-resources.html>

Video length: 30 seconds



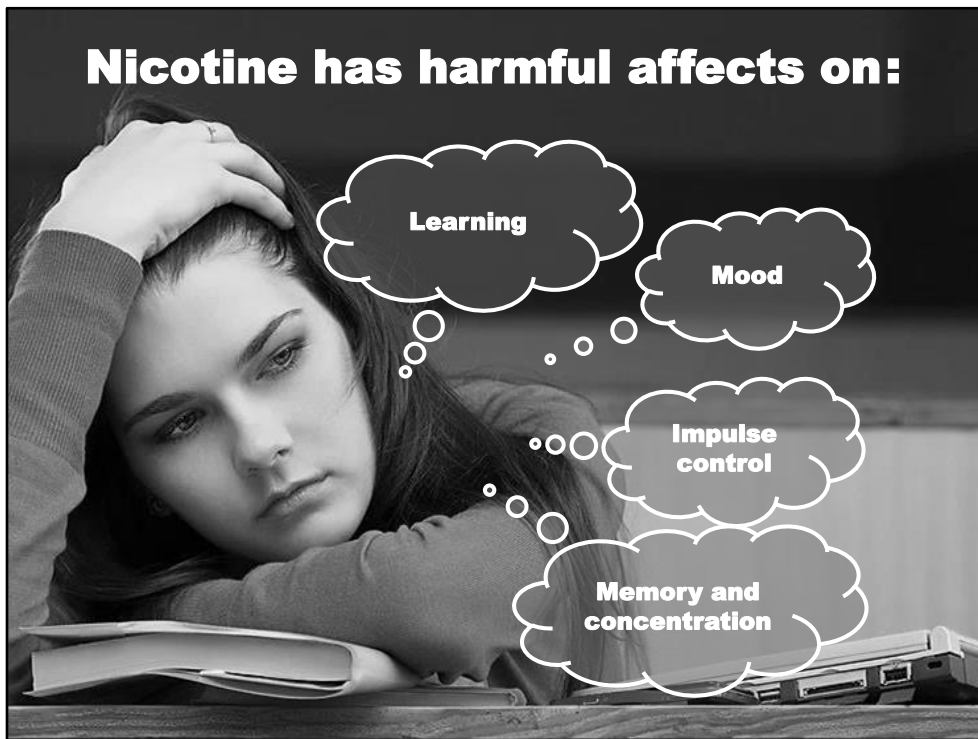
Kids and teens are especially susceptible to the harmful effects of nicotine because brain development continues throughout adolescence and into early adulthood.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/risks.html>

Vaping nicotine can interfere with healthy brain development until the mid-20s.

<https://www.canada.ca/en/services/health/publications/healthy-living/talking-teen-vaping-tip-sheet-parents.html>

Image source: Adobe Stock (purchase)



Nicotine can affect memory and concentration and is known to alter teen brain development.

Exposure to nicotine during adolescence may cause reduced impulse control as well as cognitive (learning) and behavioural (mood) problems.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/preventing/vaping.html>

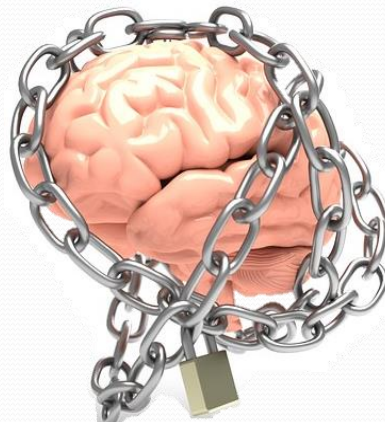
https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

Image source: PowerPoint Clipart

Nicotine

Nicotine can reach the brain in as little as **10 seconds**.

As soon as nicotine enters the body, it can create an **ADDICTION**.



The nicotine present in e-cigarettes results in addiction. As soon as nicotine is introduced into the body, we start to want it again.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/effects-smoking/smoking-your-body/nicotine-addiction.html>

Image source: Pixabay



**Vaping can create
a nicotine **addiction.****

Image source: Adobe Stock (purchase)



Nicotine is a highly addictive substance. Vaping nicotine could:

- lead to addiction;
- cause nicotine addiction among users who would not have started using nicotine otherwise.

They may become addicted to nicotine at lower levels of exposure than adults.

Exposure to nicotine could potentially predispose youth to addiction to other drugs.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/risks.html>

Image source: PowerPoint Clipart



**Test your
knowledge!**

True or false?

The nicotine present
in most e-cigarettes
affects brain development.

True



Answer:

True

Vaping products containing nicotine can alter brain development in teens.

<https://www.canada.ca/en/services/health/publications/healthy-living/talking-teen-vaping-tip-sheet-parents.html>

Exposure to nicotine in adolescence can lead to reduced impulse control and to cognitive and behavioural problems.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/risks.html>

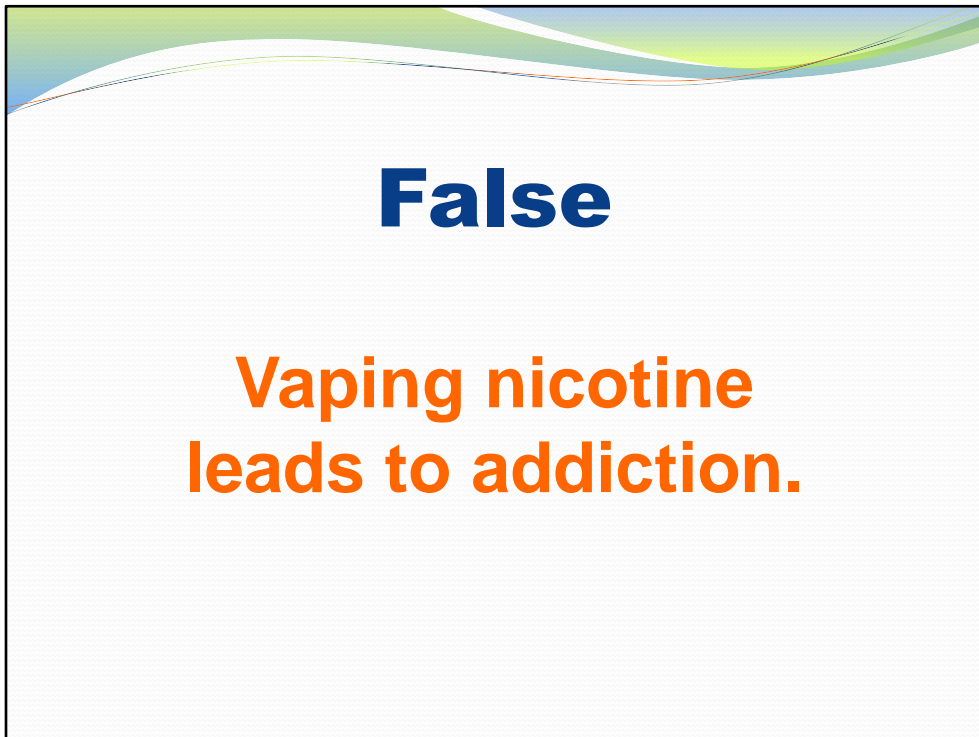
Image source: Pixabay

True or false?

Vaping nicotine does not
lead to addiction.



Image source: Pixabay



Answer:

False

Vaping nicotine leads to addiction. Vaping can deliver nicotine to your body, causing you to crave it more and more and leading to addiction and physical dependence.

<https://www.canada.ca/en/services/health/campaigns/vaping.html>

Image source: Pixabay

True or false?

**Nicotine addiction may
occur more quickly
in youth than adults.**

True



Answer:

True

In youth, nicotine addiction may occur more quickly than in adults.

<https://www.canada.ca/en/services/health/publications/healthy-living/talking-teen-vaping-tip-sheet-parents.html>

Youth are especially susceptible to the harmful effects of nicotine, particularly addiction. They can become addicted at lower levels of exposure than adults.

<https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping/risks.html>

Image source: Pixabay

True or false?

If I vape, I am at greater risk of starting to smoke.

True



Answer:

True

Many studies have shown that non-smoking youth who use e-cigarettes are three times more likely to smoke regular cigarettes one or two years later than if they had never used e-cigarettes.

<https://avoidthetrap.ca/>

Image source: Pixabay

True or false?

Nicotine addiction is similar to heroin or cocaine addiction.

True



Answer:

True

Nicotine causes chemical or biological changes in the brain. This effect is called psychoactive and although it is less dramatic than heroin or cocaine, the strength of the addiction is just as powerful. It is a “reinforcing” drug, which means that users desire the drug regardless of its damaging effects.

<https://www.canada.ca/en/health-canada/services/health-concerns/tobacco/smoking-your-body/addiction.html>

Image source: Pixabay

True or false?

**A nicotine-free e-cigarette
poses no danger
to your health.**



Image source: Pixabay



False

Even if a vaping product does not contain nicotine, there is still a risk of being exposed to other harmful chemicals.

Answer:

False

Even if a vaping product does not contain nicotine, there is still a risk of being exposed to other harmful chemicals.

<https://www.canada.ca/en/services/health/publications/healthy-living/talking-teen-vaping-tip-sheet-parents.html>

Image source: Pixabay

True or false?

**I only vaped once or twice
so I can't develop an addiction.**



Image source: Pixabay



False

**You can develop an addiction
even if you only smoke
e-cigarettes with nicotine
occasionally.**

Answer:

False

You can develop a dependency even if you only smoke e-cigarettes with nicotine occasionally.

<https://avoidthetrap.ca/>

Image source: Pixabay

Multiple choice

The brain continues to develop until about what age?

- a. 15 years
- b. 19 years
- c. 21 years
- d. 25 years



Answer:

d. 25 years

Nicotine is highly addictive and can harm brain development, which continues until about age 25.

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/factsheet/index.html

Image source: Pixabay



We suggest that you engage in a dialogue on the topics covered in this module and to encourage students to actively participate in group discussions.

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