

Chapter four

VAPING AND OTHER NICOTINE PRODUCTS

Model lesson plan 4

Bitesize activities:

Jordan North - Vaping

Vaping and the Law

Peer pressure - Vaping and other nicotine products

Vapes, cigarettes, pouches and the environment

Vaping emoji quiz

Factsheets/ worksheets

the negative effects of vaping on the body (blank and full versions)

Vaping and the Law

Making choices sheet (blank and full versions)

4. VAPING AND OTHER NICOTINE PRODUCTS MODEL LESSON PLAN

This selection of activities explores vaping, social norms and laws relating to vape products and the potential effect of vaping on health.

AGE RANGE: 13-15

LESSON LENGTH: 50 minutes



talkabouttrust.org/resources/schools/dane-model-lesson-4-vaping/

PREPARATION:

Identify any local sources for help, advice and support and add to the penultimate slide.

Ensure the animation can be played.

Decide on a question and three possible choices for the making choices activity.

Decide on whether to choose option A)

Vapes' effect on the environment OR option B)

If you were Prime Minister / First Minister What would you do?

Remove any slides you aren't intending to use.

NB Disposable vapes are expected to be banned in June 2025 in the UK.

LEARNING OBJECTIVES:

- Learn what vaping is and what vapes/puff bars can contain
- Explore the short and long term effects of nicotine
- Explore the differences between nicotine products
- Think about why someone may choose to vape
- Examine laws in the UK relating to vaping
- Consider the environmental impact of vaping.

INTENDED LEARNING OUTCOMES:

Students will be able to:

- Explain what vaping is and say what substances are in vape products
- Describe the difference between regulated and unregulated vapes
- Give a reason why young people specifically should avoid vaping
- Give examples of the short-term effects of nicotine on health and also the long-term effects
- List different nicotine products
- Give a reason why someone may choose to vape
- Know where to go for more information and support

RESOURCES:

Details of where students can go for support for vaping-related concerns both within school and locally.

How can vaping effect someone's health? blank talkabouttrust.org/resources/schools/negative-effects-of-vaping-on-the-body-blank/

How can vaping effect someone's health? blank talkabouttrust.org/resources/schools/negative-effects-of-vaping-on-the-body-full/

Vaping and the Law

talkabouttrust.org/schools/vaping-and-the-law/

4. VAPING AND OTHER NICOTINE PRODUCTS - MODEL LESSON PLAN

ICEBREAKER: (5 mins)

Introduction

Outline basic information about vaping (regulated and unregulated). Highlight that most contain nicotine which is addictive.

Vapes – The basics

Vaping is the use of an electronic device to inhale vapour derived from a heated liquid. The liquid can contain:

- propylene glycol and vegetable glycerine (which gives vapour)
- Nicotine, which is addictive
- Flavourings, colouring and sweeteners

- Disposable vape stick
- Reusable pod system
- Refillable vape
- Use/Juul style pod cartridge, reusable vape
- Disposable cig-a-like design
- Cartridge system reusable cig-a-like
- Refillable vape pen design
- Refillable vape pen design
- Box mod with oversize tank
- Large box mod, but legal sized tank

... to get us thinking

This animation has been created by a Leeds Uni of The Arts student to help us think about the effect of vaping on our bodies, brains and the environment.

He uses humour and irony to get important points and facts across for us to think about

Play the film clip.

Film Clip

What are the hazards and dangers of vaping?

Small group discussion

In small groups, get the students to discuss the list of questions to establish the level of knowledge on vaping.

DISCUSSION – small groups

Discuss these questions, if possible one question per group, for a few minutes. Feedback your answers to the whole class and talk through what you think the answers might be

- Why do you think most teenagers chose not to vape?
- Why might some adults choose to vape instead of smoking?
- Is vaping worse than smoking for young people?
- Why might under 18's vape although it's illegal?
- What percentage of 11 to 15-year-olds have tried vaping a few times or more? a) 10% b) 20% c) 30% d) 40% e) 50%
- What other products contain nicotine?

ACTIVITY 1: WHY DO MOST YOUNG PEOPLE CHOOSE NOT TO VAPE? (10 mins)

Ask students to work in pairs or small groups to create 2 lists of reasons for a) why most teenagers choose not to vape and b) why a small percentage of teenagers do try vaping.

Why do you think most teenagers chose not to vape?

Nearly a third (32%) of teenagers aged 13-18 say they have vaped at least once according to a survey carried out for [BBC Bitesize](#) and BBC Radio 5 Live. Of those who said they had vaped at least once, 55% said they were worried it would be bad for their health.

- because it's illegal
- they don't like the taste
- Bad for the planet, especially disposables
- Waste of money
- sport and fitness – affects lungs
- nicotine is addictive

Why do you think most teenagers chose not to vape?

8 in 10 under 18's choose not to vape regularly (more have tried once or twice)

- We are the experiment! No-one knows the effect of vaping yet
- We do know nicotine is addictive and changes the teenage brain
- Vapes contain up to 200 chemicals – some tested have been found to include nickel, THC
- Vapes sold on social media are unregulated so they can contain anything

Why do some people choose to use vapes?

Why might under 18's vape even though it's illegal?

- 10% because they like the taste
- 20% because other people use them
- 54% to give it a try (curiosity) (28% for those who have smoked)

- Just 2 in 10 young people under 15 have tried vaping.
- Most just want to see what it's like, but some feel pressured to try it

Smoking v Vaping

When a cigarette is smoked, tobacco is burnt, releasing more toxins and smoke is inhaled.

For all smokers trying to give up, vaping is less harmful to their health than smoking cigarettes. But this doesn't mean vaping is safe.

76,000 people die from smoking related diseases in the UK each year.

If someone smokes, vaping is much safer.

If someone doesn't smoke, they should avoid vaping.

Why might some adults choose to vape instead of smoking?

- Vapes help adults give up smoking
- Most vapes, like cigarettes or nicotine patches and gum

- give smokers the same stimulant as smoking
- do not contain the tar and other chemicals like carbon monoxide found in cigarettes that cause lung cancer, heart disease and other illnesses.
- contain high levels of nicotine

MORE ABOUT NICOTINE

Continue with the PowerPoint using the presenter notes covering information about nicotine, its effects on the teenage brain and other short and long-term effects on health. Outline other nicotine products other than vapes.

4. VAPING AND OTHER NICOTINE PRODUCTS - MODEL LESSON PLAN

ACTIVITY 2: The effects of nicotine on the brain (4 mins)

Read out the quote on the slide to the whole class as a prompt for the discussion questions:

During the discussion, encourage students to use a different coloured pen where possible to add on anything new they have learnt about the effects of nicotine or addiction.

Is nicotine worse for teenagers?

Martin Dockrell Tobacco Control Programme Lead Department of Health & Social Care

When you're a teenager your brain is developing fast. Nicotine gets into your brain and mimics natural brain chemicals that make you feel good. But it also stimulates your brain's appetite for more. It re-wires your brain, changing the brain chemistry so that soon your brain is craving more and more nicotine all the time. If you don't get some it makes you feel anxious, you can't concentrate on the things that matter. You're constantly thinking about when you can get more. You begin to lose control over your choice to vape or not.

The same is true of smoking.

Vaping worsens sleep quality and the mental health of young people.



ALCOHOL

THC and Spice in vapes

- Cannabis (weed) vape products can contain high levels of THC (the principal psychoactive constituent of cannabis)
- Because these products are unregulated, it's not possible to be sure about the amount of THC – or any other substance!
- Compared to smoking cannabis, vapes allow a larger amount of THC to be inhaled very quickly – this can lead to overdosing (most hospitalisations for vaping are linked to THC vapes).
- They are more likely to cause negative side effects or long-term health problems.
- Testing of these products has shown many are made with synthetic cannabis (Spice) which is highly dangerous.

Schoolchildren offered vapes spiked with spice via Snapchat

Behaviour Centre sent to parents at what London school cases concern about young people experimenting with THC vapes also being spiked with Spice



ALCOHOL

Why's nicotine so hard to quit?

What behaviours might you see if someone is addicted to nicotine from vaping or smoking?

- Vaping/smoking very regularly both with friends and alone
- Keeping secrets or lying about how much they smoke/vape
- Doing more extreme things to be able to vape/ smoke
- e.g. borrowing money, or vaping/ smoking even when they want to cut down or stop

NICOTINE IS PHYSICALLY ADDICTIVE.

The nicotine gives a temporary high, it can rev someone up, making them feel more alert, more focused and happier. After a while, this becomes a regular, necessary fix, and having nicotine in the body feels normal.

QUITTING CAUSES THE BODY TO HAVE CRAVINGS AND WITHDRAWAL SYMPTOMS

ALCOHOL

Vapes and e liquids... many are fake

Regulations in the UK restrict what chemicals can be used in vapes and limit the amount of nicotine.

The highest strength legal vapes have the nicotine level of 20 cigarettes.

Illegal vapes & e liquids can contain much more

HOW TO SPOT AN LEGAL VAPE

- 2ml – maximum tank size
- 20mg/ml (or 2%) – highest nicotine strength
- About 600 – total number of puffs
- 10ml – Largest refill bottle volume
- A third of the packaging should be a health warning

ILLEGAL VAPES

- Many vapes and e liquids sold online, from dealers, given or from social media are illegal and can be unsafe.
- When tested, they have been found to contain lead, nickel, chromium, Spino, acetaldehyde, formaldehyde and nicotine levels of 100 plus.
- 1 in 6 vapes confiscated in schools in 2024 contained spice


ALCOHOL

THE EFFECTS OF VAPING

Continue with the PowerPoint using the presenter notes covering information about nicotine, its effects on the teenage brain and other short and long-term effects on health. Outline other nicotine products other than vapes.

A bit more about nicotine...

- Nicotine causes the body to release **adrenaline**, a hormone that makes us hyper aware and jumpy (fight or flight)
- Adrenaline causes an increase in speed of breathing and heart rate
- As someone inhales more the stimulant wears off and the person feels relaxed
- The short-term effects of nicotine can include:
 - An increase in heart rate and blood pressure (dizziness)
 - Feeling jittery/ hyper
 - Feeling sick
- Withdrawal symptoms lead to
 - Having problems concentrating
 - Having headaches and shaking when stop
 - Being irritable



ALCOHOL

How can vaping effect someone's health

IMMEDIATE

- Headaches
- Vaper's tongue
- Mouth and throat dry or irritated
- Feeling jittery/ distracted
- Shortness of breath
- asthma / cough

LONG TERM

- Lung problems
- Nicotine dependency
- Potential effect of toxic chemicals and metals in some vapes
- Dental problems

For all smokers trying to give up, vaping is less harmful to their health than smoking cigarettes. But this doesn't mean vaping is safe. If you smoke, vaping is much safer. If you don't smoke, don't vape.

ALCOHOL

Other nicotine products

Cigarettes

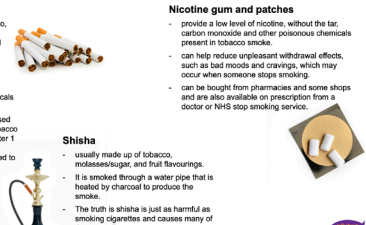
- deliver nicotine by burning tobacco, which can cause smoking-related illnesses such as lung cancer and heart disease.
- Each cigarette contains 10mg of nicotine.
- It is the tar and carbon monoxide inhaled as well as 67 other chemicals that are linked to cancer.
- The Tobacco and Vapes Act, passed in 2020, makes it illegal to sell tobacco products to children born on or after 1 January 2009 to prevent the next generation from becoming addicted to tobacco.

Nicotine gum and patches

- provide a low level of nicotine, without the tar, carbon monoxide and other poisonous chemicals present in tobacco smoke.
- can help reduce unpleasant withdrawal effects, such as bad moods and cravings, which may occur when someone stops smoking
- can be bought from pharmacies and some shops and are also available on prescription from a doctor or NHS stop smoking service.

Shisha

- usually made up of tobacco, molasses/sugar, and fruit flavourings.
- it is smoked through a water pipe that is heated by charcoal to produce the smoke.
- The truth is shisha is just as harmful as smoking cigarettes and causes many of the same diseases.



ALCOHOL

How can vaping effect someone's health

IMMEDIATE

- Disrupted sleep
- Headaches
- Anxiety
- Vaper's tongue
- Nausea/ dizziness
- Mouth and throat dry or irritated
- Feeling jittery/ distracted
- Shortness of breath
- asthma / cough

LONG TERM

- Lung problems
- Nicotine dependency
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ALCOHOL

Other nicotine products

SNUS

- a smokeless powdered tobacco mixed with salts and flavourings, like mint. SNUS is banned from sale in the UK and the EU (except in Sweden).

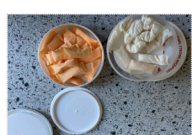
White SNUS/ Nicotine pouches

- Flavoured mini sachet that contain synthetic nicotine and synthetic flavourings, sodium carbonate, and sweeteners.
- They are placed between the upper lip and gum
- They often have a high pH value, an effect of the sodium carbonate, which allows the nicotine inside the pouch to penetrate the soft lining on the gum more quickly and enter the bloodstream, resulting in stronger nicotine kicks. (Source Institute of Dentology, University of Gothenburg)
- The Tobacco and Vapes Act, that became law on April 29, 2020, means that pouches are now regulated by tobacco legislation so can't be given or marketed to under 18s.
- They now need to display a warning, "This product contains nicotine, which is a highly addictive substance".
- They can contain any level of nicotine, with high strength pouches containing 50mg*, compared to 1-8mg from a single cigarette.

Production controls: Milder have powers to limit maximum nicotine strengths, cap pouch size, regulate flavourings, and mandate specific packaging to reduce the appeal to children.

High-strength ban: The legislation creates specific offences for manufacturing and selling ultra-high strength oral nicotine products. These measures are enforced by local trading standards.

See [ASH Tobacco and Vapes Act overview](#) or read the [Official Bill Document](#)



ALCOHOL

4. VAPING AND OTHER NICOTINE PRODUCTS - MODEL LESSON PLAN

VAPING AND THE LAW

Explain the various laws in the UK relating to vaping

Vaping and the Law

- It is illegal to sell or supply e-cigarettes, e-cigarettes or E-liquids to anyone under 18. Suppliers that do not comply can be fined up to £5,000. In Scotland, however, many retailers will only sell e-cigarettes to the age of 16.
- All nicotine products in the UK must comply with safety laws to ensure they don't pose a risk to health and safety. But 25% of vapes tested in the UK are illegal and still contain harmful substances such as Spices or THC.
- To buy e-cigarettes, e-cigarettes and e-liquids a person must be 18 or over and be able to prove it. It is illegal for adults to buy vapes for anyone under 18 (even parenting).
- Vaping, like cigarettes, is restricted on certain places and situations. These rules include schools, workplaces, hospitals, public places, and on public transport. It is illegal to buy or use e-cigarettes on all of these products like ships, buses, aeroplanes, trains or in any other public or private spaces because of the effect on others.
- The government has a number of ways to make it harder to buy and use e-cigarettes. These include:
 - Making it harder to buy e-cigarettes online.
 - Making it harder to buy e-cigarettes in shops.
 - Making it harder to buy e-cigarettes in public places.
 - Making it harder to buy e-cigarettes in public places.
 - Making it harder to buy e-cigarettes in public places.

Questions to explore:

Why are some substances/ products illegal, age-restricted or heavily regulated? e.g., to control the amount of nicotine available, to ban specific substances, to control who has access?

Which regulations and laws govern the content and sale of vapes?

What does this mean for young people under 18?

What does this mean for people supplying young people under 18?

Does the legal status of products/substances help you and others make decisions about what is 'safe' and what might be 'harmful'?

Does regulation help you and others make decisions about what is 'safe' and what might be 'harmful'?**

CHOOSE EITHER OPTION A OR B OPTION A) VAPES' EFFECT ON THE ENVIRONMENT: (10 mins)**

Disposable vapes and the planet

- ONS say that 5.1 million adults vape in the UK and 1 in 6 young people aged 16 – 24.
- Greenpeace says we bin nearly 5 million vapes each week – that's roughly 8 vapes every second.
- Single use waste that has to go somewhere. Some enters the environment as litter, some goes for recycling, while the rest ends up in landfills.

WHAT'S INSIDE A SINGLE USE VAPE?

- Single-use vapes contain batteries and difficult to recycle plastics.
- These are dumped in landfill causing dangerous chemicals to pollute our soil, water and oceans.
- The plastics and toxic waste affect birds and animals.
- Over 40 tonnes of lithium was thrown out with disposable vapes in the UK in 2022. That's enough to make batteries for 5,000 electric cars!

...and the effect of cigarettes

Cigarettes are the most littered item on the planet with 4.5 trillion cigarette butts polluting our pavements, parks, soil, rivers, beaches and oceans.

All of this produces 25 megatons of solid waste, 58 megatons of waste-water, almost 84 megatons of CO₂ emissions to climate change – approximately 0.2% of the global total.

Around six trillion cigarettes are manufactured each year globally using 5.3 million hectares of land and 600 million trees.

Questions to reflect on:

How do these facts make you feel?

What do you think should happen?

How could we reduce the effect on the environment?

Reflection

- How do these facts make you feel?
- What do you think should happen?
- How could we reduce the effect on the environment?

**NB In June 2025 the UK government banned single use vapes. This ban applies to all retailers and includes both nicotine and non-nicotine disposable vapes.

OPTION B) IF YOU WERE PRIME MINISTER / FIRST MINISTER WHAT WOULD YOU DO? (10 mins)**

Either in small groups, or pairs, come up with ideas to raise awareness about vaping and possible ways to reduce vaping among young people.

Influencers and social media

80% of young people aged 11-17 years say that they see e-cigarettes being promoted

- Why do you think influencers promote vapes, cannabis products or alcohol?
- How do dealers use social media to sell vapes and other drugs?
- Would someone buying vapes through Telegram, TikTok or Snapchat – or even eBay and Amazon know what was in them?

What do you think manufacturers of vapes are doing to promote them?

PURE TASTE AND CARTRIDGE TASTE
JUUL VAPORIZED
ELF BAR
BIG BOY DISPOSIBLES
ELF BAR DISPOSIBLES AVAILABLE NOW

Did you know...

Although China is one of the main producers and suppliers of single use vapes, they have a ban on selling vapes on-line and have banned flavoured vapes in China, but they allow them to be produced and exported to the UK

What do you think about this fact?

How does this make you feel?

4. VAPING AND OTHER NICOTINE PRODUCTS - MODEL LESSON PLAN

Explore how the government, regulators and industry can collectively take action to reduce the access and appeal of vaping to children and young people, including by restricting the sale and marketing of vapes to this group.

We have a leaflet on supporting young people to give up vaping or nicotine products. talkabouttrust.org/resources/schools/supporting-young-people-to-give-up-vaping-or-nicotine-products/



PLENARY: (5 mins)

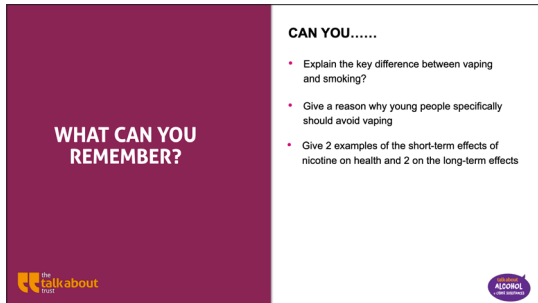
Briefly recap what has been covered in the lesson using the Learning Objectives.

Signpost students to staff in school and external agencies where they can go for additional support around vaping issues.

Promote sources for further information, and support.



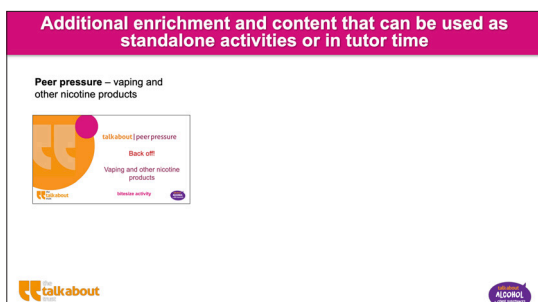
ASSESSMENT FOR LEARNING: (5 mins)



Ask students to:

- Explain the key difference between vaping and smoking?
- Give a reason why young people specifically should avoid vaping
- Give 2 examples of the short-term effects of nicotine on health and 2 on the long-term effects

Additional activities



4. VAPING AND OTHER NICOTINE PRODUCTS - BITE SIZE ACTIVITIES

JORDAN NORTH - VAPING, bite size activity

This selection of activities explores what is in vapes and their potential risk to health.

AGE RANGE: 13-15

ACTIVITY LENGTH: 50 minutes



talkabouttrust.org/resources/schools/bite-size-jordan-north-vaping-and-nicotine/

OBJECTIVE

Using documentary style information from a journalist and current vaper can overcome potential reluctance by KS3/ KS4 pupils to engage with a behaviour or lifestyle choice.

The activity enables mature exploration and reflection on the risks of vaping, the issue of illegal and unregulated vapes and the marketing and availability of nicotine products, especially to young people.

LEARNING OUTCOMES:

- To understand how vaping is different from smoking cigarettes
- Explore some of the risk to health from vaping
- Understand why young people are particularly affected by vaping

- Explore how companies market vaping products
- Know what regulations/laws are in place to control the sale and use of vaping/e liquids and nicotine products in the UK

PREPARATION

In advance, ensure that the BBC film is accessible from iplayer in the planned classroom.

Ideally, print the A4 list of questions off for each pupil or group of pupils to fill in and reflect on while watching the documentary.

RESOURCES REFERENCED WITHIN THE POWERPOINT:

BBC iplayer film

bbc.co.uk/iplayer/episode/m001xj1p/jordan-north-the-truth-about-vaping

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