

Youth Prevention Toolkit:

E-cigarettes and other nicotine delivery systems







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Introduction

This toolkit has been designed for those working with young people in a youth setting. The purpose of this toolkit is to provide accurate and up-to-date information on e-cigarettes and other nicotine delivery systems.

This resource explains what these devices are; the health effects that they can have, in particular on a young person; the environmental impact of their use; why we should be concerned about a young person vaping; how to address this issue and have a conversation on this topic with a young person.

This toolkit can be adapted to fit into your current suite of health behaviour programmes or used to start a conversation with a young person or group of young people. It has been developed as a prevention tool. However, it can also be used with young people who are currently vaping or using other nicotine delivery systems.



How to use this resource

There are two sections to this resource.

1

Section 1 has information on e-cigarettes and other nicotine delivery systems. This section should provide you with all the information that you need about these devices. See contents page for all of the topics covered.

2

Section 2 has a selection of activities covering different aspects of vaping and nicotine addiction. These activities can be delivered as part of an existing health promotion programme, used to deliver stand-alone sessions or act as a conversation starter.



General points for discussion with young people or adults

The aim of this toolkit is to equip you to have informed discussions about e-cigarettes with young people. Having read the information provided in Section 1, you can use the following discussion points:

- E-cigarettes are consumer products. There is some regulation in place to protect consumers but not the same quality and safety system as would be in place for a licensed drug or medical device;
- People who do not smoke or use e-cigarettes should not start;
- Smoking tobacco is extremely dangerous and, compared to this, e-cigarettes are likely to be less harmful. They are not harm-free though, and there is some uncertainty at the moment regarding their long term health impact. E-cigarettes should be strictly regulated and, most importantly, must be kept away from children;
- The acute effects of e-cigarettes include poisonings, burns, blast injuries, lung injury and asthmatic attacks. Some of the chemicals in e-cigarettes are thought to cause tissue and cell damage and some are agents that may cause cancer in the long-term. The long-term health effects beyond 24 months are not researched yet;
- E-cigarettes on their own are associated with increased risk of cardiovascular diseases and lung disorders and adverse effects on the development of the foetus during pregnancy;
- Evidence regarding the effectiveness and safety profile of e-cigarettes as a stop smoking support is evolving;
- Adolescents who use e-cigarettes are three to five times more likely to start smoking tobacco cigarettes compared to those who never used e-cigarettes;
- Dual use of both e-cigarettes and conventional tobacco cigarettes are more harmful than smoking tobacco cigarettes alone;
- Nicotine is highly addictive and found in most e-cigarettes. Both tobacco products and e-cigarettes pose risks to health and the safest approach is not to consume either;
- There are challenges in safely disposing of e-cigarettes and accessories. E-cigarette cartridges can leak and expose children, adults, pets and the environment to nicotine and other chemicals.

1

SECTION 1

Information on e-cigarettes and nicotine delivery systems

What is a nicotine delivery system?

Nicotine delivery systems include any device or item that delivers nicotine to the body. There are a variety of these available on the market, including e-cigarettes, tobacco cigarettes, roll your own tobacco, heat-not-burn devices, synthetic oral nicotine pouches and hookah. There are new products and delivery systems being developed all the time. There is more information about these devices below and on pages 10 and 11.

What are e-cigarettes?

E-cigarettes are electronic devices that produce an aerosol by heating a liquid, often called 'e-liquid'. This e-liquid usually contains nicotine, which is an addictive drug also found in regular cigarettes and other tobacco products. The e-liquid used in e-cigarettes also contains flavourings and other chemicals. Users breathe this aerosol into their lungs. This is commonly referred to as 'vaping'. Anyone who is near a person who is vaping also breathes in this aerosol.

E-cigarettes are known by many different names. They are sometimes called 'e-cigs', 'vapes', 'vape pens', 'tanks' and 'electronic nicotine delivery systems'. Many young people refer to them as vapes as opposed to e-cigarettes. In this toolkit, we will refer to them as e-cigarettes but when you are talking to young people, they may be more familiar with some of the other terminology. Ask young people in your group what they call them.

E-cigarettes containing hexahydrocannabinol (HHC) are available to buy on the Irish market. HHC is chemically similar to tetrahydrocannabinol (THC), the primary psychoactive substance in cannabis. HHC appears to have broadly similar effects to cannabis and THC products and is currently legal in Ireland. Some common brands for sale in Ireland include Loom and Kanavape.

E-cigarettes can also be used to vape cannabis and other drugs.

There are many different types of e-cigarettes and nicotine delivery systems, and we tell you more about these throughout this toolkit.

Overleaf are some terms and phrases that young people use to describe vapes or the act of vaping.



Commonly used phrases and words used to describe e-cigarettes and the act of vaping¹:

Vapes	Vapes (e-cigarettes) are battery-powered devices. They heat nicotine mixed with flavourings and other chemicals to create an aerosol that the user inhales.
Vaping	Using an e-cigarette is known as vaping.
Disposable vapes	Devices that are not refillable and are intended for one-time use.
Refillable system, refillable devices	These systems require e-liquid and come in three varieties: box mods, pens and refillable pods. These devices have tanks or pods that are continuously refilled with e-liquid. These systems are used more by “hobbyist” vapers because they require more upkeep and are typically modified.
Closed pod system	A type of device that uses disposable pods containing e-liquid (typically 200-500 puffs). The body of these devices can be recharged and the disposable pods can be replaced with new compatible pods.
Clouds	The vape mist that is produced during vaping.
E-liquid, vape juice or e-juice	E-liquid is sometimes referred to as vape juice or e-juice. E-liquid is used in open/refillable systems and comes in a variety of flavours. E-liquid typically contains nicotine and is made of vegetable glycerine or propylene glycol, water and flavourings. There are more than 7,000 e-liquid flavours on the market including menthol, fruit, dessert, coffee, alcoholic beverage and cigar flavours.
Ghost	A vape trick where a user will inhale as much as they can and not exhale.
Starter kit	A kit that includes basic e-cigarette equipment designed for newcomers to vaping. Most starter kits come with one or more atomizers, one or more batteries, a charger and a number of cartridges sometimes pre-filled with juice.
Hit, drag or rip	Refers to a single “puff” from an e-cigarette or tobacco cigarette.
Throat hit or kick	The tingling feeling in the back of the throat when vaporizing e-liquid that contains nicotine.

¹ Adapted with permission from Foróige, North West Regional Drug and Alcohol Task Force (NWRDATF) and Mayo, Sligo and Leitrim ETB (MSLETB); “What’s the panic about vaping?” A report on the use of vaping products among children & young people in Sligo and Leitrim. <https://www.foroige.ie/blog/foroige-sligo-release-vaping-research-report>

What is in an e-cigarette aerosol?

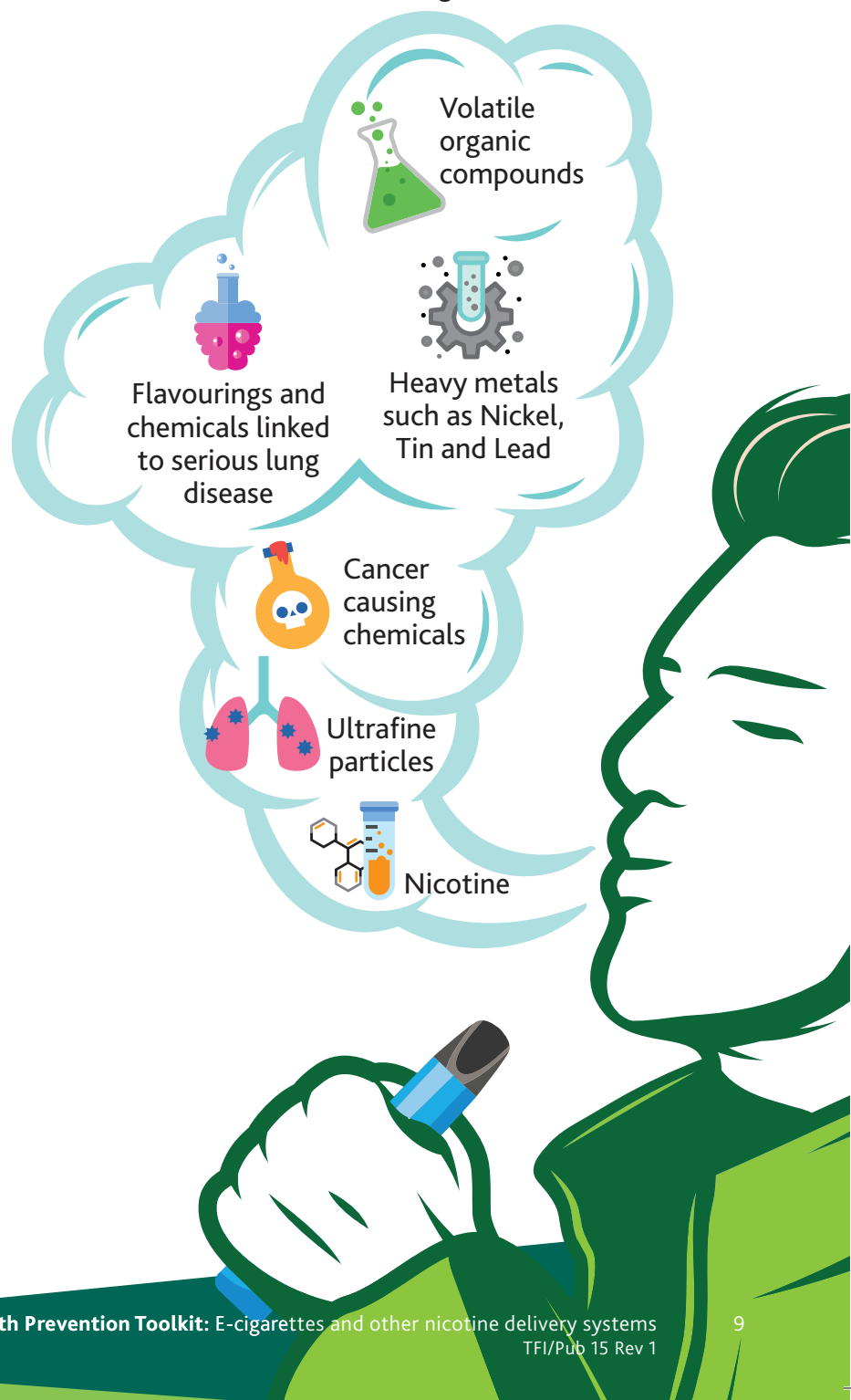
The e-cigarette aerosol that people breathe in can contain harmful substances.

It is hard to know exactly what e-cigarettes contain. They are consumer products and are not regulated in the same way as a drug or medical device. Some e-cigarettes for sale in Ireland have been found to have more nicotine than is advertised on the packaging.

The HSE Environmental Health Service is responsible for monitoring e-cigarette legislation compliance. They conduct sampling of products. In 2023, they found that 90% of products sampled were not legally compliant with the maximum nicotine content as per legislation. They also found that there was non-compliance in terms of packaging and labeling.

The image on this page shows some of the substances that can be found in e-cigarettes:

- Nicotine, which is highly addictive. It releases dopamine to the brain, creating a temporary sense of pleasure
- Volatile organic compounds which are usually human-made chemicals that are used and produced in the manufacture of pharmaceuticals
- Ultrafine particles
- Cancer-causing chemicals
- Heavy metals, such as nickel, tin and lead
- Flavourings and chemicals linked to serious lung disease





Different types of e-cigarette

Some e-cigarettes are made to look like regular cigarettes, cigars or pipes. Some look like pens, USB sticks and other everyday items, while others have a tank-style shape with a mouthpiece.

There are many kinds of e-cigarettes available to purchase in Ireland today. The most common types are:

Disposable vapes

Disposable vapes are bought fully charged and are already filled with e-liquid. They cannot be recharged or refilled and cannot be used once the battery and e-liquid are used up. In recent years, disposable vapes have become popular in Ireland, particularly among young people. Some of the most common brands include Lost Mary, Elfbar and Vuse.



Vape pens

These vapes can be recharged and can be used multiple times. The e-liquid is held in a refillable cartridge. The cartridge is attached to a battery pen, which contains the battery.



Modifiable tanks

These e-cigarettes can be recharged and used multiple times. The battery power can be increased or decreased through controls on the battery. These controls tell the e-cigarette to make more or less aerosol.



Other nicotine delivery systems

There are a range of devices that deliver nicotine. Activity 2 in the resources section, will provide young people an opportunity to explore and understand these other devices. In addition to the multiple brands and variations of e-cigarettes that are available, the devices below also deliver nicotine and are used by young people:

Cigarettes

Cigarettes contain tobacco, nicotine and thousands of chemicals, of which over 60 we know can cause cancer. Tobacco smoke is toxic and because of the nicotine content, cigarettes are highly addictive.



Loose tobacco for making roll your own (RYO)

This is loose tobacco that allows a person to roll their own cigarettes. Contrary to what some people believe, loose tobacco is as harmful as that found in regular cigarettes.



Heat-not-burn device

'Heat not burn' also known as 'heated tobacco' or 'smokeless tobacco' products are electronic devices that, unlike e-cigarettes, contain tobacco. The tobacco is heated to a high temperature, without setting it alight, creating smoke, which the user inhales. They contain nicotine, additives and are often flavoured.



Synthetic oral nicotine pouch

Nicotine pouches are similar to snus pouches but they do not contain tobacco. They do contain nicotine, often with added flavours. The pouch is placed between the lip and gum and the nicotine gets into the bloodstream through the gums.



Hookah and Shisha

A hookah is a device that is used to smoke moist tobacco or non-tobacco (herbal) products known as shisha. The term hookah is one of many names for this smoking device. Hookahs are also commonly known as water pipes. Shisha is the flavoured tobacco made up of shredded tobacco leaf combined with molasses, honey or dried fruit.





Who is using e-cigarettes?

The number of people who vape has increased significantly in Ireland in recent years. There has been an increase in vaping among children and young people. This is something, which has been seen in many other countries. It is a cause of concern for children and young people, their parents, their communities and health professionals.

Adults – 1 in 12 use e-cigarettes²

Our most recent figures on e-cigarette usage for adults is from the Healthy Ireland Survey 2023. These figures show that 8% of adults (about 1 in 12) use e-cigarettes. This compares to just 3% in 2016 and means use of e-cigarettes by adults has almost tripled between 2016 and 2023. There is a high use, which is rising, amongst under 25 year olds. Broken down by gender, it found that 20% of women and 16% of men were vaping in this age group.

Children and young people – almost 1 in 8 use e-cigarettes³

Our most recent figures on e-cigarette use by children and young people aged between 12 and 17 years is from the Health Behaviour in School-Aged Children (HBSC) Study in 2022. These figures show that at least 13% (almost 1 in 8) of them used e-cigarettes in the last 30 days. Girls and older children are more likely to report that they have used electronic cigarettes in the last 30 days. There is no significant difference across social class groups.

However, a separate study from 2019 (European Schools Project on Alcohol and Other Drugs) found that 18% (almost 1 in 5) of 16 year olds were current e-cigarette users⁴.

We monitor cigarette and e-cigarette use through national surveys, which are done periodically. These give us a national picture of the problem and how it is evolving over time.

There have been a number of other regional surveys completed in Ireland. For example, Planet Youth⁵ conducted a survey in 2018 among 15 and 16 year olds to examine emerging behaviours associated with e-cigarette use. In 2023, the North West Drugs Task Force, Foróige and Mayo, Sligo and Leitrim Education Training Board⁶ conducted a study on e-cigarette use among young people aged between 10 and 24 years living in Sligo and Leitrim.

These are regional studies, which used mixed method approaches. Although these are very useful in helping us understand the issues around vaping and smoking, their smaller sample sizes and their regional focus are less helpful in assessing overall prevalence.

These studies in particular looked at risk and protective factors. They found very predictable patterns in terms of combustible cigarettes but not for e-cigarettes. For example, being active in sports protected children from using combustible cigarettes, but not e-cigarettes.

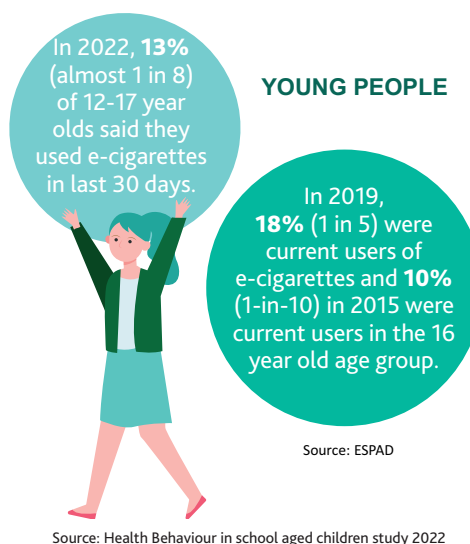
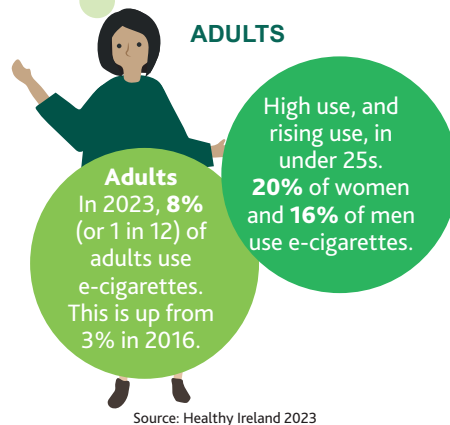
2 [Healthy Ireland Survey 2023 Summary Report](#)

3 [Health Behaviour in School-aged Children \(HBSC\) Ireland 2022](#)

4 [European Schools Project on Alcohol and Other Drugs, 2019 Ireland](#)

5 [E-cigarette Only and Dual Use among Adolescents in Ireland: Emerging Behaviours with Different Risk Profiles, 2018](#)

6 ["What's the panic about vaping?" A report on the use of vaping products among children and young people in Sligo and Leitrim, 2023](#)





What are the health risks of vaping?

We are still learning about the long-term health effects of vaping. Here is what we know now.

1. Risks due to nicotine

Nicotine addiction:

Most e-cigarettes contain nicotine, which is highly addictive and leads to dependence.

Nicotine can also train the brain to be more easily addicted to other drugs like cocaine.

Children and young people are especially vulnerable to the effects of nicotine as their brains are still developing.

Children and young people who vape are likely to become addicted to nicotine, develop mood disorders, and find it hard to control their impulses.

Physical side effects of nicotine addiction:

Nicotine addiction happens very quickly and the risk of long-term addiction is very high. Nicotine also has physical effects on the body. People who vape may experience any combination of:

- Nausea
- Vomiting
- Diarrhoea
- Cold, clammy skin
- A rapid pulse
- Dizziness
- Fainting
- Headaches
- Anxiety
- Increased sweating

Nicotine withdrawal:

People may also experience nicotine withdrawal when they stop vaping or in situations or places where they cannot vape. Common symptoms of withdrawal include:

- Anger, frustration and irritability
- Difficulty concentrating and studying
- Feeling tired or groggy
- Having trouble sleeping





2. Wider risks to health

Mental health

Nicotine in e-cigarettes can have a negative impact on your mental health, for example, it can cause mood swings and make it harder to control your impulses.

Nicotine withdrawal symptoms can include irritability, restlessness, feeling anxious or depressed, trouble sleeping, problems concentrating, and craving nicotine.

General health

Early evidence links e-cigarettes to heart and lung tissue damage.

Children and adults have been poisoned by swallowing, breathing or absorbing e-liquid.

E-cigarettes can contain substances that harm the body. These include tiny particles that reach deep into the lungs as well as chemicals that are known to cause cancer.

Some well-conducted studies have shown how, for young people with asthma, a very common condition in this group, vaping worsens lung health and leads to exacerbations of asthma.

E-cigarettes can cause unintended injuries. E-cigarette batteries have caused fires and explosions, some of which have resulted in serious injuries.

Long term health effects of vaping

E-cigarettes are still relatively new. It will take several years, maybe even decades, before we know everything about the health effects of vaping. For example, we know that e-cigarettes have an effect on the heart and lungs while they are being used and shortly afterwards. However, it will take large studies of people who vape over many years for us to know if this leads to serious lung and heart disease.

The HSE recommends that every effort is made to discourage young people from vaping. The brain of a young person is still developing up to the age of 25. Using nicotine can change a young person's brain and create lifelong nicotine addiction.

3. Risk of starting to smoke tobacco cigarettes

The Health Research Board (HRB) conducted a review into e-cigarette use among young people. It found that young people who vaped were three to five times more likely to start smoking tobacco cigarettes than those who have never vaped. This, in turn could potentially lead to serious harm and tobacco related disease⁷.

Ireland has made huge inroads into reducing smoking prevalence across the population, particularly among youth, over the last 10-15 years. E-cigarettes have the potential to act as a gateway to tobacco smoking and derail the progress made towards delivering a Tobacco Free Ireland. Vaping and e-cigarettes have the potential to introduce nicotine addiction, and increase the risk of addiction to other drugs, to the current and future generations of young Irish children.

⁷ <https://www.hrb.ie/publications/publication/electronic-cigarette-use-and-tobacco-cigarette-smoking-initiation-in-adolescents-an-evidence-review/>



How would you know if you are addicted to vaping?

Here are some signs to watch out for. You are probably addicted to vaping if you:

- need to vape after waking up in the morning
- feel anxious or irritable due to cravings
- are vaping without thinking about it
- are having trouble concentrating or sleeping
- are thinking about vaping throughout the day
- continue to vape even after learning about the health risks

Is vaping less harmful than smoking tobacco cigarettes?

Compared to tobacco cigarettes, vaping may be less harmful, but we don't know for sure. This does not mean that vaping is harm-free. E-cigarettes can contain harmful and potentially harmful substances that are described on page nine. In addition, as they are still very new, we have yet to get a full picture of the harm vaping can do to your health.

The HSE recommends that young people do not vape. The long-term impact of these products is unknown. There is emerging, but limited evidence that e-cigarettes may act as a 'gateway' to tobacco use, especially among those in their late teens who did not intend to smoke tobacco.

The environmental impact of vaping

E-cigarette waste is a serious environmental threat. They introduce plastic, nicotine salts, heavy metals and flammable lithium-ion batteries into waterways, soil and to wildlife.

Like cigarette butts, e-cigarette waste won't biodegrade even under severe conditions. E-cigarettes left on the street eventually break down into micro plastics and chemicals that are a threat to the environment and human health. Disposable vapes in particular, are increasingly ending up as litter in Ireland and are harmful to the environment.

For more information on the dangers posed by e-cigarettes to the environment, see Activity 10 in the resources section of this toolkit.

The HSE does not recommend e-cigarettes as a stop smoking aid

The HSE does not recommend you to use e-cigarettes as a stop smoking aid. We advise anyone who wants to stop smoking to use evidence-based medications (medications that are safe and that we know can work well). An example of this is nicotine replacement therapy.

Despite this, some people may choose to vape to support them in quitting smoking tobacco cigarettes, or they may consider switching from smoking to vaping. Although we can provide support to anyone who wants to use e-cigarettes to try to quit smoking cigarettes, the following should be taken into consideration before making this decision:

E-cigarettes are consumer products. There is some regulation in place to protect consumers of e-cigarettes, but it is not the same as that which is in place for a licensed drug or medical device. In Ireland, the Health Products Regulation Authority (HPRA) are the authority responsible for regulation of medical devices. E-cigarettes are not currently classified as a medical device and are not regulated by the HPRA.



For people who smoke and want to quit, the HSE provides behavioural support and medications such as nicotine replacement therapy. These are effective and safe.

There are a lot of things we don't know about the safety of e-cigarettes and whether or not they actually work as a stop smoking aid.

Does the HSE provide stop vaping services?

The HSE provides safe, effective and clinically sound stop smoking services, which are free and easy to access across the country. These services have been designed for people who smoke cigarettes. We think that these supports may also help those people who wish to stop vaping. If capacity allows we can provide support and advise to those who wish to stop vaping.

Research is ongoing to establish safe and effective services to help people stop vaping. There is good evidence to show that advice and support can help people address health behaviours like smoking, vaping, drinking and drug use.

You can contact the HSE stop smoking services for more information if you or someone else is worried about vaping:

www.quit.ie

Freephone 1800 201 203


There is also the Quit4Youth group programme for young people. This is a group stop smoking and/or vaping programme designed specifically for young people attending a youth service. It is delivered by a HSE Stop Smoking Advisor and supported by a youth worker. For more information on this programme, please contact your local stop smoking service. See <https://www2.hse.ie/living-well/quit-smoking/support-services/> for the full list.

You may find some of the resources from this programme useful, such as the [QUIT4Youth facilitators' book](#) and the [QUIT4Youth participants' handouts](#).

What is the current legal position in relation to e-cigarettes?

There are specific regulations with which e-cigarettes must comply. This legislation is enforced by the HSE National Environmental Health Service, which undertakes a targeted inspection and sampling programme, testing for nicotine concentration and volume of liquid in e-cigarettes. These regulations set the minimum safety and quality legal requirements that e-cigarettes must comply with, for example:

- The nicotine concentration must not exceed 20mg/ml or 2%, which must be legally declared on the packaging of the e-cigarette. The volume of nicotine containing liquid in an e-cigarette must not exceed 2ml.
- Where products are found to be in breach of the legislative requirements, the HSE National Environmental Health Service has a range of legal powers and sanctions available to deal with non-compliant product and economic operators that are not in compliance with legislation. These powers include withdrawal of the products from the market, destruction orders and/or prosecution of the economic operator. In 2023, their inspections were targeted through information received



from complaints and randomly inspecting businesses. Environmental Health Services conduct a minimum of 40 inspections annually. The volume of product and retail premises however makes oversight of this area challenging.

In 2023, unfortunately, they found that almost 90% of the retailers and importers of e-cigarettes inspected were selling e-cigarettes that did not comply with legislation. As a result, Notices were served by Environmental Health Officers to detain the non-compliant e-cigarettes found during inspections and orders for the destruction of these non-compliant products. Approximately 3,500 e-cigarettes have been detained and had to be destroyed during 2023.

The new Public Health (Tobacco Products and Nicotine Inhaling Products) Act 2023⁸ provides for (amongst other things):

- The introduction of a licensing system for tobacco and e-cigarette retail sales and a related enforcement system (Part 2 and sections throughout). This would replace the current registration system that applies to tobacco. Licences would have to be applied for annually and a separate licence would be required for each premises. Though indicated in the World Health Organisation's Framework Convention on Tobacco Control (a legally binding treaty that Ireland has ratified), licensing systems are not common in European countries.
- A ban on sales of tobacco (s.44) and e-cigarettes (s.25) from vending machines and from mobile or temporary premises.
- A ban on retail sales of e-cigarettes to those aged under 18 years of age (s.27). There was universal support for this measure among stakeholders engaging with the Joint Committee on Health during its pre-legislative scrutiny (PLS) of the Bill.
- A ban on the sale of tobacco and e-cigarettes by under 18-year-olds (with an exemption for 16-17 year-olds who are relatives of the licensee) (s.26).
- A ban on sales of tobacco and e-cigarettes at events aimed at children (defined in the same way as in the Public Health (Alcohol) Act 2018)(s.28).
- A ban on e-cigarette advertising and promotion in certain places, including within 200m of the perimeter of a school and at bus stops / train stations (s.29). Though there is an exemption for premises that are selling these products.

Gaps in legislation:

The Minister shall, within 24 months after the passing of this Act, carry out a review of the operation of this 2023 Act, the Act of 2002, and the Act of 2015, to also examine:

- The regulation of flavouring, packaging and advertisement of nicotine inhaling products;
- The regulation of disposable tobacco products and nicotine inhaling products;
- The evidence base for calculating licence fees, the appropriateness of fees which have been set, and potential methodologies for calculating such fees;
- Issues arising from the implementation of the Acts and attempts to circumvent the Acts, such as proxy purchasing;
- The pricing of tobacco products and nicotine inhaling products, including bulk purchasing, and options for standardising tobacco unit prices;
- Regulating or prohibiting tobacco price lists.

⁸ <https://www.oireachtas.ie/en/bills/bill/2023/48/>

2

SECTION 2

Resources and activities

Now that you have the information about e-cigarettes and the HSE position on their use, the resources and activities in the following pages will support you to engage with young people on this topic.

The activities here can be adapted to suit your current health behaviour programmes or can simply be used to start a conversation with a young person or a group of young people.





ACTIVITY 1: WHAT'S IN AN E-CIGARETTE?


Delivery method: Discussion and exploration activity

Aim: To know what chemicals are in an e-cigarette and explore the possible harmful effects of vaping on health.

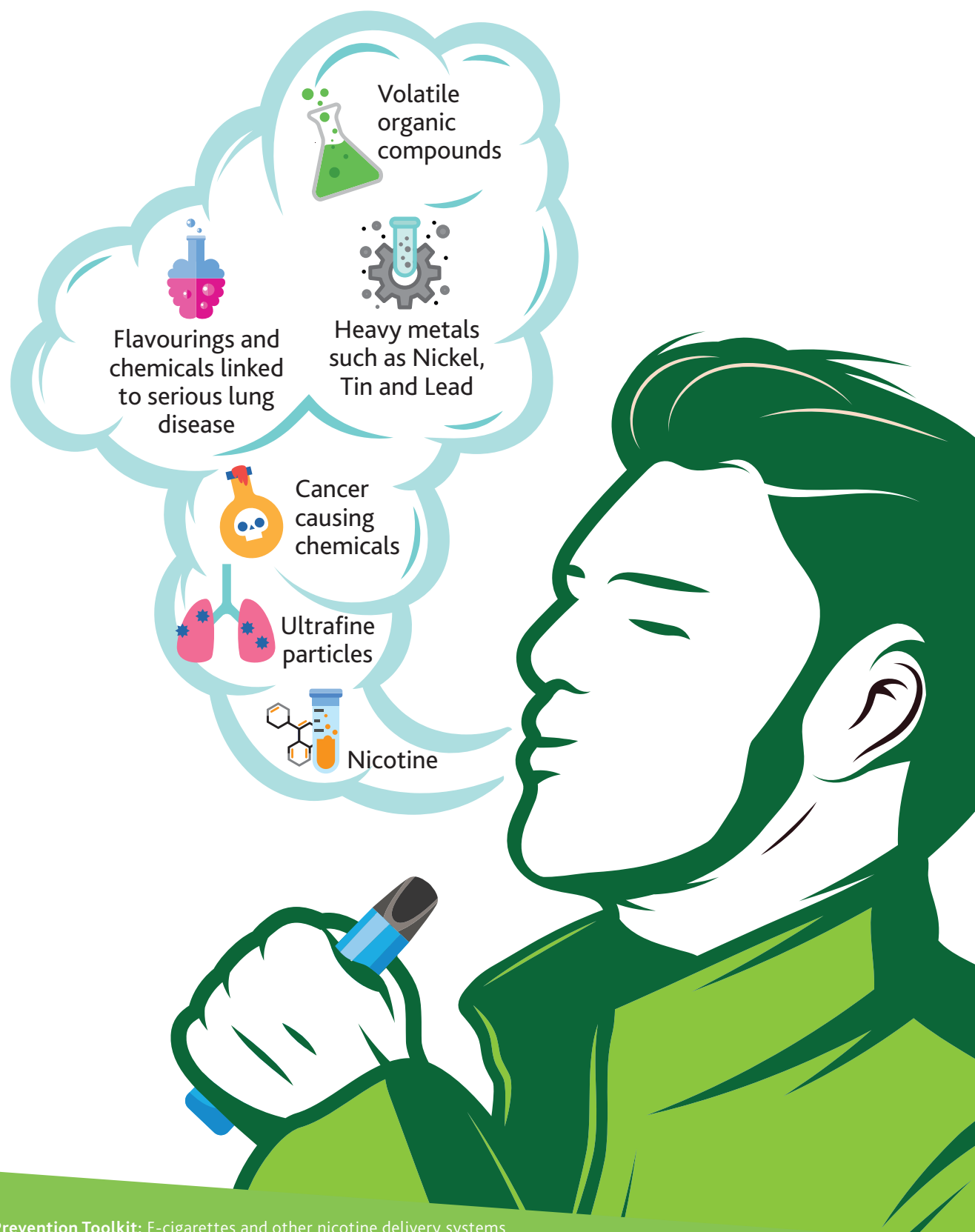
Instructions:

Present the PowerPoint image below (or a photocopy) and ask the group if they know any of the chemicals or ingredients found in an e-cigarette:





Once the group have contributed some answers or if they don't know any of the ingredients, present the PowerPoint image or a photocopy, as below, of an e-cigarette with a list of some of the chemicals found in an e-cigarette.





Ask the group:

- Do you know what these ingredients or chemicals are?
- Follow this up by saying:

The vapour that a person breathes in from a vape and then exhales can contain harmful and potentially harmful substances. Here's what's in some of these substances.

Use the information below to provide detail and information on these chemicals ⁹.

- Nicotine: a highly addictive substance that has a negative effect on the developing brain of a young person, for example, problems with attention, learning, mood and impulse control.
- Volatile organic compounds: these are usually human-made chemicals that are used and produced in other household products. Examples of these are:
 - acrolein – used as a weed killer and is linked to irreversible lung damage;
 - diethylene glycol – a toxic chemical used in antifreeze that is linked to lung disease;
 - propylene glycol – a common additive in food that is also used to make anti-freeze and paint solvent;
 - Cadmium – a toxic metal found in traditional cigarettes that causes breathing problems and disease and
 - Benzene – a volatile organic compound that is found in car exhausts.
- Ultrafine particles that can be inhaled deep into the lungs and cause damage.
- Carcinogens: These are chemicals that cause cancer. Those found in e-cigarettes include:
 - acetaldehyde which is used primarily in the production of herbicides, insecticides, fungicides, pharmaceuticals, flavours, fragrances, dyes, plastics and synthetic rubber
 - formaldehyde which is used in the production of fertiliser, paper, plywood, and some resins and household products, such as antiseptics, medicines, and cosmetics. Exposure to formaldehyde can irritate the skin, throat, lungs and eyes.
- Heavy metals, such as nickel, tin and lead
- Diacetyl – this is a flavouring that is linked to a lung disease called bronchiolitis, more commonly known as popcorn lung. Diacetyl has not been allowed in e-cigarettes in the EU since 2016.

Provide the following information:

It is difficult to know what vapes contain. For example, some vapes marketed as containing zero percent nicotine have been found to contain nicotine.

In 2023, the HSE issued a safety alert about five flavoured vapes produced by the McKesse brand, because they contained more than the permitted concentration of nicotine.



⁹ [American Lung Association](#)



Now start a conversation using some or all of the questions below:

- Are you surprised that there are so many chemicals in an e-cigarette?
- Does this change your perception of e-cigarettes?
- Nicotine is the addictive substance in e-cigarettes that gets you hooked. Do you know how much nicotine is in your e-cigarette? How can you be sure?
- What effect do you think nicotine has on a young person's brain?
- What do you think are the effects of vaping on your body right now?
- What do you think might be the long-term effects of vaping on your body?
- Did you know that if you start vaping, you are more likely to start smoking compared to someone who has never vaped? Would this worry or concern you?

Additional information for facilitator

The long-term health effects of using e-cigarettes beyond 24 months are not yet known. Whether a person smokes tobacco or vapes, they are still inhaling nicotine. The younger a person tries nicotine, the greater the risk of addiction. The brain of a young person is more vulnerable to the effects of the addictive substances than that of a fully developed adult brain.

Nicotine can:

- disrupt brain development
- lead to problems with attention, learning, mood and impulse control
- interfere with long-term cognitive functioning
- increase the risk of various mental and physical health problems later in life

E-cigarette use has also been linked with poisonings, burns, blast injuries and an increased risk of lung infection and asthmatic attacks. Some of the chemicals in e-cigarettes are thought to cause tissue and cell damage and some are agents that may cause cancer in the long term¹⁰.

In addition to this, research has shown that young people who use e-cigarettes are three to five times more likely to start smoking tobacco cigarettes compared to those who never used e-cigarettes. Most e-cigarettes have higher levels of nicotine than regular cigarettes/tobacco.¹¹

Some e-cigarettes marketed as containing low levels of nicotine have in fact been found to contain much higher levels of nicotine than marked on the packaging. Even those sold as containing no nicotine have been found to contain nicotine in low and high levels¹².

¹⁰ [HRB Review: Harms and benefits of e-cigarettes and heat-not-burn tobacco products. A literature map](#)

¹¹ [Electronic cigarette use and tobacco cigarette smoking initiation in adolescents. An evidence review](#)

¹² <https://www.hse.ie/eng/services/news/media/pressrel/two-rape-safety-alert-notices-relating-to-disposable-electronic-cigarettes-containing-illegal-levels-of-nicotine.html>



ACTIVITY 2: NICOTINE DELIVERY SYSTEMS

Delivery method: PowerPoint presentation and discussion

Aim: To know the different nicotine delivery systems.

Instructions:

Present the images provided on the following pages of each of the nicotine delivery devices named A-H below.

Ask the young people to name each device or item and then ask them to describe how each of them works:

Here are the names of each of the items in the images, A-H*:

- A. Cigarettes
- B. Disposable e-cigarettes that are popular among young people in Ireland. The examples provided in the image are: Lost Mary, Elf Bar and Vuse
- C. Vape tank e-cigarettes
- D. E-cigarette with refillable cartridge
- E. Loose tobacco for making roll your own (RYO)
- F. Heat-not-burn (also known as heated tobacco) device
- G. Synthetic oral nicotine pouch
- H. Hookah

Say to the group:

These are just the current nicotine delivery systems; new ones are constantly being developed by tobacco companies to keep people using their products.

Suggested discussion points:

- What do these products have in common?
Response: All of these products are designed to deliver nicotine to the human body.
- Why does the tobacco industry make and promote an increasing range of nicotine delivery systems?
Response: To create nicotine addiction so that people need to continue buying and using the products, which increases companies' profits

* You will find more information about the devices listed below in Section 1, under "Other nicotine delivery systems".



Cigarettes



Disposable e-cigarettes, the examples here are Lost Mary, Elf Bar and Vuse



Refillable e-cigarettes



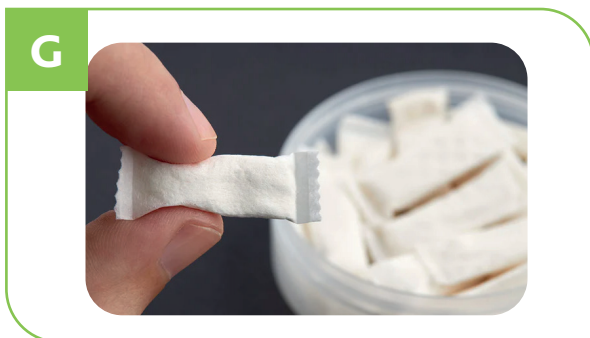
E-cigarette tank with refillable cartridge



Loose tobacco for making RYOs



Heat-not-burn (also known as heated tobacco) device



Synthetic oral nicotine pouch



Hookah



ACTIVITY 3: UNDERSTANDING NICOTINE ADDICTION

Delivery method: Video followed by discussion

Aim: To understand nicotine addiction and to explore our own attitudes to addiction.

Instructions:

Play the video on nicotine addiction.

You can access this video using the the QR code or click on the link:

<https://youtu.be/gJwhcGAuZC4>

Pause the video at 00:43



Suggested questions

- Are smoking and vaping the only means of nicotine consumption? (Refer back to the various products that were identified in Activity 2: Nicotine Delivery Systems).
- What might be the signs that a person is addicted to nicotine? What might they look like? How might they act? How might they feel?
- How do you think tobacco and e-cigarette companies promote their products on TV and in films?

▶ Play the video again. Pause it at 2:08

Suggested questions

- What is dopamine? What does dopamine do in the body?*
- How does nicotine affect the brain?
- Describe how nicotine addiction happens?

▶ Play the video again. Pause it 3:15

Suggested questions

- What effects does nicotine have on the body?
- What particular harm can nicotine do to adolescents?
- What are the symptoms of nicotine withdrawal?
- Do you know about any ways that people can manage nicotine withdrawal when they are trying to quit smoking/vaping?*

▶ Play the video again to the end.

Suggested questions

- Was any of the information in the video new or surprising to you?
- Do you think if other young people knew about the impact of nicotine on their brain, that this would affect their choice or decision to use nicotine containing products? Why/why not?
- What other things might cause young people to decide against using these products?

* See the facilitators' notes on the next page for more information.



Additional information for facilitator

Dopamine

Dopamine is the chemical in the body that acts on the brain to give you feelings of pleasure and satisfaction. It plays a role in controlling memory, mood, sleep, learning, concentration and other functions. It is sometimes referred to as the “feel good” chemical in the brain.

Nicotine stimulates the release of dopamine. When a person inhales a product containing nicotine, dopamine is released and the person has an almost instant feeling of pleasure or relaxation. However, because of the way that nicotine works in the body, this feeling does not last long. The effects wear off in just a few hours creating the desire or need for another nicotine hit.

Useful tips for dealing with cravings:

Below are some useful tips for dealing with nicotine withdrawal. Share these with young people who may be experiencing nicotine withdrawal. Better still, offer a couple of these as suggestions and ask them if they can think of something that would work for them.

- Individual cravings usually pass in 3 to 5 minutes.
- Deal with cravings by using the '4 Ds':
 - Distract yourself by focusing on something else
 - Delay doing anything about the craving until it passes
 - Deep breaths: Take 20 deep breaths
 - Drink a cold glass of water or fruit juice

Use one or some of the following to help practice the 4 Ds

- call a friend
- step outside for some fresh air
- chew some chewing gum
- eat a healthy snack such as carrot sticks or an apple
- do something physical such as a yoga stretch, walking up the stairs or cleaning
- do a short relaxation exercise
- listen to music, read, sew, do jigsaws or puzzles

Don't forget:

- Remind yourself that these feelings are temporary - they will go away
- Congratulate yourself for coping with life without vaping
- Ask others to understand and be patient
- Do things that make you feel good



ACTIVITY 4: HEALTH, FINANCIAL AND SOCIAL ASPECTS OF VAPING

Delivery method: Discussion

Aim: To explore the health, financial and social impact of vaping.

Instructions:

Lead a group discussion or a walking debate on the health risks, financial issues and social aspects of vaping to reinforce different reasons why those who currently vape might want to quit.

NOTE: If you have already explored the health risks of vaping, you may choose to omit these questions from the discussion. You should, however, remind the group of these risks and explore any connections between the three topics.

Use the questions below to facilitate this discussion.

Allow young people space and time to think about and answer the questions.

Health questions:

1. What do you think is in an e-cigarette? See Section 1 or Activity 1: "What's in an e-cigarette", for the list of chemicals.
2. What are the health risks associated with vaping?
3. Do you know any of the short term and/or long-term effects of vaping?

Financial questions:

1. Do you know the cost of a disposable vape or the cost of e-liquid?
2. How do you think people who do vape, could spend their money, if they didn't vape?
3. What do you think might be some long-term financial impacts for people who vape?

Social questions:

1. Why do you think people start vaping?
2. What would you say to someone if they asked you to vape?
3. Have you ever felt pressurised to try vaping?

All three topics, health, financial and social:

1. What are the benefits of not vaping? Think about the individual, wider society and the environment.
2. Why do you think people want to quit vaping?



Additional information for facilitator

Benefits of quitting vaping¹³

- Nicotine will no longer have control of your life
- You are less likely to start/return to smoking tobacco
- You will have a positive influence on younger brothers, sisters and friends
- Quitting vaping will help improve your concentration and improve your mental health. Nicotine can harm the developing adolescent brain. The brain keeps developing until about age 25. Stopping vaping can prevent harm to the developing brain
- You will have more money – disposable e-cigarettes typically cost €8 each (in 2024). A person using 2-3 disposable vapes a week could expect to spend up to €1,248 a year. Tank style e-cigarettes can cost from around €30 to €100 or more
- You will have improved self esteem
- Each time a new memory is created or a new skill is learned, stronger connections – or synapses – are built between brain cells. Young people’s brains build synapses faster than adult brains. Nicotine changes the way these synapses are formed. Becoming nicotine free helps develop normal brain connections
- Using nicotine in adolescence may also increase risk for future addiction to other drugs so quitting will help prevent your risk of other addictions

¹³ Centers for Disease Control and Prevention: <https://www.cdc.gov>



ACTIVITY 5: QUESTIONNAIRE FOR NICOTINE DEPENDENCE¹⁴

Delivery method: Questionnaire

Aim: To examine a person's nicotine dependence, for those who currently vape.

Instructions:

This activity can be used with young people who currently vape.

The questionnaire overleaf is a simple tool that can be used to determine nicotine dependence – i.e. addiction to nicotine.

This activity is most useful to demonstrate that e-cigarettes are addictive allowing the young person to reflect on their own use and dependence.

The questionnaire could be used alongside a couple of other activities in this book, in particular, the walking debate, to demystify the belief that a young person cannot get addicted to e-cigarettes.

Give each person one copy of the Nicotine Dependence Questionnaire. Then explain how to complete the questionnaire:

- Simply answer each question and circle the score next to the response
- Add up all the scores from the 10 questions
- Use the score table at the bottom to determine whether the person has a low, medium or high dependence

¹⁴ Adapted from Jonathan Foulds, Susan Veldheer, Jessica Yingst, Shari Hrabovsky, Stephen J. Wilson, Travis T. Nichols, Thomas Eissenberg, Development of a Questionnaire for Assessing Dependence on Electronic Cigarettes Among a Large Sample of Ex-Smoking E-cigarette Users, *Nicotine & Tobacco Research*, Volume 17, Issue 2, February 2015, Pages 186– 192, <https://doi.org/10.1093/ntr/ntu204>



Nicotine dependence questionnaire

Choose the answers that best describe your vaping behaviour.

QUESTIONS	RESPONSES	SCORE
How many times per day do you usually vape? (assume one time consists of around 15 puffs or lasts around 10 minutes)	30 or more a day	5
	20-29 times a day	4
	15-19 times a day	3
	10-14 times a day	2
	5-9 times a day	1
	0-4 times a day	0
On the days that you can vape freely, how soon after you wake do you first use your vape?	Less than 5 minutes	5
	6-15 minutes	4
	16-30 minutes	3
	31-60 minutes	2
	61-120 minutes	1
	More than 121 minutes	0
Do you sometimes wake at night to vape?	Yes	1
	No	0
How many nights per week do you typically wake to vape?	4+ nights	2
	2-3 nights	1
	0-1 nights	0
Do you vape now because it is hard to quit vaping?	Yes	1
	No	0
Do you ever have strong cravings to vape?	Yes	1
	No	0
Over the past week, how strong have the urges been to vape?	Very strong	2
	Moderate/strong	1
	None/slight	0
Is it hard to not vape in places where you are not supposed to?	Yes	1
	No	0
If you have not used a vape for a while or if you are trying to stop:		
Did you feel more irritable because you could not vape?	Yes	1
	No	0
Did you feel nervous, restless or anxious because you could not vape?	Yes	1
	No	0
TOTAL		

Please see overleaf for information on what your score means



SCORE TABLE
0-8 Low dependence
9-12 Hazardous e-cigarette use. You are likely to be having e-cigarette related problems.
13+ High level of e-cigarette use. You are likely dependent on nicotine

Your result:

Whatever the results, if you feel uncomfortable about some of your answers, you may want to talk it over with someone, perhaps an adult you trust or a health care professional.



ACTIVITY 6: VAPING AND THE MEDIA

Delivery method: Small group activity with discussion

Aim: To explore how the media and social media can influence vaping behaviour.

Instructions:

NOTE: You need to ask the group to prepare for this activity one week in advance.

Ask the group to observe over the next week, the vaping behaviours of influencers and characters on social media, TV, in movies and adverts.

- The following week, divide into either pairs or small groups.
- Give each pair or group a copy of the discussion points on the next two pages.
- Tell them to discuss each of the points and write some responses in the boxes provided.
- Give them 10 minutes to complete this activity.
- Bring the group back and share responses with the wider group.



What types of characters on TV shows and in the movies vape?

How is vaping represented on TV shows and in the movies?

How do you think vaping in TV shows and in the movies affects young people who are trying to quit or who have quit?



Have you seen any influencers or celebrities using e-cigarettes on social media or online (e.g. Instagram, TikTok)? If so, what have you seen?

If you have seen e-cigarettes being used on social media, how is it being portrayed?

If you were with other people and saw someone vaping on a TV programme, in a movie or on social media, what could you say to challenge it?



ACTIVITY 7: VAPING, THE MEDIA AND THE TOBACCO INDUSTRY

Delivery method: Exploration and discussion

Aim: To explore media influences on young people in relation to smoking and the normalisation of vaping.

Instructions:

Play the video "Straight to vape: While you were streaming 2020". Use the QR code below or you can use this link: https://www.youtube.com/watch?v=CfGqQ_B-688. You can also find this link on YouTube by typing in "Straight to vape: While you were streaming 2020".



For more information on this article and the truth initiative click [THIS LINK](#) or scan this QR code:



Now that you have watched the video start a conversation about how the movie and TV industry has been used to promote vaping, in particular among young people.

Use the questions below to stimulate this conversation.

Start with asking this question:

- Do you think that movies and/or TV have an influence on the lives of young people? If so, how?

Then ask this question:

- Do you think that exposure to vaping in movies or on TV gives young people a positive perception of vaping?



Then finish with these questions:

- Are you surprised that even though most tobacco companies are barred from paid brand placement that a significant number of top grossing films continue to feature smoking and now vaping in movies targeted at teens?
- Do you think that exposure to vaping in the movies increases young people's intentions to try vaping?

Read the following information:

The figures I am about to read are taken from the Health Behaviour in School Aged Children (HBSC), 2022. The HBSC survey is carried out every 4 years across Europe. The responses below are from children and young people aged 12 to 17 in Ireland. They were asked about their use of cigarettes and e-cigarettes. These are the figures that were reported in 2022:

- More than 1 in 11 (9%) of children reported that they have ever smoked
- 1 in 20 (5%) reported to be current smokers
- Almost 1 in 5 (19%) of children reported that they had tried an e-cigarette
- Almost 1 in 8 (13%) reported to be current e-cigarette users

Now ask the group:

- Do these figures surprise you?

Finally finish off this session with the following questions:

- Do you think that young people are influenced by what they see in movies or on TV?
- Can you think of any movies or TV shows aimed at young people where vaping is featured?
- If there were one key message to give to your peers, what would it be?



ACTIVITY 8: THE TRUTH ABOUT THE TOBACCO AND E-CIGARETTE INDUSTRIES

Delivery method: Walking debate

Aim: To explore the marketing tactics used by the tobacco and e-cigarette industries to influence young people to use their products.

Instructions:

Place three flipchart pages in a different corner of the room.

Write “Agree” on the first, “Disagree” on the second and “Not sure” on the third.

Explain that you are going to call out a statement (see statements below) about the tobacco and e-cigarette industries. Once the statement has been read, each participant should go to the relevant corner of the room according to what they think about that statement, i.e. do they agree, disagree or are they not sure.

Following each statement and when participants have selected their responses, facilitate a discussion about the participants’ thoughts on each statement.

Give participants an opportunity to voice their opinion and to challenge one another on their attitudes and opinions.

Always back up the discussion with the correct facts in response to the statement provided.

You can use the information on the next page to provide more detail. Statement 4 will allow you to delve into a deeper conversation about the marketing of e-cigarettes to young people.

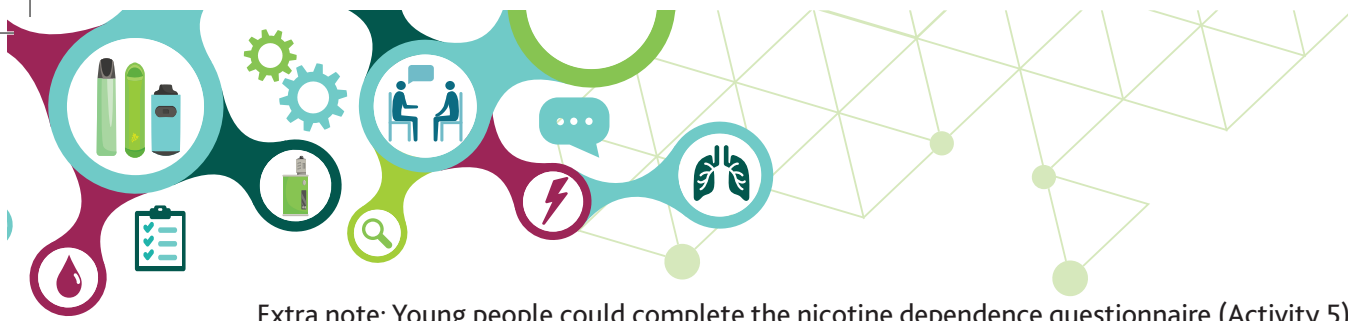
Statements

Statement 1: The tobacco industry is concerned about the increase in e-cigarette users as it is taking away from their customer base.

Response: The tobacco industry has invested heavily in the e-cigarette market and they actually own a number of the e-cigarettes companies. It is unlikely that they are concerned about people moving from smoking to vaping.

Statement 2: Young people are less likely to become addicted to nicotine than adults or older people.

Response: E-cigarettes are designed to deliver nicotine quickly. Nicotine is highly addictive and children and young people are especially vulnerable as they become addicted very quickly. Nicotine can harm adolescent brain development. Getting addicted to nicotine at a young age makes it more difficult to quit at a later stage.



Extra note: Young people could complete the nicotine dependence questionnaire (Activity 5) to establish their own nicotine dependence if they are already vaping.

Statement 3: The tobacco industry deliberately markets its tobacco products to young people.

Response: The tobacco industry needs to recruit 50 new smokers in Ireland every day to maintain smoking rates. Since 80% of smokers start when they are children/young people, most of these new smokers are children or young people.

Below are some statements taken from the tobacco industry over the years:

RJ Reynolds Tobacco Company, 1984:

Younger adults are the only sources of replacement smokers.

Philip Morris Tobacco Company, 1981:

Today's teenager is tomorrow's potential regular customer and the overwhelming majority of smokers first begin to smoke while still in their teens... The smoking patterns of teenagers are particularly important to Philip Morris".

Philip Morris Report, 1999:

The ability to attract new smokers and develop them into a young adult franchise is key to brand development.


Reply of an RJ Reynolds representative when asked the age of the kids they were targeting:

They got lips, we want them.

Statement 4: The tobacco/e-cigarette industries market e-cigarettes to young people.

Response: Use the information below to explore this topic in more detail. Find out what the young people in your group think. There are some additional questions in the text overleaf to help you and the young people in your group, delve into this topic in more detail.

The tobacco industry owns many of the e-cigarette products on the market. It is using the same



tactics they used to sell cigarettes for decades. There are concerns that these products are being marketed to young people and non-smokers to be used as a recreational product.

Lawsuits have been taken against e-cigarette companies for promoting their products to young people, putting these addictive products into their hands and convincing them that they are harmless. For example in the US, the New York Attorney General¹⁵ litigated and secured a multi-state half billion dollar settlement from JUUL e-cigarette company for the role its marketing played in the vaping epidemic among young people. This is a very major development in the area – something which some young people may be aware of – and shifts the narrative here from “concern” and “criticism” to one of causation of harm and liability.

- **What do you think about the flavours or the packaging of e-cigarettes?**
These companies have been accused of designing flavours and packaging that appeal to young people. The flavours of e-cigarettes are often associated with treats, snacks and sweets and the packaging is colourful and often resemble sweets.
- **What about disposable vapes? Do these make vaping more appealing to young people?**
Disposable vapes in particular are cheap, which can make it easier for younger people to start using them. Up until the 1980s you could purchase single cigarettes. This was an easy way for children to access cigarettes. Single use vapes make access to vaping much easier and cheaper for young people to access.
- **Have you ever seen someone on social media promoting these products (remember promotion can be done discreetly just through use of a product or showing a product in video content)? If so, did this make them appealing to you or make you want to try vaping?**
In the past, vaping companies have tried to advertise their products on social media sites such as Facebook, Instagram, YouTube and TikTok. Advertising standards organisations around the world, have found this to be in breach of advertising standards due to rules against the promotion of nicotine or nicotine-containing products that are not licensed medicines. However, despite this, some influencers still promote vaping on their social media platforms.

Another way that the industry normalises behaviour is by funding producers/writers of TV series and films to write vaping and smoking into their shows.

Research conducted by the Irish Heart Foundation and the Irish Cancer Society in 2019, also found that young people in Ireland have rejected the idea that the e-cigarette manufacturers do not design their advertising and packaging to attract children.

¹⁵ For more information on this lawsuit read: <https://ag.ny.gov/press-release/2023/attorney-general-james-secures-462-million-juul-its-role-youth-vaping-epidemic>

Finish this discussion by presenting the image below and having a discussion about the image. Use the questions below to start this conversation:



Suggested questions:

- Does this display remind you of anything?
Note for facilitator: This looks like a sweet display
- Do you think this is set up to be attractive to children and young people or to adults?



Additional information for the facilitator:

Who is the tobacco industry?

The tobacco industry is a very powerful and manipulative industry, which has one goal, to make money. This means that they need people to buy their products regardless of the health impact that their products can have on their customers.

The four largest companies are:

- Philip Morris – worth \$13.5 billion
- British American Tobacco - \$5.2 billion
- Imperial Tobacco – worth \$2.6 billion
- Japan Tobacco International – worth \$7.7 billion

The tobacco industry has a problem in that 1-in-2 smokers will die from a smoking related illness. The industry tries to recruit children and young people, as it needs to find replacement consumers to buy and consume their products. Who are the most likely to take the risk of starting to smoke or vape and ignore the consequences? The answer is young people.

Publicly the tobacco industry has always claimed that it does not use advertising to attract young people into smoking. However, documents from the tobacco industry, once confidential but now in the public domain reveal that they see the recruitment of under 18's to smoking as essential. The same playbook is being played out in relation to vaping and the marketing of e-cigarettes.



ACTIVITY 9: WHAT DO WE REALLY KNOW ABOUT E-CIGARETTES AND VAPING?

Delivery method: Discussion and provision of information

Aim: To know the facts about vaping and nicotine addiction.

Instructions

Use the questions below to start a conversation about vaping and to explore the myths and facts about vaping.

You can choose some or all of the questions, depending on time, age of the group and topics that arise in your everyday conversations with young people about vaping.

Use the responses provided to support the debate and to challenge myths and provide young people with the facts about vaping.

Questions

Question 1: What are the long term health effects of vaping?

Response: The truth is that we do not know what the long term health effects of vaping are. However, we do know that e-cigarettes are addictive. They contain nicotine which can damage a young person's brain.


While scientists are still learning about the short and long-term health effects of using e-cigarettes, a recent outbreak of lung disease and deaths related to e-cigarette use in the United States demonstrates that e-cigarette aerosol can be harmful to the lungs causing a condition called popcorn lung. E-cigarettes can also be modified to deliver marijuana and other harmful substances that have been linked to lung disease.

Defective e-cigarette batteries have caused some fires and explosions, which exposes the user to the risk of serious injury and burns.

Nicotine can cause anxiety and depression or make these worse for people already suffering from anxiety and depression. It also affects memory, concentration, self-control and attention, especially in the developing brains of young people.

The Health Research Board¹⁶ also found that young people who do not smoke but who start vaping are three to five times more likely to start smoking than those who never vaped. This is an extremely worrying finding. We have made huge inroads to protect children from the harms caused by smoking, and vaping jeopardises these important public health gains.

¹⁶ [HRB Review: Electronic cigarette use and tobacco cigarette smoking initiation in adolescents. An evidence review](#)



Question 2: Is vaping is less harmful than smoking.

Response: We often hear from the e-cigarette industry that using e-cigarettes is “safer” than smoking conventional combustible cigarettes, but what does this mean? Smoking conventional cigarettes is incredibly dangerous. Cigarettes kill 1-in-2 people who smoke and on average lead to 10 years of life lost for people who smoke. Each week in Ireland, almost 100 people die and 1,000 people are hospitalised from preventable disease caused by smoking.

Vaping does not involve burning tobacco, which releases tar and other chemicals known to be extremely harmful to human health, but to say a product is not as dangerous as combustible cigarettes does not mean that it is free from serious harms.

The Health Research Board¹⁷ examined the harms caused by vaping and found that in some instances it can lead to burns and injuries, had acute effects on the heart and lung and contained chemicals known to cause cancer. There are particular harms for young people. Nicotine is highly addictive and affects the developing brain leading to problems with concentration, impulse control and mood. More recently, some well-conducted studies have shown how, for young people with asthma, vaping worsens lung health and leads to exacerbations.

These Health Research Board findings are consistent with other large and well-conducted reviews of e-cigarettes at EU level, in North America and in Australia. Finally, a big issue when we talk about the known harms of e-cigarettes is that it’s possible that there are serious harms that are currently unknown and will only emerge as we continue following people with studies over the coming decades.

In summary, for young people, using e-cigarettes offers no benefit, is already linked with serious harms and we can expect this list of harms to grow over time.

Question 3: Is vaping a personal choice?

Response: This is open to interpretation. Some people may believe that vaping is a personal choice and you choose to vape. We know that nicotine is a powerful addictive drug. Completing the questionnaire for nicotine dependence will help determine a person’s physical addiction to nicotine. Once you are addicted to nicotine, it is not a personal choice and that’s why we need to regulate things like marketing, displays and using nicotine products indoors so young people don’t start in the first instance and don’t see it as the normal thing to do.

Young people are being exposed to advertisements for vaping products, which are sometimes promoted as safe and fun products, on social media platforms such as TikTok. Some young people may believe that they are taking part in something that is safe. They may also feel pressurised to experiment with vaping by the marketing tactics of the industry and those promoting them or by their peers.

You also need to consider people who do not vape but who are exposed to second hand vapour – do they have a choice?

¹⁷ [HRB Review: Harms and benefits of e-cigarettes and heat-not-burn tobacco products. A literature map](#)



Question 4: How difficult is it to give up vaping?

Response: E-cigarettes contain nicotine, a drug that is highly addictive. You don't have to vape every day to get addicted. When a person intakes nicotine, a nicotine receptor grows in the brain, which they have to feed regularly with a cigarette or e-cigarette because the body will crave the nicotine. When a person inhales, it takes 7 seconds for the nicotine to reach the brain. When a person quits vaping they experience withdrawal symptoms because their body is craving another hit.

Some e-cigarettes marketed as containing low levels of nicotine have in fact been found to contain much higher levels of nicotine than marked on the packaging. Even those sold as containing no nicotine have been found to contain nicotine in low and high levels. For example in August 2023, the HSE's Environmental Health Service issued a warning alerting the public to stop using five different flavours of McKesse brand disposable e-cigarette as they contained illegal amounts of nicotine. These products were analysed and found to have a nicotine concentration up to 28.9 mg/ml, though the packaging stated it was 20mg/ml.



ACTIVITY 10: VAPING AND THE ENVIRONMENT

Delivery method: Discussion

Aim: To explore the impact that vaping has on the environment.

Instructions:

Start by asking young people:

- What are the environmental risks of vaping to local communities?

If they are struggling to come up with any answers, you can use these additional questions to prompt responses:

- What do you think about litter when you see it in your community, playgrounds, school, etc.?
- How does this affect you and your health?
- How can animals and other wildlife be harmed by litter?
- How might vaping affect habitats and biodiversity?
- Where does litter go when it is washed away in drains and rivers?
- What is the impact on animals and other wildlife then?
- How does e-cigarette litter add to climate change?

Follow this discussion with the following question:

- What do you think are some of the global impacts of vaping on the environment?

Additional information for facilitator

E-cigarette waste is potentially a more serious environmental threat than cigarette butts because e-cigarettes introduce plastic, nicotine salts, heavy metals, lead, mercury and flammable lithium-ion batteries into waterways, soil and to wildlife.

Unlike cigarette butts, e-cigarette waste won't biodegrade even under severe conditions.

E-cigarettes left on the street eventually break down into micro plastics and chemicals that flow into the storm drains to pollute our waterways and wildlife.

E-cigarettes need to be disposed of carefully, using the WEEE Ireland Blue Battery Boxes that you often see in supermarkets or they can be returned to the retailer who is obliged to take back these devices. E-cigarettes should never be disposed of with normal waste as they are a fire risk. They contain a battery, which can overheat or get damaged. They also contain flammable chemicals, which could combust.

Disposable vapes are especially difficult to recycle and some use lithium-ion batteries which can over heat and catch fire, making them a hazard to waste collection workers and others.



Useful webpages

	SPHE Healthy Choices Unit 2 - Nicotine Addiction YouTube video
	HSE E-cigarettes resources page
	HSE information on vaping
	SPHE Healthy Choices Unit 2 Tobacco and E-cigarettes Teachers Handbook
	Straight to vape While you were streaming 2020 YouTube video
	Quit4Youth resources page

