



## HSE Health and Wellbeing

INFORMATION AND GUIDANCE  
ON E-CIGARETTES FOR SCHOOLS

# background information



## What are e-cigarettes?

E-cigarettes (electronic cigarettes), sometimes referred to as vapes use an ‘e-liquid’ that usually contains nicotine, as well as varying compositions of flavourings, propylene glycol, vegetable glycerine, and other ingredients. The e-liquid is heated to create an aerosol that the user inhales or ‘vapes’. The level of nicotine varies and some e-liquids can contain as much nicotine as a pack of 20 cigarettes. Some vape product labels do not show that they contain nicotine. Some vape liquids sold as 0% nicotine have been found to contain nicotine.

E-cigarettes work by delivering a “hit” of nicotine. Nicotine is a highly addictive substance. Nicotine exposure during the teenage years can harm brain development, which continues until about age 25. It can impact learning, memory and attention, and increase risk for future addiction to other drugs.

The Centers for Disease Control and Prevention (CDC) in the United States provide an easy-to-read summary describing these products. For more information, visit:

[https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)



# What are the risks for young people?

Until about age 25, the brain is still developing and using nicotine can harm the parts of the brain that control attention, learning, mood and impulse control.

E-cigarettes can contain harmful and potentially harmful ingredients, including:

- **ultrafine particles that can be inhaled deep into the lungs**
- **diacetyl, a chemical linked to serious lung disease**
- **heavy metals, such as nickel, tin and lead**
- **aldehydes which can cause lung disease, as well as cardiovascular (heart) disease.**

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 smoke or vape may experience any combination of:

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

People may also experience nicotine withdrawal when they stop vaping or in situations or places where they are unable to consume nicotine. Common symptoms of nicotine withdrawal include:

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

## Who uses e-cigarettes?

Our most recent figures on e-cigarette use by children and young people (12-17 years) is from the 2018 Health Behaviour of School-Aged Children Study. These figures show that about 1 in 10 (9%) of them used e-cigarettes in the last 30 days. Usage is more common for boys than girls, and was more common among older children and young people.<sup>1</sup> In a study of 16 year olds only, conducted in 2019, 1 in 5 (18%) were current users of e-cigarettes versus 1 in 10 (10%) in 2015.<sup>2</sup> We expect that this figure has increased since 2018. New reports will be published in 2024.

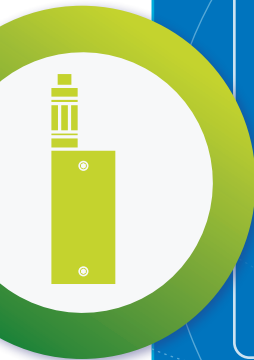
A study conducted by the HSE Environmental Health Service<sup>3</sup> found that adolescents can access e-cigarettes easily; Social media was the most popular way to obtain them with children using Snapchat and Instagram to buy and sell products between themselves.

1 Költő, A., Gavin, A., Molcho, M., Kelly, C., Walker, L., & Nic Gabhainn, S. (2020). The Irish Health Behaviour in School-aged Children (HBSC) Study 2018. Dublin: Department of Health & Galway: Health Promotion Research Centre, National University of Ireland, Galway.


2 Sunday, S., Keogan, S., Hanafin, J. and Clancy, L. (2020). ESPAD 2019 Ireland: Results from the European Schools Project on Alcohol and Other Drugs in Ireland. Dublin: TFRI

3 Evans, DS, Hickey P (2020). E-cigarette & Smoking Use among Adolescents in Ireland: A Focus Group Study. Report prepared on behalf of the Tobacco Control Operational Unit, HSE.

# HSE Recommendations



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. The Health Research Board in Ireland found that young people who vape are three to five times more likely to begin smoking conventional, factory-made cigarettes. Nicotine can also train the brain to be more easily addicted to other drugs like cocaine.<sup>4</sup>




## KEY POINTS FOR COMMUNICATING WITH YOUR WHOLE SCHOOL COMMUNITY

In a study of 16 year olds only, conducted in 2019, 1 in 5 (18%) were current users of e-cigarettes versus 1 in 10 (10%) in 2015.<sup>4</sup> We expect that this figure has increased since 2018. New reports will be published in 2024.

The HSE recommends every effort is made to discourage young people from vaping.

Parents should be encouraged to talk to their children about the risks of vaping. Schools should consider reviewing their substance use policies and procedures and include e-cigarettes and e-liquid as a prohibited substance in their substance use policy. For further guidance for parents on how to talk to their child or adolescent about vaping see <chrome-extension://efaidnbnmnibpcjpcglclefindmkaj/https://www.hse.ie/eng/about/who/tobaccocontrol/resources/vaping-information-for-parents.pdf>



Schools are invited to consider completing the new smoking and vaping lesson plans developed as part of the new junior cycle SPHE curriculum. <https://www.hse.ie/eng/about/who/tobaccocontrol/resources/e-cigarette-resources.html>

More detailed information on e-cigarettes and vaping is available in **Key Information on E-Cigarettes** at the end of this document.

<sup>4</sup> Sunday, S. Keogan, S. Hanafin, J. and Clancy, L. (2020). ESPAD 2019 Ireland: Results from the European Schools Project on Alcohol and Other Drugs in Ireland. Dublin: TFRI

# What can schools do?

Schools have an important role to play in supporting students to make conscious and informed decisions about the risks associated with substance use, including creating a culture and environment that supports them to make healthy choices.

The central objective of a school's substance use policy is the welfare, care and protection of every young person, and sets out in writing, the framework within which the whole school community manages issues relating to substance use.

Taking a whole school approach is the most effective way to protect students from the risks associated with e-cigarettes. The schools substance use policy provides a framework for actions related to e-cigarette use.

## When reviewing your policy consider:

### Curriculum

- How do we achieve the learning outcomes for substance use outlined in the Junior Cycle SPHE Short Course<sup>5</sup> ?
- How do we achieve the learning outcomes for substance use outlined in the Curriculum Framework for SPHE at senior cycle<sup>6</sup> ?
- In what other curriculum areas could teaching and learning around substance use take place?
- How can we support school staff with teaching and learning related to substance use through access to information and continuous professional development?

5 NCCA (2023) Short Course. Social, Personal and Health Education. Specification for Junior Cycle [www.curriculumonline.ie/getmedia/ca8f8975-50ca-4dc3-bba5-a04e25b4f978/JC\\_SPHE\\_Short\\_Course\\_2023.pdf](http://www.curriculumonline.ie/getmedia/ca8f8975-50ca-4dc3-bba5-a04e25b4f978/JC_SPHE_Short_Course_2023.pdf)

6 NCCA (2011) Senior Cycle SPHE Curriculum Framework. [www.curriculumonline.ie/getmedia/91b8718c-fc2a-4c44-99ac-d28b3dda8ee6/sphe\\_framework.pdf](http://www.curriculumonline.ie/getmedia/91b8718c-fc2a-4c44-99ac-d28b3dda8ee6/sphe_framework.pdf)

## Culture and Environment

- How do we currently manage incidents relating to substance use, and how will this apply to e-cigarettes?
- Consider:
  - ◆ Where are young people most at risk of using e-cigarettes?
  - ◆ Does our school have a shared understanding of what constitutes an incident?
  - ◆ How do we achieve a balance between a pastoral approach and disciplinary approach to incidents?

## Policy and Planning

- How does this policy link to other school policies e.g. Code of Behaviour, Health and Safety, SPHE Plan?
- Do we need to update policies to reflect changes in our substance use policy?

## Relationships

- How do we involve our whole school community in the process of updating our policy?
- How do we communicate changes in our policy to students, parents and staff?

### RESOURCES FOR TEACHING AND LEARNING RELATED TO SUBSTANCE USE

#### HSE Junior Cycle SPHE Resource

Includes units of learning for substance use:

- <https://www.hse.ie/eng/about/who/healthwellbeing/hse-education-programme/junior-cycle-sphe-training-resources/>

Units of learning related to e-cigarettes

- <https://www.hse.ie/eng/about/who/tobaccocontrol/resources/e-cigarette-resources.html>

#### Know the Score – Substance Use Materials for Senior Cycle SPHE.

- <https://www.hse.ie/eng/about/who/healthwellbeing/hse-education-programme/training-and-resources-for-post-primary-school-teachers/know-the-score.html>



# Key Information on E-Cigarettes

## What is the legal situation in relation to e-cigarettes?

In 2022, the drafting of the Public Health (Tobacco and Nicotine Inhaling Products) Bill was approved by government. The Bill will ban the sale of e-cigarettes to those under the age of 18 and strengthen regulation of the retail of tobacco and e-cigarette products. We expect the Bill to be brought forward into the legislative programme soon.

## What are the risks in relation to e-cigarettes for young people?

E-cigarettes work by delivering a “hit” of nicotine. Nicotine is a highly addictive substance. Nicotine exposure during the teenage years can harm brain development, which continues until about age 25. It can impact learning, memory and attention, and increase risk for future addiction to other drugs.

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

There is some early evidence that e-cigarettes are linked to heart and lung tissue damage.

Children and young people who vape are three to five times more likely to start smoking than those who never vaped.<sup>7</sup>

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

## Marketing of e-cigarettes to young people

Although the industry claims that it does not target young people, the flavours of e-cigarettes can make them more attractive to this age cohort. The appearance of e-cigarettes and other Electronic Nicotine Delivery Systems is constantly changing. They are designed to look like everyday items such as USB sticks, highlighters, credit cards, remote controls, and pens.

Most e-cigarettes contain nicotine. Some vape product labels do not disclose that they contain nicotine, and some vape liquids marketed as containing 0% nicotine have been found to contain nicotine. Some e-cigarette products can also contain THC (the main psychoactive compound found in cannabis) or CBD (also found in cannabis, but not psychoactive), with or without flavouring. Products containing THC are illegal in Ireland.

There are many e-cigarette products on the market. Pod mod-type e-cigarettes are becoming increasingly popular among young people in Ireland. Pod mod products have a prefilled or refillable 'pod' or 'cartridge' with a modifiable ('mod') system. They come in many shapes, sizes and colours, and brands include Elf Bar, Lost Mary and VUSE.

The Centers for Disease Control and Prevention (CDC) in the United States provide an easy-to-read summary describing these products. For more information, visit: [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/pdfs/ecigarette-or-vaping-products-visual-dictionary-508.pdf](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/ecigarette-or-vaping-products-visual-dictionary-508.pdf)

## What did the Health Research Board find in their review of e-cigarettes?

The Health Research Board also conducted a review of harms associated with e-cigarette use in 2020.<sup>8</sup> Most of the observed harms were due to acute events associated with the use of e-cigarettes. They included poisonings, burns, fractures, lung injury and exacerbations of asthma. There were fatalities among the poisonings and respiratory disease cases, and long-term disability among some burn cases. There was some early evidence of damage to cardiovascular and respiratory tissue, mainly due to metals and volatile organic compounds. Four cross-sectional surveys on cancers identified the presence of carcinogens for lung, oral, and oesophageal cancer, and one identified biomarkers for bladder cancers.

8 McCarthy A, Lee C, O'Brien D, Long J (2020). Harms and benefits of e-cigarettes and heat-not-burn tobacco products: A literature map. <https://www.hrb.ie/data-collections-evidence/hrb-evidence-centre/publications/publication/harms-and-benefits-of-e-cigarettes-and-heat-not-burn-tobacco-products-a-literature-map/returnPage/1/>



## Where are young people accessing e-cigarettes?

A study conducted by the HSE Environmental Health Service<sup>9</sup> found that adolescents can access e-cigarettes easily. Social media was the most popular way to obtain them with children using Snapchat and Instagram to buy and sell products between themselves. Products were also purchased in shops such as discount stores and vape shops, where any age restrictions were not difficult to overcome. Most participants had not discussed e-cigarettes with their parents. By contrast, most had discussed smoking with their parents. Similarly, their findings suggest that smoking, alcohol consumption and use of e-cigarettes are interlinked.

## How to talk to a young person about vaping

Here are some suggestions for talking to children and young people about vaping:

- Ask questions like: what do they think about vaping? Do they know people who vape? Why do they think people vape?
- Listen to them, learn from them, but also use what you know to help them understand the facts about vaping.
- Talk about the different reasons why young people may vape and give examples such as wanting to fit in, curiosity, stress, etc.
- Talk to them about how to respond if they ever feel pressured to try vaping.



<sup>9</sup> Evans, DS, Hickey P (2020). E-cigarette & Smoking Use among Adolescents in Ireland: A Focus Group Study. Report prepared on behalf of the Tobacco Control Operational Unit, HSE.



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