



YOUNG PEOPLE AND VAPING

Briefing Paper for parents, carers and staff who work with young people

October 2024

KEY MESSAGES

- ★ If you don't smoke, don't vape.
- Yapes are not meant to be used by young people. They can be used to help adults who smoke to quit smoking.
- Yaping is not risk-free, particularly for young people and those who have never smoked. Vaping can lead to both short and medium term health impacts.
- Using nicotine from a young age can harm young people's brain development, affecting the parts of the brain that influence concentration levels, learning ability, mood, and self control.
- Nicotine is a stimulant drug which is highly addictive. Using nicotine during teenage years may lead to subsequent dependency of nicotine and other substances.
- *Young people say that peer groups and peer pressure/influence are the main reasons for choosing to vape.
- Yape waste is extremely harmful to our environment. Most vapes contain lithium-ion batteries, which often end up being discarded in normal waste bins, posing a fire hazard.

What is a vape?

Vapes are devices which heat a liquid (called an e-liquid) to produce a vapour that is then inhaled by the user. Vapes can also be referred to as electronic cigarettes (e-cigarettes) or Nicotine Vapour Products (NVPs). Most contain nicotine and flavouring chemicals (1).



Despite vapes often being considered as a single type of product, there is a wide variety of vaping products available (1). Vapes may help adults who smoke to quit smoking (2).

Disposable vapes are most commonly used amongst young people. They are 'single use' as they are designed to be discarded after the e-liquid has been used – this may be after a few days or weeks, depending on how often it is being used. Nearly all disposable vapes come in the maximum 20mg/ml (2%) nicotine concentration. Based on the price of disposable vapes, the weekly cost of using this type of vape ranges between £1 and £42 – depending on the purchase of low to high priced products and the customer's frequency of use (1).

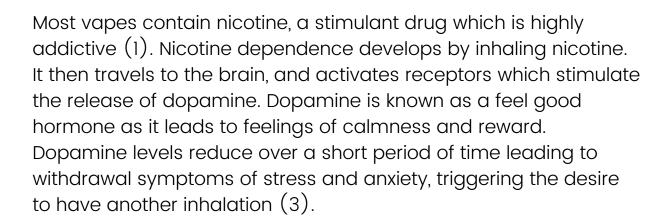




Are vapes addictive?









Early exposure to nicotine can impact parts of the brain that control concentration levels, learning ability, mood, and impulse control (4,5). Using nicotine in adolescence can increase young people's risk of harm from other substances such as cannabis and cocaine (6). Some e-cigarettes have been marketed as 'nicotine free' but testing has confirmed they do in fact contain nicotine.

How does vaping impact on health?



Short-term effects of coughing, dizziness, sore throats and headaches have been identified. The long-term effects are not yet known (6).



Recent studies suggest that vaping may negatively impact heart health, including heart rate and blood pressure (6).



Nicotine can harm the developing adolescent brain. The brain keeps developing until about age 25 (8).



As nicotine affects brain development, this can make it harder to learn and concentrate (5). Some of the brain changes are permanent and can affect mood and ability to control impulses into adulthood (9).



Vaping may affect sporting performance. This can lead to lung inflammation and irritation, which can make it harder to breathe and do well in sports (10).



Emerging evidence suggests vaping has negative impacts on oral health, but more longer term studies are required (11).



Many of the ingredients in a vape (e-liquid) are considered safe for ingestion (eating), but when these ingredients are heated they produce new chemicals that may not be safe to inhale (12). The flavours in the e-liquid could potentially lead to allergic reactions from use of these vaping products (13).

Can vaping impact on mental health?



When a person is dependent on (or addicted to) nicotine and stops using it, their body and brain have to get used to not having nicotine. This can result in temporary symptoms of nicotine withdrawal (4).

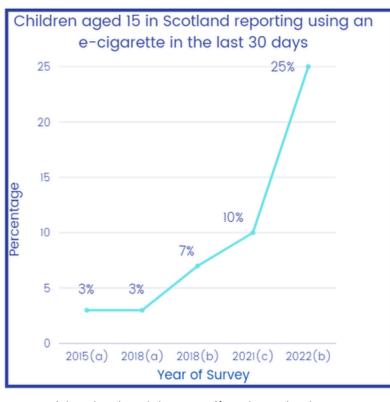


Nicotine withdrawal symptoms include irritability, restlessness, feeling anxious or depressed, trouble sleeping, problems concentrating, and craving nicotine. People may keep using a vape to help relieve these symptoms (4).



Young people may turn to vaping to try to deal with stress or anxiety, creating a cycle of nicotine dependence. But nicotine dependency can be a source of stress in itself (5).

Are many young people vaping?

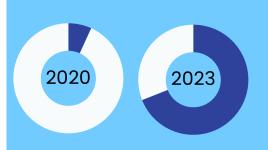


Between 2018 and 2022, there was a steep increase in vape use amongst young people.

Around 2021, vaping use increased among all age groups. This trend was seen across people who have never smoked; people who currently, regularly or occasionally smoke and those who have stopped smoking (1).

This increase coincided with the COVID-19 pandemic and a huge increase in the use of disposable vapes. Data suggests that the use of disposable vapes is strongly linked with the overall increase in vape use (1).

- a. Scottish Schools Adolescent Lifestyle and Substance Use Survey (14)
- b. Health Behaviour in School-aged Children (15)
- c. Health & Wellbeing Census Scotland (16)



Disposable vapes

The use of disposables has increased from 7.8% to 69% between 2020 and 2023 among 11 to 17 year olds in Great Britain (1).

Why are young people vaping?



One of the main identifiable reasons that young people choose to vape is down to peer groups and peer pressure/influence (17,18).

When we asked young people in Greater Glasgow and Clyde why they vaped, some of their responses were:

"It was a trend and I felt pressured into it"

"I wanted to be cool and felt if I said no it would be embarrassing"

"They're cool, everyone is doing it right now" Vapes are very attractive to young people due to their appearance. They are available in many different colours and flavours, and some look like toys (6). Many vaping brands are using slick branding and flavours to target young people, and the increasing presence of the tobacco industry in the market is a concern (19).







Credit: ASH Scotland

Unlike cigarettes which are required to in plain packaging and not on display in shops, vapes are very eye catching and clearly visible in shops (20). Vapes are often marketed on popular social media platforms used by young people and there are concerns that 'influencers' are being paid to promote vaping on these sites (6).

What is the law in Scotland regarding vaping and young people?



It is illegal to sell a vape or purchase a vape for a person under 18(4).



A ban on the sale and supply of disposable vapes in Scotland will be in place from 1st June 2025 (21, 22).



Many vapes sold online and in some shops have been found to be non-compliant and therefore not intended for the UK market. Trading Standards estimate that a third of vapes sold are non-compliant and therefore illegal (23).



These include vapes with oversized tanks or unsafe levels of nicotine or other substances (including drugs such as cannabis). As these vapes do not comply with the UK regulations, it is not possible to know exactly what is in these vapes, the quantity of these contents and the possible health risks (24).

If you find out that a business is selling vapes to under 18s or is selling non-compliant vapes, you can report the business to Trading Standards.

Visit the <u>Consumer Advice</u> website.



Are vapes harmful to the environment?

Vape waste is extremely harmful to our environment as it consists of three different forms of environmentally harmful waste:



Plastic - this often does not degrade and is difficult to recycle



Electronic - including batteries which can be a fire risk and circuit boards which can leak hazardous chemicals into the environment



Chemical - e-liquid is a hazardous chemical waste and can be dangerous to children and animals if consumed (25).



Most vapes contain lithium-ion batteries, which often end up being discarded in normal waste bins, posing a fire hazard (26). Vapes are difficult to recycle which means that only a small number of vapes are properly disposed of or recycled. Zero Waste Scotland estimated that in 2022 up to 26 million disposable vapes were thrown away in Scotland (27).

To find out more about where to dispose of vapes, visit <u>recycle your electricals</u>.



Are young people still smoking cigarettes?



Survey data on smoking prevalence over the last few years indicates that regular and occasional tobacco use in young people has decreased in Scotland (1,14,15,16). This is thought to be linked to the increase in vaping in young people. There is emerging evidence that vapes may create a new route into smoking for young people (1).



Occasionally, people may decide to use a vape alongside smoking tobacco (dual use). Dual use does not appear to provide any health benefits and may increase the risk of some diseases (28).

Are there other nicotine products young people are using?

There are some other nicotine products that young people might be experimenting with. Here are some examples:



Shisha (hookah, water pipe, hubble bubble) is becoming increasingly popular in the UK. Tobacco is mixed with fruit or molasses sugar through a bowl and hose/pipe, and burned with wood, coal or charcoal, creating flavoured smoke to inhale. A shisha session (usually between 20-80minutes) can be the equivalent of consuming over 100 cigarettes (29).



Cigar use is appearing to increase amongst young people, particularly in those aged 18-24 (30).



Snus is a variant of dry snuff where the tobacco is loose or in a little pouch, which is inserted to sit under the lip to give a nicotine dose. Snus is illegal in the EU except in Sweden and Norway(31).



Nicotine pouches (white snus) contain flavoured nicotine but not tobacco. They are placed between the lip and gum, and come in various nicotine strengths and flavours (32). As these do not contain tobacco, they can be sold legally and marketed to children.



Chewys are a flavoured gummy containing nicotine. As these do not contain tobacco, they can be sold legally and marketed to children.

All of these products contain nicotine, which is an addictive substance, not recommended for use by young people.

Is there advice available for young people who vape?



Yes, advice is available for young people in Scotland. Contact:

- Quit Your Way Scotland can offer advice to anyone of any age who would like to quit vaping via the phone or webchat service.
- <u>Childline</u> provides tips for quitting vaping as well as access to a Childline counsellor and the message boards.
- <u>Breathing Space</u> can provide information and support for anyone in Scotland over the age of 16 experiencing low mood, depression or anxiety.







What advice is available for parents, carers and others concerned about a young person vaping?

To protect young people, we advise parents, carers and those who work with young people to:

- Approach vapes like any other age restricted product, for example alcohol or cigarettes
- Discourage experimentation of vaping
- Take opportunities to provide accurate and clear information on the risks of vaping to our health. This includes that vaping impacts on our health in the short and medium term, and some long-term impacts remain unclear.
- Take opportunities to provide accurate and clear information on the dangers of nicotine and how it is a highly addictive substance that can affect young people's brain development
- Encourage young people not to share vapes with their friend(s) as this can increase their risk of spreading germs or infections
- Encourage safe choices and minimise peer pressure/influence.

For more information, view our <u>presentation on young people and vaping</u>.



<u>Parentclub</u> also offer advice on what to do if you think your child may be vaping and tips for starting a conversation about vaping.



<u>Respect me</u> have lots of information and resources available on dealing with bullying behaviour.



About us

This Briefing Paper has been written by NHS Greater Glasgow and Clyde (NHSGGC) 'Young People and Vaping Group'. For more information, please contact quityourway.smokefreeschools@ggc.scot.nhs.uk

Disclaimer: All references are correct at time of publication and will be reviewed every six months. NHSGGC is not responsible for the content of any external websites listed.

References

- 1. https://www.stor.scot.nhs.uk/handle/11289/580365
- 2.https://www.nhsinform.scot/healthy-living/stopping-smoking/how-to-stop/vapes-e-cigarettes
- 3. https://truthinitiative.org/research-resources/emerging-tobacco-products/nicotine-use-and-stress
- 4. https://www.nhsinform.scot/campaigns/vaping/
- 5.https://www.cdc.gov/tobacco/e-cigarettes/youth.html
- 6. https://ashscotland.org.uk/wp-content/uploads/2024/01/Young-people-and-vaping-2023-Update.pdf
- 7.https://doi.org/10.5811/westjem.2019.7.41661
- 8.https://www.bmj.com/content/348/bmj.g1151
- 9. https://www.sciencedirect.com/science/article/pii/S1043661823000725
- 10.https://pubmed.ncbi.nlm.nih.gov/32282460/
- 11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8293737/
- 12. https://www.lung.ca/lung-health/vaping-what-you-need-know
- 13. https://www.sciencedirect.com/science/article/pii/S0273230017300892
- 14. https://www.gov.scot/collections/scottish-schools-adolescent-lifestyle-and-substance-use-survey-salsus/
- 15. https://www.gla.ac.uk/schools/healthwellbeing/research/mrccsosocialandpublichealthscien cesunit/programmes/complexity/healthbehaviourinschool
 - agedchildrenhbscscotlandstudy/#:~:text=The%20HBSC%20survey%20covers%20a,family%20life %2C%20school%20environment%2C%20electronic
- 16. https://www.gov.scot/publications/health-and-wellbeing-census-scotland-2021-22/
- 17. https://ash.org.uk/resources/view/use-of-e-cigarettes-among-young-people-in-great-britain
- 18. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7995953/pdf/yjbm_94_1_95.pdf
- 19. https://truthinitiative.org/research-resources/tobacco-industry-marketing/4-marketing-tactics-e-cigarette-companies-use-target
- 20. https://commonslibrary.parliament.uk/research-briefings/sn05537/
- 21. https://www.gov.scot/news/action-on-single-use-vapes/
- 22.https://www.bbc.co.uk/news/articles/cp8x1gyg0lro
- 23.https://www.tradingstandards.uk/media/3178685/ctsi-statement-on-vapes-1.pdf
- 24.https://commonslibrary.parliament.uk/research-briefings/cdp-2024-0004/
- 25.https://www.undo.org/environmental-impact/vape-waste-is-toxic-waste
- 26. https://www.zerowastescotland.org.uk/resources/environmental-impact-single-use-e-cigarettes
- 27.https://www.gov.scot/news/tackling-the-environmental-impact-of-disposable-vapes/

- 28. https://evidence.nejm.org/doi/full/10.1056/EVIDoa2300229
- 29. https://www.bhf.org.uk/informationsupport/risk-factors/smoking/shisha
- 30. https://academic.oup.com/ntr/advance-article/doi/10.1093/ntr/ntae021/7615427? preview=true&login=false
- 31. https://academic-oup.com/eurpub/article/26/5/817/2197571
- 32. https://www.nhs.uk/better-health/quit-smoking/stop-smoking-

aids/#:~:text=Tobacco%2Dfree%20nicotine%20pouches%20are,different%20nicotine%20strengths%20and%20flavour