

# Vaping (E-cigarettes) and children and young people (CYP)

## Primary Care Respiratory Society (PCRS) position on children and young people and vaping

The Primary Care Respiratory Society (PCRS) advocates that:

- vaping should be discouraged among children and young people;
- accurate information should be available for them, their families, schools and health professionals around the potential risks of vaping, in terms of a gateway product for other addictive behaviours; and
- that long-term safety data should be available for this age group in regulated products.

Awareness needs to be raised around the risks of unregulated products and action is needed on removing advertising and flavours that target young people. Disposable vapes also need to be discouraged because of the effects on the environment and ease of access for young people.

PCRS fully supports the Governments move to ban the sale of single-use disposable vapes in England and Wales from June 2025. However, a strategy needs to be put in place for on-going support.

Vaping and smoking cessation services need to be available for children and young people and provide all support necessary to ensure any nicotine dependency is addressed early. Support should include dealing with any risk that may result in them returning to smoking or obtaining illicit vapes. Vaping is an effective option for quitting smoking but should not be considered safe in non-smokers.

### Background

The UK has the largest market for vapes in Western Europe.<sup>1</sup> There has been a rapid increase in use over the last decade and, whilst this has now stabilised in adults, there has been a sharp rise in usage in 18–24-year-olds from 2020, coinciding with the introduction of disposable and flavoured vapes into the UK, which have been popular and attractive to children and young people.<sup>2</sup>

### What are they?

Whilst there is a variety of devices, the important thing to remember is that all vapes generally consist of the same things: a heating element or coil (atomiser) which is powered by a battery, and a tank or pod which contains e-liquid. The diverse terminology you hear only really refers to differences in size, shape or peripheral controls.<sup>3</sup>

Vapes can contain a wide range of chemicals, particularly in unregulated vapes, in addition to nicotine (which is known to cause addiction). This generally includes polypropylene glycol and glycerine but may contain formaldehyde (a known carcinogen), acrolein (a carcinogenic weed killer), diacetyl, flavourings (more than 100 different chemicals to make different flavours), plastic, copper and the lithium battery. In the UK there is a regulation that prohibits the use of chemicals of very high concern.<sup>4</sup> However, as only half of children get their vapes from shops, where regulation is easier to monitor, they may be accessing vapes from sources that are not regulated.<sup>5</sup> The regulations around vapes are different around the world. EU regulation does not ban chemicals of very high concern, but they must be labelled if they make up more than 0.1% of contents.<sup>6</sup>

Vapes are devices used to inhale nicotine from a vapour (heated liquid) rather than from smoking. The risks of tobacco smoking are well established and, to reduce smoking and aid smoking cessation, the MHRA is looking to license products that will be prescribable by the end of 2025; for now, they are sold as consumer products. Whilst there is a reduced risk in the short term from moving from smoking to vaping (see PCRS position statement on vaping),<sup>7</sup> the message sent to the wider community is that vaping is in general safe and far safer than smoking. Vaping is however associated with risks and, as a relatively new product to the market, the long-term side effects have not been studied. Whilst it remains illegal in the UK to sell vapes to children and young people less than 18 years of age, the evidence shows that vaping rates in children and young people have increased rapidly over the past decade.<sup>2</sup> Reasons for this include attractive colours and flavours marketed towards children and young people and widespread promotion and perceptions of safety. This leads to the need for different communication by healthcare professionals to discourage both smoking and vaping and explain the risks and

uncertainty around longer-term side effects.

Vapes are available in a range of nicotine strengths, from 0mg/ml to 20mg/ml. Many of the newer disposable vape models, which often attract younger users, utilise nicotine salts. These salts are smoother on the throat and easier to inhale compared to traditional nicotine. These newer vape models could present challenges for helping children and young people reduce their nicotine use or quit entirely (Public Health England, 2019; National Institute on Drug Abuse, 2022).<sup>8</sup>

## What is the evidence to support this and why is PCRS making a policy statement?

The PCRS has authored a position statement on vaping in adults to support vaping as part of smoking cessation programmes.<sup>7</sup> For those smoking, access to smoking cessation services with a range of methods for aiding cessation including vaping is widely supported. However, the increase in vaping rates in children and young people, nearly one in four 16–24-year-olds in 2024 compared with one in 20 in 2019, is concerning. Nearly one in five 11–17-year-olds in England have tried vapes; however, 4.3% use vapes more than once a week (230,000 children). The lack of compliance with regulations to prevent under 18-year-olds from purchasing vapes and the widespread promotion and marketing of products directed at this age group is concerning, coupled with misconceptions of the safety of vapes and lack of longer-term evidence.<sup>9</sup>

## Key issues

### Awareness of vaping in children and young people

- *What percentage of 11–17-year-olds have never smoked but have tried vaping?*

The proportion of never-smokers who have tried vaping has declined from 11.5% in 2023 to 8.7% in 2024 (380,000 children). However, as most children don't smoke, never-smokers make up four in 10 (39%) children aged 11–17 years who have tried vaping.<sup>5</sup>

A recent study shows that the increase in persistent vaping has continued to rise in young adults (18–25-year-olds) despite stabilising in adults overall. The previous finding that much vaping is transient was before disposable vapes were introduced into the UK market. The most recent study suggests that 56% of never-smokers who vaped reported daily vaping, with 68% having vaped for more than a year.<sup>2</sup>

- *How are children and young people accessing vapes?*

The most frequent source of vapes by current vapers is: being given to them (54%), followed by shops (48%), informal purchase (27%) and other options including online sales.<sup>5</sup>

### Reducing tobacco dependency

- *Nicotine withdrawal*

In an ASH survey of 11–17-year-olds, 26% of vapers reported strong, very strong or extremely strong urges to vape in 2020 compared with 44% in 2024.<sup>5</sup> Withdrawal symptoms can lead to long-lasting changes in cognition (thinking), attention and memory. It can also lead to mood disorders like depression and anxiety. This can impact the child's home, social and school life, as well as having an impact on the rest of the family.<sup>9</sup>

- *Diagnosing nicotine and vaping habit dependency*

There is currently little or no evidence base to assess this; however, it may be useful in practice to ask questions that are adapted from the Heaviness of Smoking Index (HSI)<sup>10</sup> such as:

- 1) How many times do you use a nicotine-containing vape a week?
- 2) If a daily user, how soon after getting up in the morning do you start vaping?
- 3) What's the longest period you can go without using a vape?

If the person does it daily, vapes early and can't go long without a vape containing nicotine, then referral to a counsellor who specialises in addiction (ideally for children and young people) should be considered if available in your area.

- *Management*

Vaping cessation is possible, but it is important for the nearly 35% of 11–17-year-olds who have tried smoking before vaping that this is not at the risk of relapsing to tobacco dependence.<sup>5</sup>

- *Managing dual users – vaping and smoking*

Around half of adult vapers smoke as well,<sup>5,11</sup> but this is a lot smaller in children and young people. In 2024, 2.8% (150,000 children) are dual users (they both vape and smoke). If the child or young person is ready to stop smoking, they can join an NHS stop smoking service to get behavioural support and additional pharmacotherapy if needed.<sup>11</sup>

- *Why do we not have stop vaping services?*

The National Centre for Smoking Cessation and Training (NC SCT) states that, based on current evidence, it would not be cost-effective for health improvement in the overall population,<sup>12</sup> but may need to be reassessed as longer-term evidence becomes available.

The Nicotine Mouth Spray is licensed as a vaping cessation aid and could be considered from 12 years and above.<sup>13</sup>

## Short- and long-term side effects

- *Short-term unwanted effects*

The most recent Cochrane Review indicates that the number of unwanted effects (including serious unwanted effects) reported from vaping is low in adults.<sup>14</sup> Unfortunately, data do not exist for children and young people. There are some concerns that developing lungs may be more sensitive to the toxic effects of the chemicals in vapes. Despite these risks, it's crucial to recognise that the adverse health impacts of smoking are significantly more severe than those associated with vaping. The unwanted effects most often reported from vaping are throat or mouth irritation, headache, cough and feeling sick. It is important to report any adverse reactions to the MHRA via the yellow card website <https://yellow-card.mhra.gov.uk/>.

- *Longer-term potential effects*

An exploration of the available studies found that levels of tobacco-specific nitrosamines, volatile organic compounds and other toxicants implicated in the main diseases caused by smoking were found at significantly lower levels in vapers. Among vapers, overall levels of nicotine were lower or similar to smokers.<sup>15,16</sup>

These data are from adults aged 18 years and above and do not include any long-term data for children and young people as the rapid rise in vaping has been since 2020. Vaping exposes users to some toxins and we do not know yet what the risks might be in the longer term.

The EU has looked at potential risks, including accidental spillage and accidental ingestion, safety caps to prevent children from accessing refills, a gateway product to nicotine addiction and chemicals whilst considered safe for ingestion, not tested for inhalation, with human and animal studies showing evidence of cytotoxic and/or oxidative and respiratory inflammation and cardiopulmonary effects.<sup>1</sup>

However, for children and young people who have never smoked before but who have tried vaping, it would be ideal not to start vaping in the first place. This is because there remain concerns that the brain of adolescents may be more susceptible to developing addictive behaviours.<sup>16</sup> This is supported by the findings that the UK is now the largest market for vaping in Western Europe and the increase is largest in those who have never smoked, predominantly in young adults aged 18–24 years and those with higher alcohol consumption.<sup>2</sup> It is also possible that these same young people may be smoking as well, but not at the level of vape uptake.

## Environmental issues

- *What's the environmental impact of vaping?*

Disposable vapes are incredibly harmful to the environment. Five million disposable vapes are either littered or thrown away in general waste every week. This has quadrupled in the last year. Disposable vapes are difficult to recycle because they're made from a mixture of materials – including plastic, copper and a lithium battery. They're designed as one unit, which means the batteries can't be easily separated from the plastic shell and other materials. This makes disposable vapes difficult and expensive to recycle.<sup>17</sup>

Due to this, PCRS is very pleased to hear that the Government will be banning single-use disposable vapes in England and Wales from June 2025.

<https://www.pcrs-uk.org/sites/default/files/resource/2024-July-PCRU-tobacco-dependence.pdf>

## Support, resources and information for healthcare professionals, patients, families and other community providers (schools, etc)

### Prevention

Families of children and young people need to be aware that smoking and vaping are more likely to be taken up if they live in families where they are already in use. Thinking about measures for the whole family to quit smoking and vaping is important. Resources available, see overleaf.

## Information for children, young people and their families

- Vaping: A young person's perspective <https://www.pcrs-uk.org/blog/vaping-young-persons-perspective>
- Frank Website <https://www.talktofrank.com/drug/vapes>
- <https://smokefreesheffield.org/get-involved/campaigns/vaping-the-facts/>
- <https://www.youtube.com/watch?v=pMaTOkSF29A&t=68s>

## Resources for healthcare providers

### British Paediatric Respiratory Society (BPRS)

- Annual report: <https://www.bprs.co.uk/publications/>

### Royal College of Paediatrics and Child Health (RCPCH)

- Policy briefing web page: Vaping in young people | RCPCH
- Policy briefing document: Policy-briefing%3A-Vaping-in-young-people-.pdf (rcpch.ac.uk)

### Action on Smoking and Heather (ASH)

- 2024 annual report: Use-of-vapes-among-young-people-in-Great-Britain-2024.pdf (ash.org.uk)
- <https://ash.org.uk/resources/view/use-of-e-cigarettes-among-young-people-in-great-britain>
- <https://ash.org.uk/resources/view/addressing-common-myths-about-vaping-putting-the-evidence-in-context>
- <https://ash.org.uk/resources/view/awareness-and-use-of-nicotine-pouches>

### Government Tobacco & Vapes Bill

- <https://www.gov.uk/government/publications/tobacco-and-vapes-bill-factsheets/tobacco-and-vapes-bill-smokefree-generation-factsheet>
- <https://www.gov.uk/government/publications/tobacco-and-vapes-bill-factsheets>

## Children and young people (CYP) campaign resources

- <https://smokefreesheffield.org/get-involved/campaigns/vaping-the-facts/>

## Public Health Directors

- <https://www.adph.org.uk/networks/northwest/wp-content/uploads/sites/14/2024/03/Position-Statement-on-Nicotine-Vaping-Final-1.pdf#:~:text=Children%20and%20young%20people%20under%20the%20age%20of,negative%20impacts%20on%20brain%20development%20in%20young%20people.>

## World Health Organisation (WHO)

- <https://www.who.int/campaigns/world-no-tobacco-day/2024>

## PCRS position

### Overarching PCRS position on vaping which complements the introduction section

PCRS strongly advocates that vaping should be discouraged in children and young people. This includes the significant reduction or withdrawal of promotional/vape advertising campaigns aimed at them; limits in terms of access to vaping and vaping materials; and availability of accurate information to children, young people and their families on the short-term addictive risks and unknown longer-term risks of vaping, as well as risks around unregulated products.

Due to the environmental impact of vaping, PCRS also feels that action is required to discourage vaping from an environmental point of view, particularly where disposable vapes are concerned.

PCRS fully supports the Government's move to ban single-use disposable vapes in England and Wales from June 2025.

Vaping and smoking cessation services play a key role in addressing tobacco dependency and children and young people should have access to these to address nicotine dependency early. However, vaping should not be considered safe in non-smokers and should therefore be actively discouraged. The PCRS would like to see more done to support children and

young people in vaping cessation as well as treating tobacco dependence. With the forthcoming ban of single-use disposable vapes, these services must support children and young people not to revert back to smoking and/or start obtaining illicit vapes.

## What do we want our colleagues and others to do (NHS England/population)?

- Carry out health promotion of not smoking or vaping and the health benefits associated with this.
- Raise awareness of vaping in children and young people e.g. that they are addictive (26% of vapers reported strong, very strong or extremely strong urges to vape in 2020, compared with 44% in 2024) and potentially damaging to mental health and well-being.
- Highlight that they are not risk-free and long-term effects haven't been studied in children and young people.
- Campaign for the reduction or removal of vape advertising in a similar way to what has been done for cigarettes. In 2024, 72% of 11–17-year-olds reported they were exposed to some form of vape promotion, the main sources being in shops (55%) and online (29%).<sup>5</sup>
- Provide more support to children and young people in smoking and vaping cessation. This needs to address the underlying nicotine dependency as well as to ensure that they do not revert back to smoking or start obtaining illicit vapes.

## What more do we want the government to do?

- Implement effective monitoring of the sale of vapes to ensure age restrictions are observed.
- Discontinue single-use disposable vapes, most commonly used by children and young people, as planned in June 2025.
- Prevent vape advertisements/promotions targeted at children and young people.
- Clear public health messages to not start smoking or vaping.
- Legislate for plain packaging and flavours/colours available and to make vaping less accessible and appealing to children and young people.

## A different position to reduce vaping uptake by children and young people

- Addressing vaping along with other health promotion and well-being issues including addiction, drugs and smoking.
- Access to cessation services for children and young people. These services should support children and young people to

address their nicotine dependency and provide them with all the necessary support to ensure they do not go back to smoking or start to obtain illicit vapes.

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