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Evidence brief
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Vaping Cessation for Young People

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Summary

- **Youth vaping is on the rise.** UK Government action has combined legal and regulatory measures (such as banning disposable vapes) with educational programmes through schools and Local Authorities.

- **Behavioural and educational interventions show promise.** Text messaging interventions can have significant and positive effects on youth vaping cessation. Tackling the marketing appeal of vape packaging might help prevent young people trying vapes. Perception of harms is a probable predictor of vaping abstinence and intention to quit.

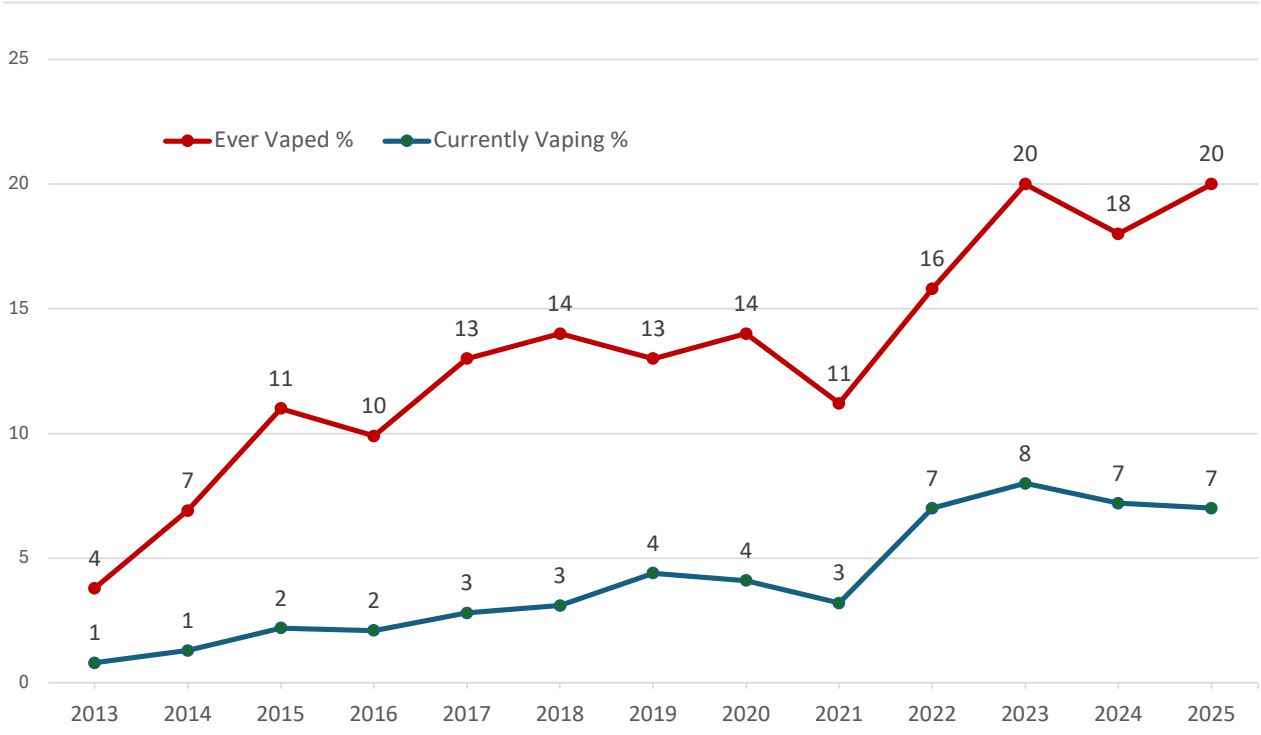
- **The evidence base is narrow and highly US-centric, with a relative shortage of evaluations of what works in the UK.** Future research needs to generate more long-term data, more randomised control trials, cost effectiveness analysis, and more understanding of implementation fidelity and sustainability of interventions.

What is the public health challenge?

Underage vaping in the UK has increased, prompting a strong focus on prevention and cessation efforts tailored to young people. While it is now illegal to sell vaping products to anyone under 18, enforcement challenges remain. Disposable vapes can easily be obtained by young people through some retailers or proxy purchasing.

Surveys with young people point to a **sharp rise in experimentation with vapes among teens**: around one in five young people reported having tried vaping since 2023. Regular use remains concentrated among those who have a history of smoking, but the concern is that vapes are appealing to never-smokers in a way that was never intended when vapes were promoted by public health authorities to support adult smokers to quit cigarettes.

Figure 1: Youth vaping trends in the UK (11-17 year olds) 2013-2025



Policy action in the UK

The Government is currently adopting a dual approach: using more stringent policies such as **controls on marketing and sales to under-18s**, while also expanding **support and information for vaping cessation and prevention services**.

The UK-wide Tobacco and Vapes Bill is currently being debated by Parliament and includes a series of vaping regulations targeted at restricting smoking in some outdoor places, and targeting the advertising and marketing appeal of vaping products particularly to children. Recent tobacco control plans (outlined in Stopping the Start, 2023) included specific proposals to reduce the appeal and accessibility of vapes to children; for example by closing loopholes like free samples to children, mandating plain packaging, restricting branding that targets youth, enforcing age verification more strictly, and raising penalties for illegal sales. A ban on disposable vapes has been implemented since June 2025. Alongside such

legal and regulatory tools, the UK policy approach draws on education and information tools. This includes guidance from health agencies and non-governmental groups such as Action on Smoking and Health (ASH), and collaborative working with local authorities and schools to inform students about vaping risks and the law. This evidence brief focuses on what we currently know about prevention and cessation interventions for youth vaping.

What is the evidence base like?

Many types of evidence resources are available relating to youth vaping interventions, including: randomised controlled trials and survey experiments focusing on quantitative evidence; systematic and literature reviews; qualitative research; implementation reports; and policy briefings and strategy documents (see Table 1).

However, the overall evidence base remains small, particularly when searching for studies that evaluate UK interventions and those carried out by Local Authorities. For example, a systematic review opened in 2023 found zero eligible studies of prevention and cessation RCTs at the time (Barnes et al, 2023), although the availability of registered reports and protocols indicates a rapidly growing research field. Much of the available research focuses on US-based interventions.

We selected 11 studies from the peer-reviewed scientific literature, two rapid reviews from the grey literature, and two policy implementation reports, to provide a summary review of the evidence on youth vaping interventions. Next we explain what these interventions did, what has been found to work, and what could improve the evidence base going forward.

Youth vaping interventions: evidence and practice

We found a **rich variety of approaches to addressing youth vaping**. A review of American interventions identified prevention methods involving educators, peers, TV adverts, videos and online games; and cessation methods involving counsellors, a 'quitline', text message support, school-based education, pharmacological aids and nicotine replacement therapy, and a smartphone app (Liu et al, 2020; Sanchez et al, 2023; Butler et al, 2025).

A detailed review of 16 US-based programmes by Liu et al (2020) highlights the following common design features and gaps in service provision:

- Most programmes were free;
- Many addressed industry marketing and how that is designed to appeal to young consumers;
- Many, but not all, were built on specific health behaviour change theories;
- Many, but not all, incorporated empirical evaluations;
- Not all programmes had a separate focus on e-cigarettes, which might be beneficial due to the differences in social norms and peer effects for vapes relative to other tobacco products;
- Several programmes were not up to date with the products available;

- Very few prevention programmes had an interactive element; and
- Most cessation programmes were up to two years old at the time of the study, and very few had published pilot data or evidence on effectiveness.

Although it is only five years since this review was published, the vaping policy and products landscape has changed a lot. A contemporary review of programmes that focused on the UK and replicated the methods used by Liu et al (2020) could be very insightful.

Recent UK-based interventions suggests similarities with the approaches summarised above. Kenny et al (2023) discuss the 'Catch Your Breath' intervention delivered by the Healthy Schools Stop Smoking and Vaping Service in Cambridgeshire and Peterborough. The intervention involved **free prevention workshops** delivered to all students, with one-to-one cessation support offered via a referral pathway. A whole-school approach involved secondary and feeder primary schools and actively involved school staff for delivery and implementation. Teachers' confidence in delivering lessons on the harms of smoking and vaping increased, and schools successfully implemented the formal referral process. Demand was high enough to call for regional and potentially national expansion.

Disposables were attractive due to their affordability, availability, and the marketing of colourful and flavoured designs.

Smokefree Sheffield and the NHS South West Yorkshire Partnership report developing and rolling out a package of **youth vaping education resources** which has been implemented since 2023, and now used in over 77 Local Authorities (NCSCT, 2025a). Resources include posters for display around schools, a short animated film to support assemblies and classroom discussions, a teachers toolkit and content to share through parent newsletters. In addition a Children and Young People's service has offered a 6-8 week programme of **behavioural support** for children aged 12 and up, with face-to-face support, text messages, in schools, colleges and community youth clubs. While both of these reports indicate important work is underway, and offer timely insights on implementation and feasibility of school-based approaches, neither are in a position to offer evaluation findings. Neither report pre or post intervention data, and we cannot know how effective these interventions were on youth vaping rates.

Another notable study based in the UK takes an **in-depth qualitative approach** with regular users of disposable vapes (Notley et al, 2024). Peer-led and researcher-led interviews with 29 young people aged 16-20 allowed for thematic analysis of attitudes towards and experiences of youth vaping. The research reported that disposables were seen as attractive due to their affordability, availability, and the marketing of colourful and flavoured designs. Many participants used both vapes and cigarettes interchangeably and believed vaping was as harmful as smoking. **Vaping was a social norm among peers, often starting with friends and used for coping with stress**. Adult influence was minimal. Underage access was common, with many obtaining vapes through shops or older contacts. These insights indicate that the dual policy approach – legal and pricing measures alongside educa-

tion and norm-shifting – is an appropriate one to encourage cessation amongst current smokers.

What has been found to work?

1. Prevention: reducing marketing appeal

The first is an online survey that tested attitudes towards packaging with over 2,400 young people aged 11-18 and 12,000 people aged 18+ (Taylor et al, 2023). Different images of e-cigarette packs were presented to survey respondents – fully branded, white and standardised, and green and standardised. Participants were then asked what their level of interest was in trying the product. The standardised packaging, particular a green design, was the least appealing for children (meanwhile for adults however there were no identified differences based on packaging style). This effect was especially strong among 'never-users'. The results indicate that **plain packaging could lower youth appeal without discouraging adult smokers from using e-cigarettes for harm reduction**. While this study supports the case for regulating vaping marketing and packaging, particularly for children and young people, the online study is based on a hypothetical setting and reports intentions not actual behaviour.

2. Prevention and cessation: knowledge and attitudes

Health behaviour change models highlight the importance of knowledge, perceptions, beliefs and attitudes in moulding motivation and intentions, themselves key pre-cursors to taking action and changing behaviours. Considerable efforts are underway to engage with young people and inform them about the harms of vaping. Interventions providing information are reported to be effective in changing attitudes and behaviours, perceptions of harms and risks, and knowledge (Belon et al, 2025). Again, there is limited evidence: for example only one study showed a change in knowledge of 20 reviewed by Belon et al (2025); and the majority of the research reviewed – 17 of 20 studies – are based in the US (only one was from the UK, a study based in Wales).

Other research indicates lower rates of 'noticing' information and campaigns about youth vaping among young people in England compared to the US and Canada (East et al, 2024). While over half the 16-19 year olds surveyed reported noticing vaping campaigns over 2018-2020, the figure for England was 48% compared to 55% in the US. The difference was even more stark for noticing vaping information on social media and websites, where the rate was 48% in the US and only 27% in England; and for TV and radio where the rate was 43% in the US and 17% in England. This idea touches on broader questions of memory, attention, and decision process considered by Ananya et al (2024), who suggest that **memory and recall of health information may be crowded out by marketing**. General campaigns will need to be carefully designed to generate greater cut through with young people in the UK. An example of such an approach is the Rethink Vape campaign, developed in the US with design input and engagement from a Teen Advisory Council recruited through a youth network (England et al, 2021), with similar efforts at collaborative and peer research underway through the Partnership for Young London.

3. Cessation: tailored text message support

One of the first studies to report an effective vaping cessation intervention for young people was the randomised evaluation of 'This is Quitting' (Graham et al, 2024). Cessation support was delivered through **tailored, automated, interactive text messages, designed for young people (aged 13-17) and provided for free**.

Young people who registered for the programme were asked to set a quit date. If they set one, then for 6 weeks before and 8 weeks after that quit date they would receive messages about the risks of vaping, the benefits of quitting, and exercises to build coping skills. If they did not set a quit date, they would receive 4 weeks of messages to build skills and confidence. All participants received mental health support relating to self-care and mindfulness. Compared to a control group, participants receiving the intervention were 35% more likely to quit at seven months (the control group reported 28% quit rate, and the treatment group reported 38% quit rate). While individual design features cannot be isolated for their contribution to these success rates, the package as a whole was found to be significantly effective – with the caveat that the majority of young people were still vaping at seven months even after receiving the intervention.

More generally, **digital interventions are highlighted as a promising area** (NCSCT, 2025b). In a Cochrane review summarising RCT evidence on cessation, text message-based interventions were highlighted as an area with evidence of successful cessation compared to no or minimal support (Butler et al, 2025). However, this was based on a single youth-focused study (3 of the 9 studies in total focused on younger people). More research is needed to strengthen confidence in digital and text message approaches.

4. Cessation: individual factors and predictors

A number of studies have tried to pin down the characteristics that predict vaping cessation (Kundu et al, 2024). The most **consistent predictors included higher perceived harm of vaping, lower nicotine dependence, and less frequent use**. Young people who did not use other tobacco products were more likely to quit. Conversely, dual users and those with low harm perception were less likely to stop. Some evidence suggested younger age, exposure to anti-vaping messages, and not preferring sweet flavours may also support quitting. This points to the value of education and awareness-raising around risks and harms from vaping, and reaching people early before their nicotine dependence increases or they become accustomed to using multiple tobacco product. Other research corroborates the idea of individual factors including intentions and motivations to quit, importance of family and peer effects, ethnicity and age (NCSCT, 2025b; Ananya et al, 2024).

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How can future efforts improve on what we know?

While the published and peer reviewed evidence base is somewhat narrow at present, there are a number of protocols and registered RCTs that we can expect to report results in the near term (for example, see Sanchez et al, 2023). There are a number of ways by which we can and should improve the evidence base on youth vaping interventions:

1. Generate **more evaluation evidence – RCTs, and in time meta analyses, and systematic reviews** – for youth vaping interventions **across different social and economic contexts within the UK**. These should inform policy makers what types of interventions work best, how different approaches compare, and what an optimal combination of interventions might look like.
2. Undertake more **longer-term data collection and analysis** to shed light on how sustained the outcomes are, and how persistent the effects of education and behavioural interventions can be. A 10-year study funded by the Dept of Health and Social Care is currently underway and will support this goal. Smaller studies should also plan for longer term follow up as far as possible.
3. Produce **cost effectiveness analysis** with a particular focus on Local Authorities and services providing vaping cessation support, to enhance the efficient delivery in challenging fiscal circumstances.
4. Investigate **implementation fidelity** through **mixed methods and qualitative research** that asks why people may quit or only partially engage with interventions; and with more granular data that captures how engaged participants are with an intervention over time. This might be particularly important for understanding the effectiveness of digital interventions, and targeting support when motivation may be ebbing.
5. Create a **central repository of services and policy initiatives** currently underway. This can provide for a systematic mapping of what is being trialled and piloted, and make real time monitoring information lessons learned accessible across a community of practitioners, academics, and policy makers.

A note on methodology

The documents used in this evidence brief were retrieved from a search of Google Scholar, Scopus, and a general internet search, conducted in April-July 2025. They were selected based on the date of publication (from 2020 onwards), for geographical coverage (with efforts to prioritise UK and comparable public health settings), and the focus on youth vaping interventions. Alongside peer reviewed academic publications, we included policy papers and reports from the grey literature relating to current UK practice and debates on youth vaping.

Acknowledgements

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Work with me

Manu Savani has expertise in behaviour change and evaluation. She uses surveys, randomised control trials, and qualitative methods to understand when behaviour change interventions work (or not), and how people experience and respond to behaviour change interventions. Manu's previous experience including working as a development economist in the UK Government, an impact evaluation adviser, and collaborating with Local Authorities and charities.

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