BMA

Taking our breath away: why we need stronger regulation of vapes

Executive summary

There is a growing epidemic of vape use in the UK, which needs to urgently be addressed through tighter regulations of products and restrictions to access. Vape use by adults has risen significantly over recent years, but more worryingly, by children and young people. 7.6% of 11-17 year olds are now vaping, either regularly or occasionally, compared to 1.3% in 2014.[1]

Vapes have been found to be a successful smoking cessation aid and more effective than over the counter nicotine replacement therapies, such as patches and gums.[2] However, they are not intended to be used beyond this purpose, and children especially should not be encouraged to take up vaping. Vapes are not risk-free and can lead to nicotine addiction.

One of the most dominant factors influencing the rise in the use of vapes is the widespread availability of disposable vapes. The availability of disposable vapes is clearly linked to the sharp rise in child use.[3] This is due to their cheap price, easy usability and deliberate industry marketing tactics to ensure they appeal to the younger audience. Their impact on the environment is also detrimental due to a lack of recycling taking place and tonnes of their associated waste ending up in landfills each year.[4]

Another major influence on the sharp rise in vape use, particularly by children, is the use of vape flavours. There are thousands of e-liquid flavours currently on the market, many of which are sweet and directly aimed at children through their mimicking of sweetshop and candy flavours. Marketing tactics strategically describe flavours that would appeal to children such as 'berry blast', rather than 'blueberry'. This leads to initiation of vape use and can contribute to regular use. In addition, the impact flavours have on smoking cessation rates amongst adults and children is unclear.

Awareness and visibility of vapes are extremely high. Bright coloured packaging, with bold branding and cartoon imagery is a huge attraction to children. It can also influence the belief that the products are not harmful. The public can also not help but notice vapes in shops due to their prominent displays. More than half of children aged 11-17 years surveyed in Great Britain reported being aware of promotion of vapes in shops[5,a] leading to them being more likely to try them.

We can learn a lot from the introduction of tighter regulation of tobacco products. The introduction of plain packaging and reduced visibility of products within shops has been found to contribute to the decline in smoking rates.[6,7]

Addressing issues such as flavours, packaging and point of sale display will help to tackle youth vaping rates as their appeal and accessibility will be significantly reduced. It is inevitable that illegal sales of vapes will still take place. These mainly take the form of:
— Underage sales — The majority of children in Great Britain buy vapes from shops, so it is clear that underage sales continue to take place.
— Non-compliant products — Vape products that do not comply with UK regulation are continuing to reach retailers.

There are a number of interventions that could address these illegal sales. For example, clearer product information; education campaigns; better resources and powers for regulatory bodies such as Trading Standards; and effective deterrents for retailers to breaking the law such as higher fines.

a   Representative sample of 11-17 year olds: 2022=1,916, 2023=1,917, 2024=2,349

Finally, we must be alert to tactics used by industry to work around regulations and the evolution of products. We are already seeing industry developing re-usable vapes that almost mirror the attractiveness of disposables, reducing the effectiveness of a potential ban of disposables. Regulations need to be extended to all nicotine containing products. Novel products such as nicotine pouches are a growing class of non-combustible nicotine product that pose similar public health risks as vapes, yet are not sufficiently regulated.

Alongside these measures, it is crucial that research into these products continues to provide long term data on their health impact. However, it is vital that we do not sit and wait for this data and action is taken now to prevent any potential harms caused by vapes. Tighter regulations must be in place to reduce the uptake of vape use, along with efforts to increase awareness of the public health impact of these products.

Recommendations

The BMA calls on UK Government to:

Recommendation 1 – Ban the manufacture for commercial sale, and the commercial sale of all disposable vapes, on the grounds of disproportionate and harmful use by children and young people and their adverse impact on the environment.

Recommendation 2 – Ban all non-tobacco vape flavours.

Recommendation 3 – Prohibit the use of all imagery, colouring and branding for both the packaging and vape device.

Recommendation 4 – Reduce visibility of vapes through further restrictions on all advertising and marketing; and ensure vapes are kept behind the counter and not on display in shops and retail outlets.

Recommendation 5 – Tackle the illegal sales of vapes by accompanying tighter regulations with:
a) The requirement for manufacturers to provide clear product information.
b) Government funded and delivered education campaigns:
  – for retailers on products, details of regulation and consequences of non-compliance
  – for the public on the dangers of vapes to reduce appeal
c) Increased and adequate resources, funding and powers for regulating bodies such as Trading Standards and Border Force to enable regular and consistent monitoring and enforcement.
d) An increase of the fines and sanctions that regulatory bodies can issue.

Recommendation 6 – Implement tighter regulation and restrictions for related nicotine products, such as nicotine pouches to prevent their availability and marketing towards children and young people. This should include age of sale restrictions, plain packaging, clear product contents information and restricted point of sale displays.

Introduction

Although vapes were originally introduced as a smoking cessation tool, it is clear that they are now being used more widely than their intended purpose. There has been a significant rapid increase in their use, particularly amongst children and young people, which has led to growing concern about their impact on public health.

Research has found that vapes can be an effective smoking cessation tool. We cannot ignore research such as the latest Cochrane Review, which found evidence that people are more likely to stop smoking for at least six months using nicotine containing vapes, than using over the counter nicotine replacement therapies, such as patches and gums.[8] Research such as this has contributed to national health organisations promoting them as a smoking cessation aid. For example, Public Health England cited them as being part of a tobacco control programme in 2015.[9] Vapes are also supported by Stop Smoking Services and recommended as an aid to smoking cessation by the National Institute for Health and Care Excellence.[10]

However, their growing appeal and use by children and non-smokers needs to be addressed. There is no doubt the sudden rise in vaping rates is due to the rapid growth of the vape industry and the widespread availability of cheap, colourful products that are directly marketed towards a younger audience. For example, Juul, one of the first popular brands of vape, launched an advertising campaign in 2015 that featured bright colours and cast young, fashionable models as well as purchasing ad banners on child friendly websites.[11] Since then, a number of vape brands have emerged launching products that are appealing and easily accessible to children, including the development of disposable vapes.

In the UK, nicotine-containing vapes and e-liquids are regulated under the TRPR (Tobacco and Related Products Regulations) 2016, which set the minimum requirements for the safety and quality of e-cigarette products. Before a nicotine-containing e-cigarette product can be placed on the market, it must be 'notified' to the MHRA (Medicines and Healthcare products Regulatory Agency) through the e-cigarette notification scheme to assess whether it meets the notification requirements to be placed on the market in the UK. Trading Standards are responsible for enforcing the safety and quality requirements for nicotine-containing vape products on the UK market.[12]

However, many health organisations, including the BMA have questioned the effectiveness of these regulations and have called for better regulation to be implemented and enforced to prevent the uptake of vaping by non-smokers and children.

In February 2024 the then Government introduced the Tobacco and Vapes Bill – a Bill widely supported, including by the BMA. This aimed to tackle the use of vapes by children and young people and set out proposals to implement powers for Government to regulate the sale and use of vapes. This included banning disposable vapes, restricting flavours, and restricting marketing practices – areas that typically have enticed children to use vapes. The details on how this would be achieved were to come in secondary legislation.

During the dissolution of parliament in July 2024 for the general election, the Bill was not carried over to the next parliamentary session. However, the re-introduction of a Bill aimed at tackling smoking and youth vaping was announced by the Labour government during the Kings Speech in July 2024. At the time of writing, details of any measures contained in the proposed Bill have yet to be published.

Vape use has risen significantly over the past decade

Whilst the use of cigarettes has declined over recent years, the use of vapes has increased. 11% of adults in Great Britain currently use vapes, compared to 4.2% a decade ago (2014)[b]. The majority of adult vapers are ex-smokers (53%)[13], suggesting that vapes can act as an effective smoking cessation tool.

However, worryingly, the number of children who vape has also seen a huge increase over the last decade, with 7.6% of 11-17 year olds now vaping regularly or occasionally, compared to 1.3% in 2014[c]. The number of children regularly vaping is continuing to rise. The rate of children regularly vaping is now higher than the rate of those occasionally vaping (4.5% vs 3.1%).[14]

Figure 1: Adult and child vaping rates in Great Britain
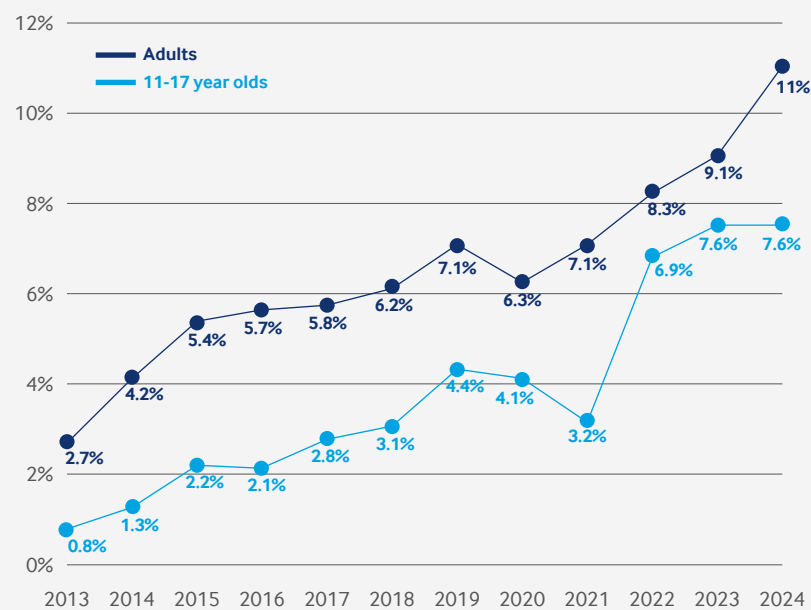
Representative samples of adults and children vaping regularly and occasionally. Source: ASH[15]

Unlike the use of vapes by adults, which has seen a steady increase over the years, there has been a rapid rise in use of vapes by children over more recent years. One of the main reasons children gave for vaping was 'just to give it a try', particularly those children who have never smoked.[16] Vapes were introduced as a smoking cessation aid and are not advised to be used by those who don't smoke. Therefore, urgent action is needed to prevent the growing uptake of vapes.

The rise in vape use has led to growing public health concerns

Although vaping is deemed less harmful than smoking tobacco, it is not without its health risks. The World Health Organisation[17] has declared vapes harmful and evidence to date confirms that the dangers of vaping and e-nicotine consumption are of concern, particularly for children. The NHS revealed that in 2023, 50 children were admitted to hospital with vaping-related disorders. This is up from just 11 children three years previously, demonstrating the significant growth in prevalence of vaping in this age group.[18] Vaping-related disorders can range from lung damage

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b   Based on a representative sample 2014 = 12,269; 2024 = 13,266
c   Based on a representative sample 2014 = 1871; 2024 = 2,587

to worsening asthma symptoms, which include wheezing, coughing and chest tightness.[19]

Vapes can cause nicotine addiction
Vapes with nicotine are just as addictive as cigarettes.[20] As more young people are vaping, there are concerns that this frequent use is exposing them to the risk of addiction to nicotine. This is due to the high levels of nicotine often contained in vapes. The nicotine contained in one disposable vape can be equal to two packs of cigarettes[21] and lasts an average of 1-2 days, depending on the level of use. Nicotine can have the potential to cause a number of health risks such as increased blood pressure and increased risk of chronic obstructive pulmonary disorder.[22] The World Health Organisation has also reported concerns that while nicotine is not itself a carcinogen, it may act as a 'tumour promotor' as it alters essential biological functions of cells.[23]

Young people are particularly susceptible to nicotine addiction due to their brains building synapses faster than adult brains which helps them learn. As addiction can be a form of learning, young people can become addicted more easily than adults[24].

Vapes may also contain harmful substances
Although vapes don't contain tar or carbon monoxide — two of the most harmful substances in cigarette smoke — some other harmful substances have been found in them. For example, to analyse the contents of popular vapes, the Inter Scientific laboratory, which offers regulatory and testing services, looked at a selection of vapes confiscated from school pupils. High levels of metals such as lead, nickel, and chromium were found in the e-liquid that far exceeds safe exposure.[25] The World Health Organisation has reported that high levels of lead exposure in children can impact brain development and the nervous system.[26] Research has also found that vapes can cause potentially harmful cardiovascular effects.[27]

While all e-cigarettes need to be registered with the MHRA, the agency actually has no power to investigate unregistered products, or to verify claims made by vape manufacturers. This potentially explains how harmful substances like metals have gone undetected in vapes.[28]

Disposable vapes have been a big influence on the rise of vape use
Disposable vapes now dominate the UK vape market, with them now making up 83% of vape sales in the UK.[29] The first disposable vape product, the MOJO pod kit, became available on the market in the UK in 2019. This was closely followed by the Elf Bar. In 2020, a ream of disposable vapes from different vape brands emerged, including Elux bar, IVG bar, Geek Bar and Riot Squad.[30]

Between 2021 and 2023 disposable vapes soared in popularity, and an increasing number of vape brands that previously produced rechargeable devices started to release disposable products.[31] Between 2021 and 2022 UK disposable vape sales grew from £141 million to £973 million[32] and the use of disposable vapes among people who vape, rose from 1.2% to 22.2%.[33] Alongside the rise in use of disposables, there was a drop in use of rechargeable e-cigarettes.[34]

Disposable vapes are clearly linked to the rise in children vaping
Disposable vapes are characterised by their cheap price, ease of use and bright colours. It is therefore not surprising that the sudden rise in youth vaping in 2021 coincided with the wide availability of disposable vapes. Disposable vapes are now the most popular type of e-cigarette amongst youth (11-17 year olds) in Great Britain,

with their use growing from 7.7% in 2020 to 69% using them in 2023.[35,d] Rechargeable vapes have consistently remained the most popular choice of vape among adults in Great Britain[36], highlighting that the significant increase in the use of disposable vapes is mainly due to youth use. As more young people are using disposable vapes and using them more frequently, there are concerns that they are at significant risk of addiction to nicotine.

They also have a detrimental impact on the environment

Disposable vapes are notoriously difficult to recycle as the battery must be removed from the plastic by the individual user and there are limited recycling points. Over half of disposable vapes are not recycled.[37]

A single-use vape contains on average 0.15g of lithium; the mining of which has led to water loss, ground destabilisation, biodiversity loss, increased salinity of rivers, contaminated soil and toxic waste.[38] Due to the scale of the waste caused by these disposable vapes, about 10 tonnes of the metal is ending up in landfills each year.[39] In addition, lithium (a limited resource) is critical to the UK's green transition. However, two disposable vapes are thrown away every second in the UK.[40] Over a year, this is enough lithium to make about 1,200 electric car batteries.

Producers of vapes are falling short of their requirements under the law to fund the recycling of the electrical waste from vapes. There is insufficient regulatory action and powers to compel them to comply.[41,42] In addition, all retailers selling vapes must provide an option for customers who buy the product to dispose of their old vapes. However, a recent survey of adult vapers found that 54% said they would be more likely to recycle single-use vapes if there were recycling points in-store.[43] This suggests there is low compliance of these services by retailers and low public awareness.

There is widespread support for a ban of disposable vapes

Many health and environmental organisations are calling for a ban of disposable vapes. In an open letter to the Environment Secretary and Health Secretary in November 2022, 18 environment and health groups, including the Green Alliance, Royal College of Paediatrics and Child Health, ASH (Scotland), the Marine Conservation Society and RSPCA, demanded the government ban the sale of single-use vapes to stem their "rapidly escalating threat" to the public's health and the environment.[44]

Recommendation:
Implement a ban on the manufacture for commercial sale, and the commercial sale of all disposable vapes, on the grounds of disproportionate and harmful use by children and young people and their adverse impact on the environment.

Additional action is needed to address high vaping rates

Although a ban of disposable vapes will go a long way in helping to tackle rising youth vaping rates, and non-smoker adult vaping rates, it will not be enough on its own to address this issue. Many other interventions are needed to address the growing appeal of vapes.

Vape flavours must be restricted

Approximately 7,700 flavours are currently being used in e-liquids.[45] The availability of flavours, particularly non-tobacco flavours such as fruit and sweet flavours, have been reported to play a role in vaping initiation regardless of whether vaping was used for smoking cessation purposes or not.[46,47]

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d   Representative sample of 11-17 year olds who are current users of vapes (2020=94,2023=187)

Sweet flavours are encouraging children to vape

Fruit flavours are consistently the most popular vape flavours used, particularly by children. However, sweet and candy flavours are also favoured by many children and young people. It is clear that industry has contributed to this as some vape flavours are marketed specifically to appeal to children and young people. For example, mimicking sweet shop flavours such as 'bubblegum' and 'gummy bear' and using appealing flavour descriptors such as 'berry blast' rather than 'blueberry'. There are also many energy drink flavour vapes (e.g. 'Elfbull Ice') that mimic the taste of the sugary fizzy drink, which are popular with adolescents.

This has had a big impact on the rise in child vaping rates. A survey by ASH in 2023 reported that 20.5% of children aged 11-17 years in Great Britain had tried vaping, up from 15.8% in 2022 and 13.9% in 2020 before the first COVID lockdown.[e,48] When asked their reasons for vaping, 14% stated that they vaped because 'I like the flavours'.[f]

Not only do flavours play a role in vaping initiation among younger people, they can also encourage the regular use of vapes. It has been found that adolescents who regularly use flavours such as fruit, dessert and candy, were more likely to continue vaping and take more puffs per vaping occasion on a long-term basis.[49,50,51] In addition, sweet flavours can decrease vape product harm perceptions among children and young people.[52, 53]

Fruit flavours also increase vape appeal in non-smoking adults

Flavours also have some impact on adult vape use. Flavours such as tobacco and menthol are more commonly used by adults, particularly those who are ex-smokers.[54,55] However, like children, fruit flavours are the most popular with adults. This includes adults who have never smoked cigarettes, highlighting how sweet flavours can help to initiate use of vapes for purposes other than smoking cessation.[56]

It is not clear if flavours assist smoking cessation

Whilst flavours may be an important motivator for e-cigarette uptake, the role of flavours in tobacco smoking cessation, including cigarette cravings, and smoking cessation intentions and motivations, is unclear. While some studies report a positive association[57,58], others report no association.[59] In addition, studies often suffer from methodological limitations, reducing their relevance.[60,61]

Overall, due to their key role in initiating and maintaining regular use of vapes by children and young people as well as adults who have never smoked, and their unclear impact on smoking cessation (the intended purpose of vapes), the BMA supports a restriction of vape flavours to tobacco only.

> ### Recommendation:
> All non-tobacco vape flavours should be banned.

Packaging must be standardised

Currently in the UK, vape packaging can include any type of imagery, colouring and branding. Vape packaging varies substantially, with some brands featuring vibrant colours and cartoon imagery. It is crucial that this is prohibited, and packaging is standardised due to its impact on increasing vaping appeal and decreasing harm perceptions of vaping.

e   Sample size 2,656 11-17, weighted to represent GB children aged 11-17 years.
f   The most common reason reported was 'just to give it a try' (54% never smoked tobacco, 26% ever smoked tobacco).

Children are attracted to branded packaging

Colourful branded packaging particularly increases the appeal of vaping in children and young people.[62] It has been found that compared with fully branded packaging, green standardised packaging with no brand imagery was associated with a decreased interest in trying the vaping products among this age group.[63,64]

Harm perceptions are also impacted by packaging design. Although vapes and vape product packaging are required to display warnings that they contain nicotine, liquid nicotine levels displayed on packs have been found to have no association with youth interest in trying, nor harm perceptions of e-liquids. However, younger people are more likely to be influenced by package design, as standardised vape packaging has been found to be associated with higher levels of harm perception in this age group.[65,66]

Lessons can be learned from the transformation of tobacco packaging

Standardised packs of cigarettes began to be introduced in the UK from May 2016 and by May 2017 all tobacco on sale in the UK had to comply with the legislation, with all brand imagery, colours and promotion having to be removed. Tobacco packaging in the UK must now be standardised in terms of shape, colour, text design and minimum contents volume.

This change has been effective in influencing the decrease in smoking rates among all age groups that the UK has seen over recent years. Standard packaging for tobacco products has reduced product appeal and has contributed to reduced uptake in non-smokers (particularly in those under 24 years old) as well as reduced use in current smokers.[67]

The same effort needs to be made to help reduce vape uptake. Vape packaging should not be designed to attract a younger market and should reflect the health risks that can be caused.

> **Recommendation:**
> The use of all imagery, colouring and branding for both the packaging and vape device should be prohibited.

Visibility of vapes must be reduced

The awareness of the availability of vapes is at its highest. Although advertising through channels such as TV, newspapers, radio and internet displays is prohibited, they can still have a presence on online platforms such as blogs, non-paid for reviews and retailer/ trade sites. They can also feature on outdoor posters, posters on buses, and hard copy leaflets.[68]

Therefore, it is not surprising that children and young people are very aware of vape promotion. Only one in five children aged 11-17 years surveyed in Great Britain reported they had not seen any vape promotion in 2024, compared to a third of children two years ago.[69] More must be done to restrict any advertising of these products and reduce their visibility, so children and young people are not encouraged to use them.

The biggest source of vape awareness comes from shops

Vapes are currently allowed to be displayed at the point of sale in shops and supermarkets. Supermarkets and convenience stores have overtaken vape shops to become the most popular places for adults to buy vaping products in England.[70] In addition, more than half of children aged 11-17 years in Great Britian surveyed

reported being aware of promotion in shops compared to a third two years ago.[71,g] Adolescents who see vapes available in shops are more likely to try them.[72]

Vapes should not be on display in shops

Like packaging, a lot can be learned from the impact of the regulation of tobacco point of sale displays. Since April 2012 in the UK, it has been illegal to display tobacco products at the point of sale in large shops such as supermarkets, and in 2015 this legislation applied to any business selling tobacco products to the public such as small shops. This was based on evidence suggesting that children were more likely to smoke if they were exposed to cigarette displays and marketing in shops.[73] In addition, point of sale bans of tobacco products have helped to reduce adult smoking rates worldwide.[74]

It is therefore clear that removing the visibility of vapes in shops will help to reduce exposure and awareness of the product, and in turn, their use.

> **Recommendation:**
> Reduce visibility of vapes through further restrictions on all advertising and marketing; and ensure vapes are kept behind the counter and not on display in shops and retail outlets.

Illegal sales must be prevented

Illegal sales of vapes are rampant, mainly through underage sales or the sale of vape products that do not comply with UK regulations. Tighter regulation of vapes will help to address this. However, a number of interventions will be needed alongside regulations to reduce the rate of these sales.

Illegal sales mainly take place in the form of under-age sales

It is illegal to sell vaping products to anyone aged under 18 in the UK. Retailer compliance is a major issue when tackling under-age sales with the majority of younger people who vape actually purchasing them from shops illegally. A survey of 11-17 year olds who buy their vapes in Great Britain, showed over half of them buy the vapes from shops or markets.[75,h] Regulatory bodies such as Trading Standards have also identified high non-compliance rates when carrying out tests on businesses with around 1 in 3 shops selling vapes to those knowingly under the age of sale.[76]

Non-compliant products are continuing to reach the market

Another major form of illegal vape sales is through the sale of products that do not comply to UK regulation. For example, vapes that exceed the maximum tank capacity, vapes that have a higher concentration of nicotine than permitted, vapes that do not fulfil the labelling requirements, vapes that contain illegal ingredients such as CBD (Cannabidiol), or those that have not been registered with the Medicines and Healthcare products Regulatory Agency.

Non-compliant products are reaching shop floors in the UK including local off-licences, and other outlets such as nightclubs, barber shops and tanning salons.[77] Although a license is not required to sell vaping products, retailers must ensure that the vaping products are compliant with the TRPR (Tobacco and Related Product Regulations) and are not sold to people under 18. It is estimated that 1 in 3 products are potentially non- compliant, which equates to more than 45 million non-compliant products being sold by retailers every year.[78] These products are being imported into

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g   Representative sample of 11-17 year olds: 2022=1,916, 2023=1,917, 2024=2,349)
h   Representative sample of 11-17 year olds who currently vape = 225

the UK illegally. Although a number of illegal products do get seized at UK ports and confiscated from shops, many slip under the radar.

Regulatory bodies need more resources and powers to tackle illegal sales
Historical and international research on sales of vape and tobacco products has shown that illegal sales can typically be difficult to control and police. Regular monitoring and compliance checks of retailers has been found to increase compliance with regulations and reduce under-age sales of tobacco and nicotine products.[79,80] However, regulatory bodies such as Trading Standards, lack resources and powers to monitor and enforce regulations on retailers. The CTSI (Chartered Trading Standards Institute) has reported that Trading Standards teams are spread very thinly and a need for greater resources to ensure there are more 'boots on the ground' to help enforce regulations and advise businesses to increase compliance. [81] Regulatory bodies such as the UK Border Force also need more powers to prevent illegal products from reaching UK markets.[82]

Greater deterrents to law breaking are needed
In addition to a lack of compliance monitoring and checking, it has been suggested by the vape industry[83] as well as Trading Standards[84] that deterrents of non-compliance are not severe enough. At present, Trading Standards have the power to issue on-the-spot fines to non-compliant retailers. However, there has been calls for tougher fines and sanctions of those retailers who are non-compliant, for example for fines to increase in value from £2,500 (the maximum that local authorities can currently issue) to £10,000, in order to be a significant deterrent.[85]

Education campaigns can improve compliance
Lack of product knowledge and regulations by retailers and the public can increase the likelihood of illegal sales. Education campaigns targeted at both groups can improve knowledge and act as an effective intervention.

— ### Education campaigns for retailers
The wide variety of vape products available and a lack of information or education on the products have also been cited as reasons for non-compliance. It can be difficult for retailers to be aware of whether a product contains nicotine and distinguish between compliant and non-compliant products. [86,87,88]

Requiring manufacturers to publish clear product information is a helpful way of increasing retailers' awareness of the products they are selling, something that standardised packaging will also help to address. Education campaigns have also historically been found to be successful in increasing compliance.[89,90] Educating retailers will not only improve understanding of vape products but can also improve awareness and understanding of existing regulations such as age restrictions and the need for age checks as point of sale.

— ### Education campaigns for the public
Increased harm perceptions of vapes have been found to be associated with reduced use.[91] Therefore, educating the public, particularly children and young people, on the possible health risks associated with vapes could contribute to increased awareness of harm and reduced vape use and in turn, reduced under-age sales.

Overall, success in preventing illegal sales is likely to be maximised if interventions are combined to develop strategies consisting of educational campaigns, regular monitoring and inspections and legal enforcement.

> **Recommendation:**
> Tackle the illegal sales of vapes by accompanying tighter regulations with:
> a) The requirement for manufacturers to provide clear product information.
> b) Government funded and delivered education campaigns:
>   − for retailers on products, details of regulation and consequences of non-compliance
>   − for the public on the dangers of vapes to reduce appeal
> c) Increased and adequate resources, funding and powers for regulating bodie such as Trading Standards and Border Force to enable regular and consistent monitoring and enforcement.
> d) An increase of the fines and sanctions that regulatory bodies can issue.

The evolution of products needs to be monitored

It is inevitable that industry will continue to produce and market products that fall outside of regulations, but that still cause similar public health risks. It is crucial that these are also regulated appropriately to ensure their use and popularity doesn't follow the trend in vape use that we have seen over recent years.

Vape adaptions are already on the market

It is likely that the vape industry will adapt quickly to any ban on disposable vapes and will produce similar appealing products that fall out of the scope of legislation for banned products. Reusable replacements to disposables are already on the market carrying the same brand name, looking similar in attractive product design and costing the same cheap price. This makes it very difficult for the public and retailers to tell the difference between the products. This emphasises the need to implement a number of strategies to reduce vape appeal, in addition to a ban of disposables, such as plain packaging containing clear product information for all vape products.

Alternative nicotine containing products are becoming more popular

Tobacco companies have and are continuing to develop interests in alternative nicotine containing products. These include:
− heated tobacco products − products that heat processed tobacco leaf, allowing users to inhale nicotine into their lungs
− snus − tobacco-containing powdered product packaged in a pouch delivering nicotine through the gums
− nicotine pouches − tobacco free product packaged in a pouch delivering nicotine through the gums

Whilst heated tobacco products are regulated under the TRPR and snus is illegal in the UK, nicotine pouches are a particularly worrying trend. Like non-nicotine vapes, they fall out of scope of the TRPR and instead are covered by the under the General Product Safety Regulations. Therefore, they are open to:[92]
− No age of sale regulations so they can be sold to anyone, as well as being handed out free.
− No standardised regulatory requirement for information on packaging to provide information to consumers.
− No controls on their advertising, promotion and sponsorship − these products are being promoted online via influencers, free samples and competitions.
− No limits on nicotine content − some of them are very high strength, much higher than allowed by the regulations for e-cigarettes.
− No regulation of contents or ingredients − other than that required for them to conform to general product safety rules.

Although current usage of nicotine pouches is low in the UK compared to other products such as vapes, their popularity is rising. In 2020 34% of Great British adults had heard of them. By 2022 awareness had increased to 44%. The proportion of adults

who had ever tried nicotine pouches, albeit still low overall, was already notably higher in 2022 (3.9%) than in 2020 (2.7%).[93,i]

Nicotine pouches have been promoted as cost effective (much cheaper than cigarettes and slightly cheaper than vapes); convenient (as they can be used anywhere and do not require batteries or a device); and relatively safe in comparison to other nicotine products. Industry-funded research has claimed nicotine pouches as a "reduced-risk" product and argued that these products have lower physiological impact compared with conventional tobacco products, partially due to the absence of tobacco leaf and combustion.[94] However, these products are not without health risks and have a significant impact on nicotine addiction.

Nicotine pouches can have negative impacts on the cardiovascular system due to the high nicotine content- which has been found to approach 50mg/pouch.[95] This compares to 40mg for the strongest 2ml vape and approximately 22-36mg/pack of 20 cigarettes.[96,97] Other potential oral side effects include mouth sores and gum irritation, particularly in the area where the pouch is placed.[98]

It is clear that the market of novel nicotine products is likely to evolve, making it necessary for regulations to include such products. This is crucial to prevent their attraction to young people through marketing strategies and to promote greater awareness of their contents to consumers.

> **Recommendation:**
> Implement tighter regulation and restrictions for related nicotine products, such as nicotine pouches to prevent their availability and marketing towards children and young people. This should include age of sale restrictions, plain packaging, clear product contents information and restricted point of sale displays.

Protections must be in place

There are many unknowns about vaping, including how they affect physical health over the long term. Experts agree that we need longer-term data on the effects of using vapes, particularly in regard to cardiovascular disease as well as the long-term impacts of these products on young lungs, hearts, and brains.[99] Until we have that information, we must ensure the public, particularly children and young people, are properly protected from the impact of the inappropriate use of vapes. Therefore, tighter regulations must be in place to reduce vape appeal, visibility, accessibility and availability, along with efforts to increase awareness of the dangers these products pose.

The fact that UK Government has recognised this issue and plans to implement legislation to address it, is very welcome. However, it is crucial that any proposed regulations are based on robust evidence, ensuring they are effective as possible, and implemented without delay.

i   Representative sample: 2020 = 12,809, 2022 = 13,088

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