

Use of vapes (e-cigarettes) among adults in Great Britain

ASH Fact Sheet

August 2024

Summary of key findings

This factsheet analyses how behaviour and attitudes to vapes (e-cigarettes) among adults aged 18 years and over have changed over time. The Smokefree GB analysis conducted by ASH is based on data collected by YouGov for ASH, and is carried out in the Spring each year. The survey first started asking about e-cigarette use in 2010, and this update includes the results of the 2024 survey (n=13,266) carried out in February and March 2024.

Use of e-cigarettes

- The proportion of the population who currently vape this year is 11%, the highest rate ever, equal to 5.6 million adults in Great Britain. (Table 1)
- More than half (53%) of current vapers are ex-smokers, equal to 3 million people. This proportion peaked in 2021 at 65%. (Figure 1)
- More than half of ex-smokers who quit in the last five years say they used a vape in their last quit attempt, which amounts to 2.7 million ex-smokers, of whom around two thirds are still vaping while around a third have quit vaping as well. (Table 3)
- Among ex-smokers who quit smoking using a vape in the last five years and have now also quit vaping, the median length of time spent vaping was around a year.
- Among all ex-smokers who have ever vaped (including current and ex-vapers) the median length of time spent vaping is two years.
- However, from 2021 to 2024, more than half of current vapers who are ex-smokers had been vaping for over 3 years, compared with 18% in 2017 when we started asking this question. This amounts to 1.5 million people in 2024. (Figure 4)
- The proportion of smokers who are current vapers has increased from 2021 (17%) to 2024 (32%), which is 2.2 million people. (Figure 2)
- The proportion of adult smokers who have never tried e-cigarettes is continuing to decline slowly, down to 26% in 2024 which amounts to 1.7 million people. (Figure 2)
- Around 1.6% of never smokers are current vapers, amounting to 8.0% of vapers (Figure 1), which represents around 440,000 people. (Table 2)

Attitudes towards e-cigarettes

- As in previous years, the main reasons given by ex-smokers for vaping are to help them quit smoking entirely (28%) or to prevent relapse (21%). The next most common reasons are to help them cope with stress or mental health (14%) and because they enjoy the experience (11%). (Figure 5)
- The main reason given by current smokers for vaping are to cut down on smoking (17%), to avoid putting others at risk of secondhand smoke (15%), to try to help them quit (11%) and because they enjoy the experience (11%). (Figure 5)
- Half of all smokers (50%) incorrectly believe vaping is more or equally as harmful as smoking (Figure 9). This is the highest ever proportion with this misconception across all waves of the survey and a significant increase on misperceptions found in 2023. Only one third of smokers understand vaping is less harmful than smoking.
- For smokers who have never vaped, 60% believe vapes are as or more harmful than smoking, compared with 24% of ex-smokers who quit in the last five years and used a vape in that successful quit attempt.

Devices and products used

- Fruit is the most popular flavour of vape (47%), followed by menthol/mint (17%) and tobacco (16%). This pattern has changed since 2016, when tobacco was the most popular flavour (33%), followed by fruit and menthol/mint (both chosen by 22%). (Figure 13)
- The most commonly used type of e-cigarette device remains a refillable tank system, with 53% of current vapers reporting this type as their main device. (Figure 15)
- The relative popularity of disposable vapes rose rapidly between 2021 and 2023 from 2.3% to 31% of current vapers but has since stabilised with 30% of current vapers reporting these as their main device.
- Use of disposable vapes is most popular among adults aged 18-24, more than half of whom (52%) used disposable vapes as their main device in 2024. (Figure 16)
- Among current vapers who have vaped more than once or twice, 59% say that they use the same strength e-liquid as when they first started vaping. Those who have changed are more likely to decreased than increased the strength. (Figure 17)

Use of e-cigarettes

The number of e-cigarette users has grown from around 800,000 in 2012 to 5.6 million in 2024. (Table 1).

Table 1. Number of e-cigarette users in Great Britain

	% population who currently vape	Percentage point change (YoY)	Rate of Growth (YoY)	Number of current vapers (millions)
2012	1.7%	-	-	0.8
2013	2.7%	1.0%	+62%	1.3
2014	4.2%	1.6%	+60%	2.1
2015	5.4%	1.2%	+29%	2.7
2016	5.7%	0.3%	+7%	2.9
2017	5.8%	0.1%	+3%	2.9
2018	6.2%	0.4%	+7%	3.2
2019	7.1%	0.9%	+16%	3.6
2020	6.3%	-0.8%	-11%	3.3
2021	7.1%	0.8%	+13%	3.7
2022	8.3%	1.2%	+18%	4.3
2023	9.1%	0.8%	+10%	4.8
2024	10.7%	1.6%	+17%	5.6

Use of e-cigarettes is similar in men (11%) and women (10%).

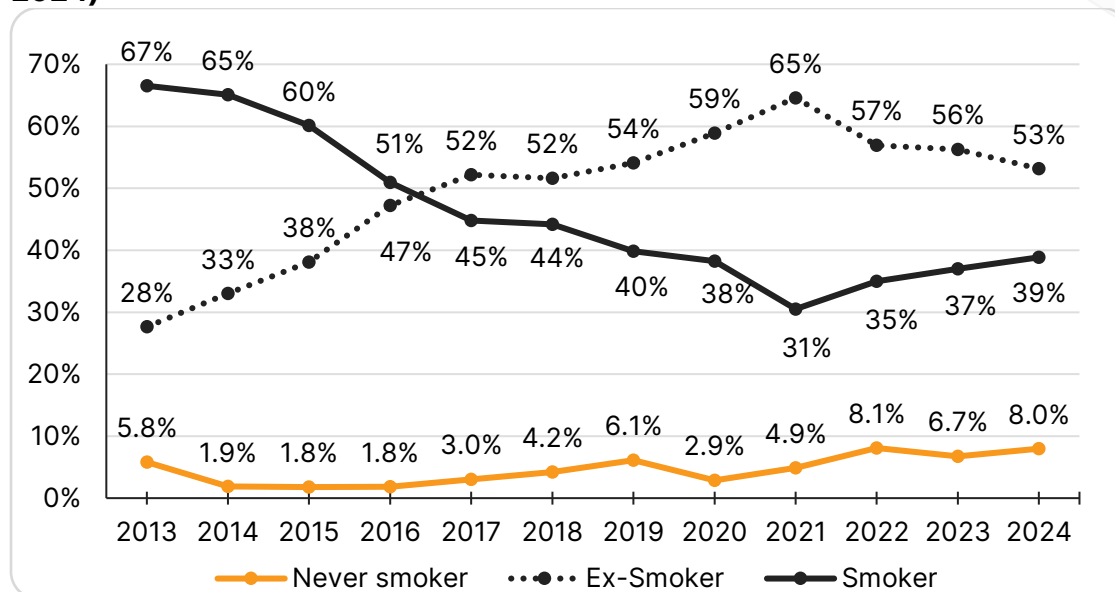
For a discussion of the age and socio-economic characteristics of vapers in our survey, see Section 4 of the Appendix.

Proportion of vapers by smoking status

Use of e-cigarettes is much more common among current and ex-smokers. Of the 5.6 million current vapers, around 3 million (53%) are ex-smokers, 2.2 million (39%) are current smokers and 440,000 (8%) are never smokers. Since 2013, the proportion of current e-cigarette users who smoke tobacco has generally fallen, while the proportion who are ex-smokers has risen (53% in 2024). (Figure 1) However, this trend reversed in 2022. There has been a significant decrease in the proportion of current vapers who are ex-smokers, from 65% in 2021 to 53% in 2024. In 2024, 39% of current vapers also smoked (dual users).

In every year since 2017, most e-cigarette users have been ex-smokers. However, there are more ex-smokers (33%) than current smokers (13%) in the whole adult population. As a result, only 17% of ex-smokers vape compared to 32% of all current smokers.

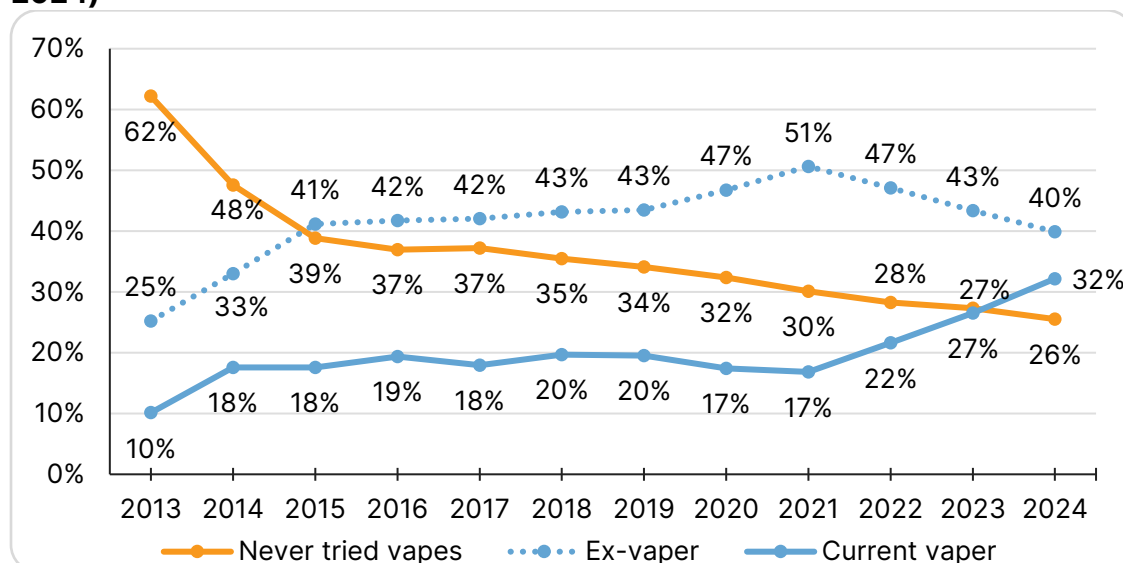
Figure 1. Smoking status among current adult e-cigarette users, Great Britain (2013–2024)



ASH Smokefree GB Adult Surveys 2013-2024. Unweighted base: Adult current vapers (2013=325, 2014=498, 2015=614, 2016=667, 2017=669, 2018=738, 2019=854, 2020=787, 2021=826, 2022=1,089, 2023=1,079, 2024=1,408)

The proportion of adult smokers who have tried e-cigarettes has continued to grow year on year since 2015. In 2024, 26% of current smokers had never used e-cigarettes. (Figure 2)

Figure 2. E-cigarette use among current adult cigarette smokers, Great Britain (2013–2024)



ASH Smokefree GB Adult Surveys 2013-2024. Unweighted base: Adult current smokers (2013=1,895, 2014=1,776, 2015=2,037, 2016=1,704, 2017=1,632, 2018=1,633, 2019=1,777, 2020=1,694, 2021=1,512, 2022=1,751, 2023=1,517, 2024=1,695)

Vaping behaviour by smoking status

Table 2. Current vaping behaviour in GB Adults by smoking status, 2024

GB Adults	% of group who currently vape	Number in group who currently vape
Current smokers	32.2%	2.2 million
Ex-smokers	17.0%	3.0 million
Never smokers	1.6%	0.44 million
ALL ADULTS	10.7%	5.6 million

ASH Smokefree GB Adult Survey 2024. *Unweighted base: GB adults (current smokers 1,695, ex-smokers=4,232, never smokers=7,339)*

Vaping prevalence in ex-smokers

About one in six ex-smokers currently vape (17%, Table 2), and a further 19% have tried vaping but no longer vape. This means there are 3.0 million ex-smokers who are current vapers and 3.3 million ex-smokers who have tried vaping but no longer do it.

A quarter (25%) of all ex-smokers say they used a vape in their last quit attempt, amounting to 4.4 million people. Some ex-smokers quit many years ago, before the current generation of e-cigarettes were available.

More than half of ex-smokers who quit in the last five years say they used a vape in their last quit attempt, which amounts to 2.7 million ex-smokers. Among those who quit smoking in the last 5 years using a vape, 64% are still vaping while 29% have quit vaping as well (Table 3). The remaining 7% can't recall or gave an invalid answer.

Table 3. Current vaping behaviour in GB Adult ex-smokers who quit smoking in the last five years using a vape, 2024

GB Adult ex-smokers who quit smoking in the last five years using a vape	Currently vape	Have quit vaping	Can't recall/invalid answer	ALL
%	64%	29%	7%	100%
Approx. number of people	1.7 million	800K	200K	2.7 million

ASH Smokefree GB Adult Survey 2024. *Unweighted base: Adult ex-smokers who quit in the last 5 years using a vape n=665*

Our findings are consistent with the Smoking Toolkit Study (an ongoing series of monthly surveys of the adult population of England) which shows that e-cigarettes are the most popular quitting aid and that there is a clear association between changes in population rates of quitting smoking and prevalence of e-cigarette use.¹ For further discussion of the STS, see Appendix 1. If the association is causal, then the use of e-cigarettes in quit attempts appears to have helped in the region of 30,000 to 50,000 additional smokers to successfully quit each year in England since 2013.²

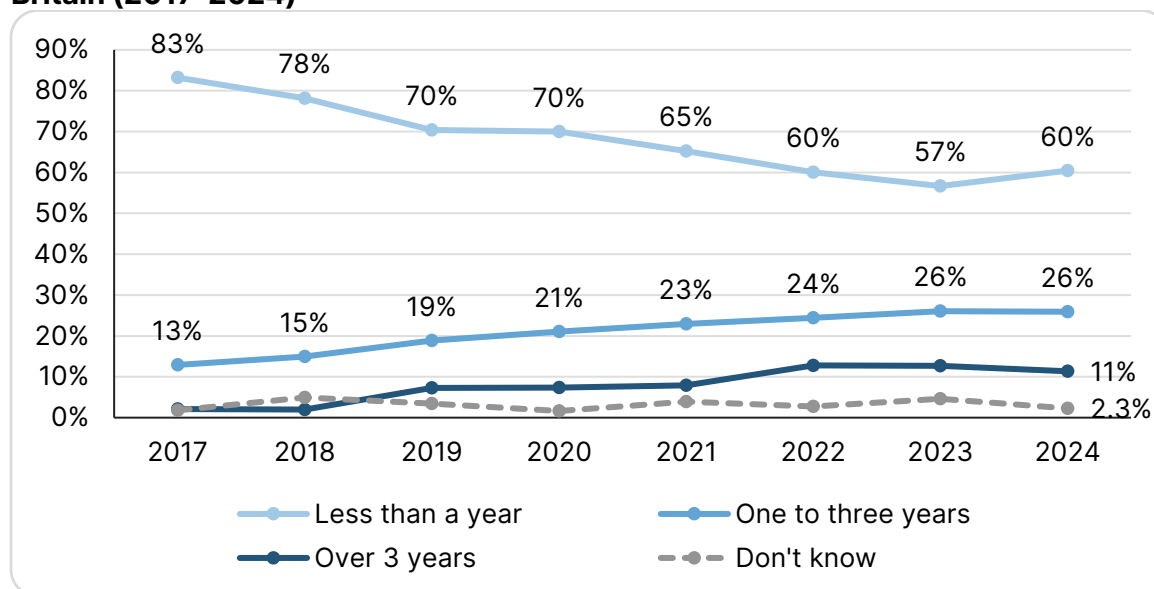
Our findings are also consistent with randomised controlled trials which provide good evidence that nicotine containing e-cigarettes are an effective quitting aid. A Cochrane systematic review of the evidence concludes that there is high certainty evidence that nicotine-containing e-cigarettes increase long-term quit rates to a greater extent than Nicotine Replacement Therapy.³ Furthermore, there is high certainty evidence that nicotine e-cigarettes, varenicline and cytisine are the stop-smoking aids most likely to help people quit smoking.⁴ Varenicline and cytisine are only available on prescription and were used in less than 1% of quit attempts in 2022.⁵

Vaping duration in ex-smokers

The median length of time spent vaping among those who quit using a vape in the last five years and have now quit vaping too was around a year. Among all ex-smokers who have ever vaped (including current and ex-vapers) the median length of time spent vaping is two years.

The proportion of ex-smokers, who are also ex-vapers that used e-cigarettes for less than a year has fallen over time from 83% in 2017 to 60% in 2024. (Figure 3) The proportion using e-cigarettes for over a year before stopping has more than doubled from 15% in 2017 to 37% in 2024, with 11% saying they vaped for more than three years before stopping.

Figure 3. Length of e-cigarette use by adult ex-smokers who are also ex-vapers, Great Britain (2017-2024)

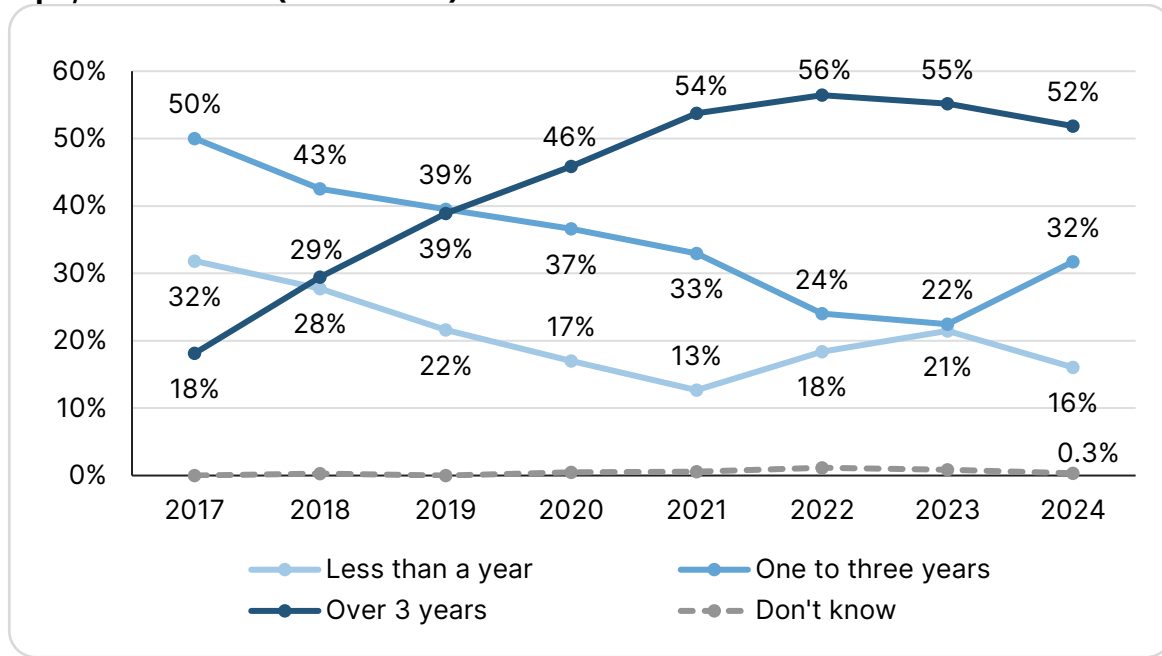


ASH Smokefree GB Adult Surveys 2017-2024. Unweighted base: Adult ex-smokers who no longer vape but once did, excluding 'once or twice' and DK frequency (2017=233, 2018=242, 2019=272, 2020=321, 2021=402, 2022=418, 2023=407, 2024=461)

More than half of current vapers who are ex-smokers in 2024 said they had been vaping for over 3 years (52%), compared with 18% in 2017 when we started asking this question. (Figure 4).

- 16% have vaped for under 1 year
- 32% have vaped for 1 - 3 years
- 22% have vaped for 3 - 5 years
- 24% have vaped for 5 - 10 years
- 5.8% have vaped for over 10 years

Figure 4. Length of e-cigarette use by adults who are ex-smokers and who currently vape, Great Britain (2017-2024)



ASH Smokefree GB Adult Surveys 2017-2024. *Unweighted base: Adult ex-smokers who currently vape, excluding 'once or twice' and DK frequency (2017=357, 2018=399, 2019=456, 2020=473, 2021=533, 2022=586, 2023=604, 2024=722)*

Many people who were both ex-smokers and ex-vapers had previously vaped regularly, with 30% saying they vaped daily and 43% at least weekly. Most ex-smokers who currently use e-cigarettes vape daily (88%), with 96% vaping at least weekly.

Vaping and NRT use by current smokers

In 2024, a third of current smokers also vape (32%, Table 2).

People who vape and smoke are known as dual users. In 2023 the proportion of e-cigarette users who smoke in our survey was the same as the proportion of Nicotine Replacement Therapy (NRT) users who smoke: 37% or just over a third. The question about NRT use wasn't asked in 2024.

The evidence shows that smokers who cut down before quitting are just as likely to succeed as those who quit abruptly, and there is some evidence that use of NRT in cutting down can increase the likelihood of successfully quitting.⁶ Cutting down to stop

with NRT is recommended in NICE guidance for smokers not yet ready or able to stop smoking completely.⁷

Dual use of e-cigarettes is less well understood. However, of smokers who vape in our survey, 41% do so daily and 87% at least weekly. The proportion of never smokers who vape daily is very similar (40%), although fewer (58%) vape at least weekly.

Vaping behaviour in never smokers

The proportion of current vapers who say they have never smoked has fluctuated over the years of the survey but is currently 8.0% of current e-cigarette users equal to 440,000 GB adults (Figure 1). However, never smokers make up most of the population so the proportion of never smokers who are current vapers is 1.6% (Table 2), with 8.1% having ever tried vaping. Two fifths (40%) of never smokers who currently vape do so daily.

Attitudes to vaping

Reasons for e-cigarette use

Among all e-cigarette users who vaped more than once or twice, the four main reasons for vaping are as an aid to quitting (20%) followed by preventing relapse (15%), because they enjoy the experience (13%) and to help with stress or mental health (11%).

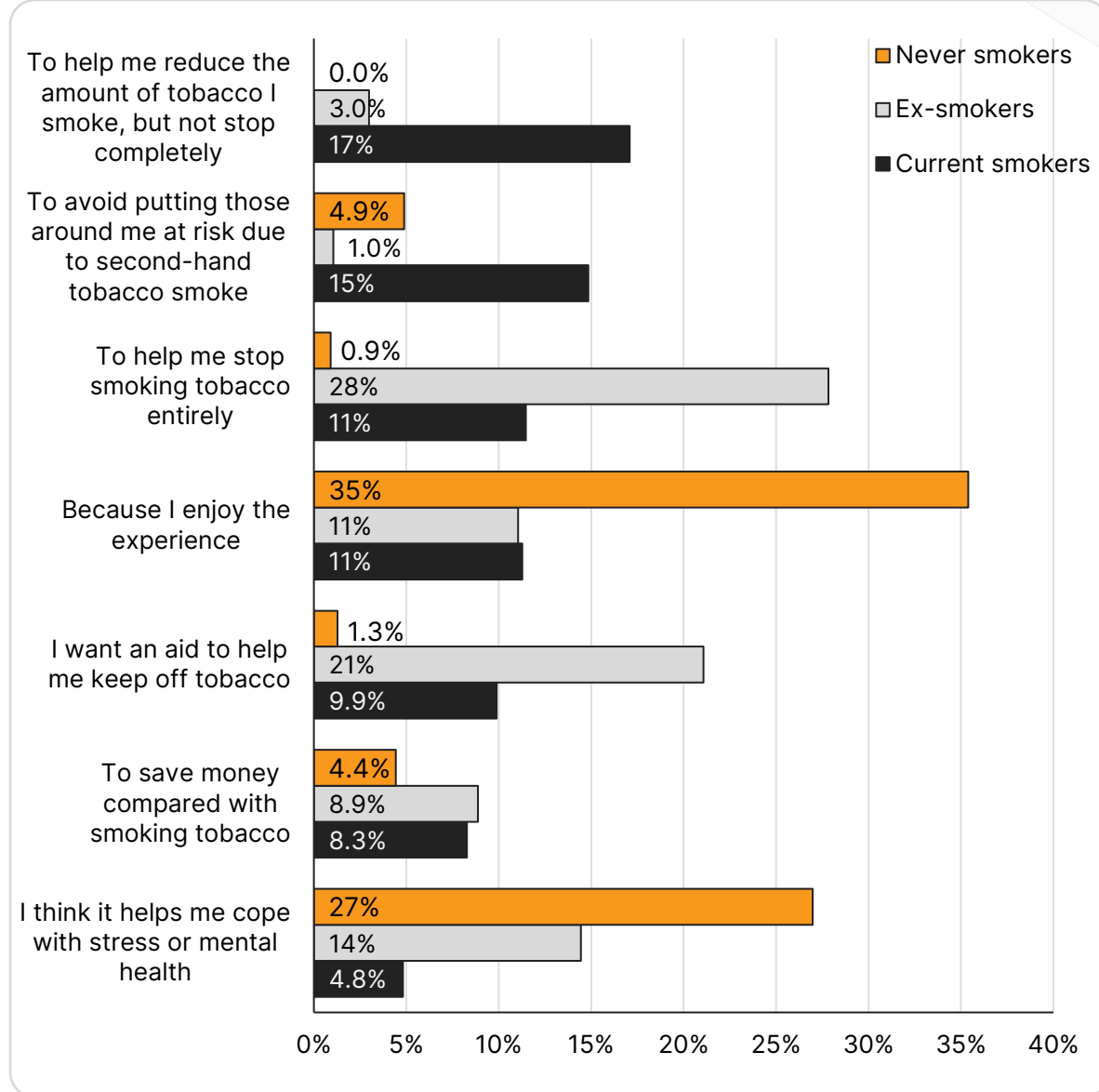
Reasons for e-cigarette use by smoking status

When current e-cigarette users who are ex-smokers are asked for their main reason for vaping, the most frequently cited reasons are: to help them quit (28%); as an aid to keep them off tobacco (21%); to cope with stress or mental health (14%) because they enjoy it (11%); and to save money (8.9%). (Figure 5)

The main reasons current e-cigarette users who also smoke (dual users) give for using e-cigarettes are to help them to help cut down the amount smoked (17%), to avoid putting those around them at risk of secondhand smoke (15%), to try to help them quit (11%), because they enjoy the experience (11%), and as an aid to keep them off tobacco (9.9%).

The main two reasons for vaping among never smokers are enjoying the experience (35%) and to cope with stress or mental health (27%). 'Just to give it a try', was chosen by 8.8% in 2024, a significant fall from 27% of never smokers in 2023.

Figure 5. Main reason for vaping among adult smokers, ex-smokers and never smokers who vape, Great Britain (2024)



ASH Smokefree GB Adult Surveys 2024. Unweighted base: Adults who currently vape, excluding 'once or twice' and DK frequency of vaping (Smokers=541, Ex-smokers=722, Never smokers=111)

Other options to choose are grouped under 'Other':

'Just to give it a try'

'I need something to help deal with situations where I cannot smoke (e.g. workplaces, bars or restaurants)'

'Because I feel I am addicted to smoking tobacco and cannot stop using it even though I want to'

'It was advised by a health professional'

'It was suggested or recommended by a friend'

'To save money compared with smoking tobacco'

'I think it helps me control my weight'

'Other'

These were all chosen by less than 10% of any group

Satisfaction

Those who tried vaping were also asked how satisfying they found it in comparison with smoking.

Ex-smokers who currently vape

Around two thirds of e-cigarette users who no longer smoke find vaping more or equally satisfying compared with smoking (68%). The proportion finding it less satisfying is 29% (Figure 6).

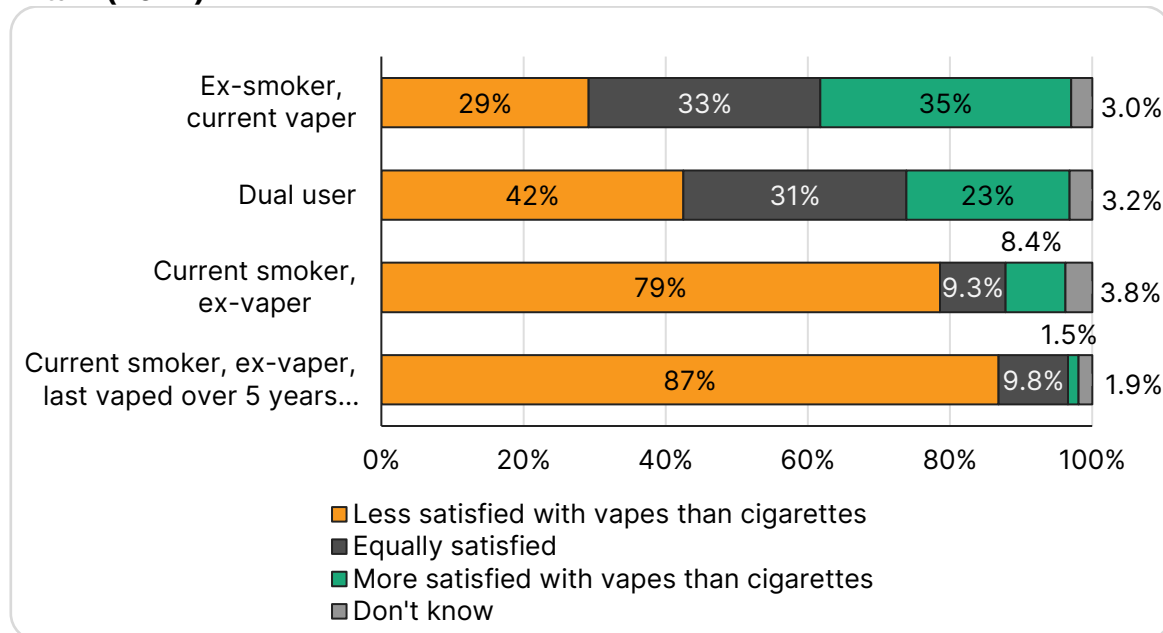
Smokers who currently vape

More than half (54%) of vapers who also smoke find it more or equally satisfying compared with smoking, while 42% find it less satisfying.

Smokers who are ex-vapers

Four in five current smokers who tried vaping but stopped find vapes less satisfying than cigarettes (79%), little changed since 2021 (also 79%). Satisfaction levels are lowest of all for smokers who last tried vapes over five years ago, 87% of whom say they had found vaping less satisfying than smoking. As products have improved over the years, and it could be worth encouraging ex-vapers who smoke to try vaping again to prompt further quit attempts.

Figure 6. Satisfaction levels from e-cigarettes compared with smoking in adults, Great Britain (2024)



ASH Smokefree GB Adult Surveys 2024. Unweighted base: Adults who have ever smoked and ever vaped, excluding 'once or twice' (ex-smoker currently vaping=724, dual user=545, currently smoking, ex-vaper=418, currently smoking, ex-vaper, last vaped over 5 years ago=61)

Reasons why smokers haven't tried or have stopped using e-cigarettes

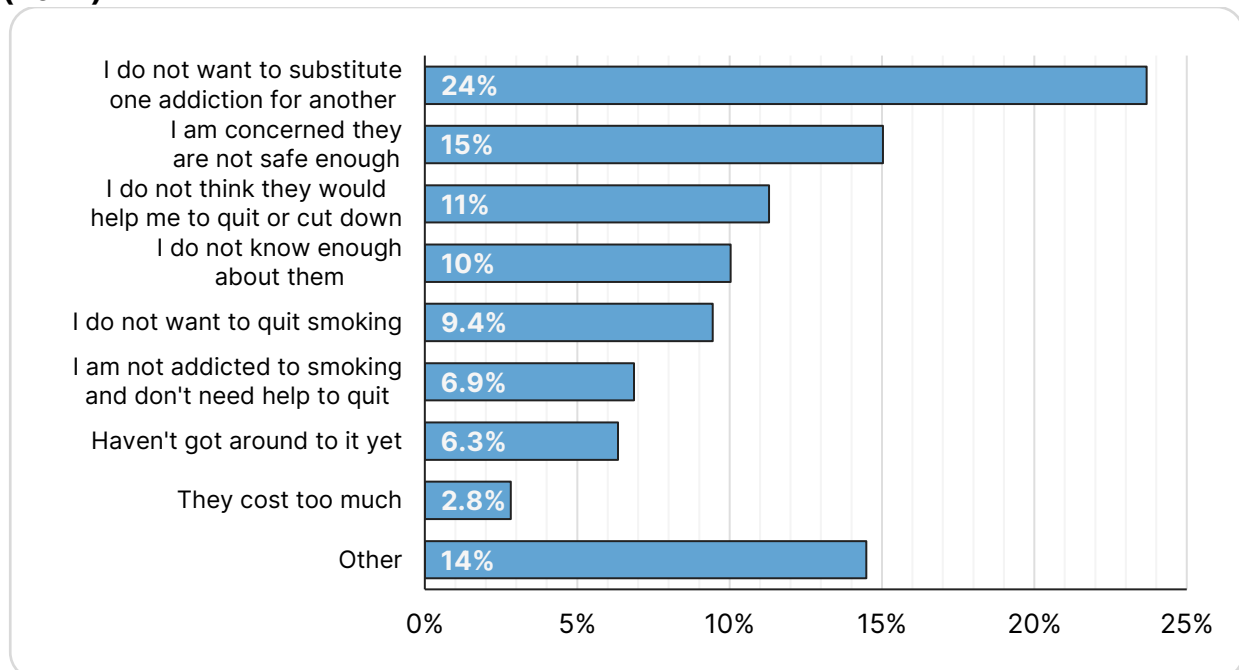
Just over a quarter of smokers (26%) have not yet tried e-cigarettes. The top four most frequently cited main reasons for not trying e-cigarettes reflect a lack of confidence in the safety and effectiveness of e-cigarettes (Figure 7). A quarter of responses (24%) are not wanting to 'substitute one addiction for another'. The second most common reason is safety concerns (15%).

The next most common reasons are not believing that e-cigarettes are effective quit/smoking reduction aids (11%), and lack of knowledge about them (10%).

Some smokers didn't view themselves as requiring a quit aid, with 9.4% not wanting to quit smoking, 6.9% saying they were not addicted to cigarettes and didn't need help to quit and 6.3% saying they hadn't got around to it yet.

Other possible main reasons such as cost, aesthetics and convenience were rare. It's worth noting that may not have perfect insight into the reasons for their actions. We know from objective evidence that cost is an important motivator for behaviour.⁸

Figure 7. Main reason for not trying an e-cigarette among adult smokers, Great Britain (2024)



ASH Smokefree GB Adult Surveys 2024. Unweighted base: Adults who are current smokers, who have not tried vapes but had heard of them (n=388)

Other options to choose are grouped under 'Other':

- 'I do not like the way they look'
- 'I'm using other things to help me quit smoking'
- 'I would be embarrassed to use them in public'
- 'There are too many products to choose from'
- 'They are difficult to get hold of'
- 'Other'

'Other' was chosen by 5.4% and the other options by less than 3% of the 2024 cohort.

Four in ten smokers (40%) have tried but no longer use e-cigarettes. The main three reasons cited for stopping using e-cigarettes were the same as last year:

- 24%: that vaping did not feel like smoking a cigarette (26% in 2023)
- 22%: that vaping did not help them deal with cravings (21% in 2023)
- 13%: that they had only tried them to see what they were like (19% in 2023)

Negative experiences included feeling unwell (9.6%) and not liking the taste (7.6%).

Some of this group stopped vaping some time ago (38% more than two years ago, 18% more than five years ago). The design of vape products has changed in the last few years, and some of these issues might apply less to vapes currently on the market.

Perceptions of harm

Adult population misperceptions of harm

Among all e-cigarette users who vaped more than once or twice, the four main reasons for vaping are as an aid to quitting (20%) followed by preventing relapse (15%), because they enjoy the experience (13%) and to help with stress or mental health (11%).

From 2016 to 2019 around one in four adults the proportion of adults who inaccurately believed vaping to be as, or more harmful than smoking, with between 43% and 50% believing it to be less harmful. (Figure 8) However, in 2020 the proportion believing it to be more or equally harmful rose significantly to 37% with the proportion believing it to be less harmful falling to 39%. The likely driver for this change in public perception was significant media coverage of injuries to health in the US from products banned in the UK.^{9,10}

In 2023 and 2024, misperceptions about the harms of vaping have risen sharply, with half (50%) of adults in 2024 believing vaping to be more or equally harmful compared with cigarettes, compared with a third (33%) in 2022.ⁱ

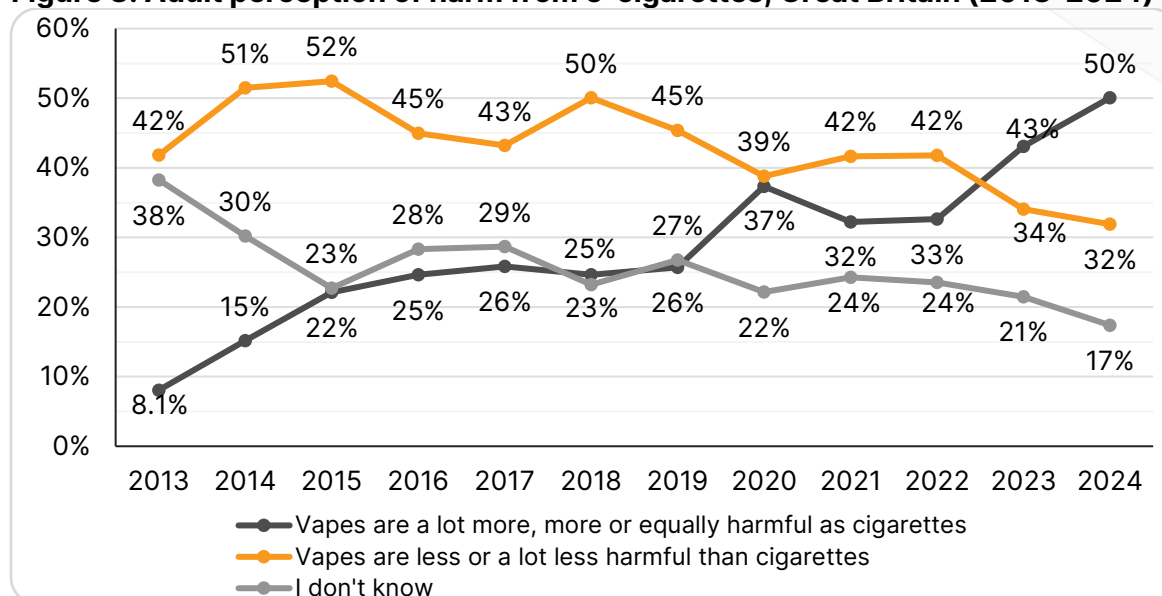
The drop in the accurate public understanding that vaping is less harmful than smoking in the past two years could be linked with widespread media coverage of youth vaping which has not always clearly distinguished the differences between the harms from smoking and vaping.

One in three (32%) believe that e-cigarettes are less harmful than tobacco cigarettes (24% “less”, 7.7% “a lot less”).

ⁱ Before 2024, the wording was “regular cigarettes”. Due to concern that “regular cigarettes” implied that vapes were a type of cigarette, in 2024, the sample was split, with a random assignment to either the “regular cigarettes” wording or “tobacco cigarettes” wording. All of the values reported in this section and graphs use only the new “tobacco cigarettes” condition, but the old wording had very similar results:

- Vaping equally or more harmful: 51%
- Less harmful: 31%
- Don’t know: 16%

Figure 8. Adult perception of harm from e-cigarettes, Great Britain (2013-2024)

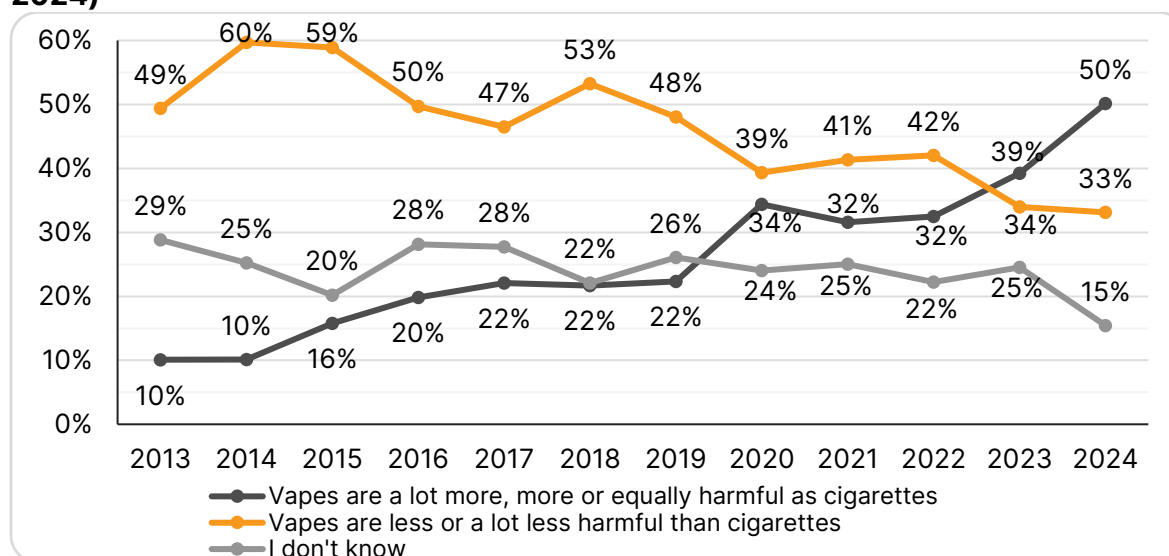


ASH Smokefree GB Adult Surveys 2013-2024. Unweighted base: Adults who have heard of vapes (2013=8,936, 2014=11,307, 2015=11,340, 2016=11,489, 2017=12,101, 2018=12,070, 2019=11,634, 2020=11,954, 2021=11,429, 2022=12,039, 2023=11,327, 2024=6,107). Options not shown on the graph are 'Vapes are completely harmless' (0.3% in 2024) and 'NA – I believe cigarettes are harmless' (0.3% in 2024). See also footnote i.

Smokers' perceptions of harm

A similar pattern can be seen among smokers' perceptions of harm in 2024 (Figure 9) with half (50%) believing vaping was more or equally harmful, and 15% saying they don't know. The proportion thinking that vaping is less or a lot less harmful than smoking is similar to that among the general population (33% of smokers and 32% of all adults).

Figure 9. Adult smokers' perception of harm from e-cigarettes, Great Britain (2013-2024)



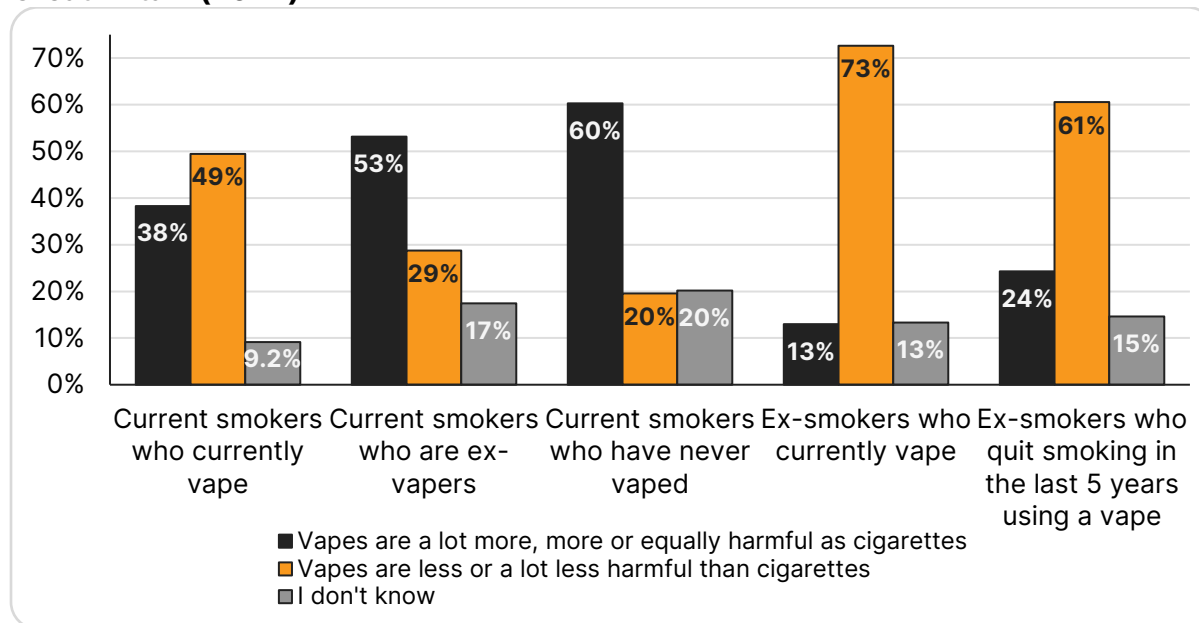
ASH Smokefree GB Adult Surveys 2013-2024. *Unweighted base: Adult current smokers who have heard of vapes (2013=1,720, 2014=1,705, 2015=1,945, 2016=1,639, 2017=1,569, 2018=1,566, 2019=1,679, 2020=1,599, 2021=1,438, 2022=1,641, 2023=1,426, 2024=816). Options not shown on the graph are 'Vapes are completely harmless' (1.0% in 2024) and 'NA – I believe cigarettes are harmless' (0.3% in 2024). See also footnote i.*

Smokers who currently use e-cigarettes have slightly more accurate perceptions of their harm, with 49% thinking that e-cigarettes are less harmful and 38% thinking that they are more or equally harmful. (Figure 10).

Ex-smokers who currently use e-cigarettes have the most accurate perceptions of the harm of e-cigarettes, but the trend in misperceptions is upwards. In 2024, 73% of them correctly thought e-cigarettes are less harmful than smoking. In 2024, 13% of ex-smokers who currently use e-cigarettes said that they are more or equally harmful (5.0% in 2019 and 2.9% in 2014). (Figure 10). About a quarter (24%) of ex-smokers who used a vape to quit smoking in the last 5 years thought vapes were more or equally harmful compared with cigarettes.

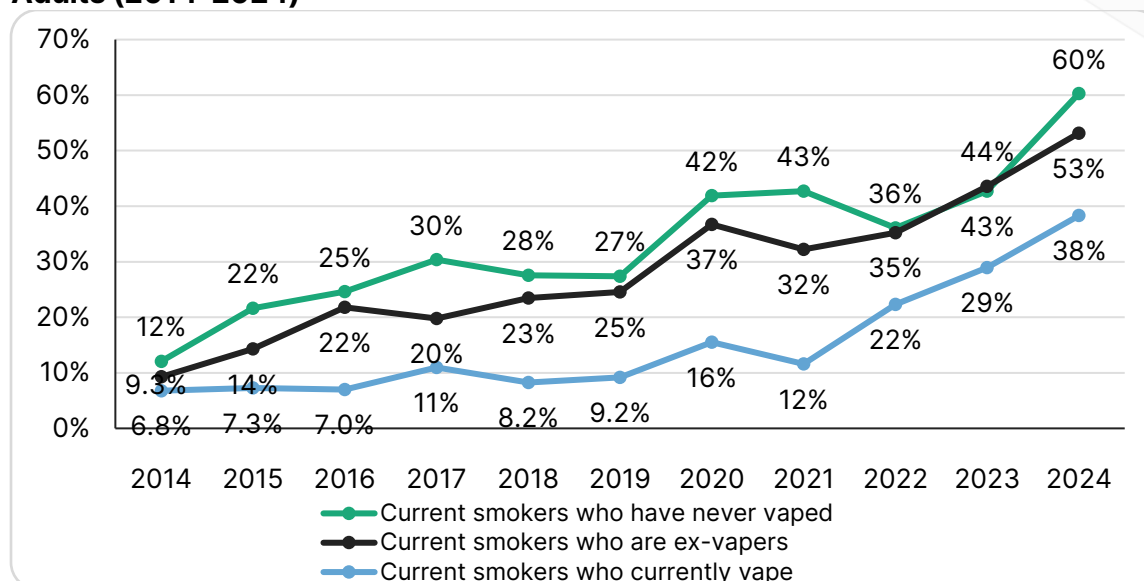
Misperceptions about the relative harms of e-cigarettes compared with cigarettes among smokers are highest among those who have never tried vaping. The proportion of current smokers who have never tried e-cigarettes who believe they are more than or equally as harmful as cigarettes increased from 27% in 2019 to 60% in 2024. (Figure 11).

Figure 10. Adults' perception of harm from e-cigarettes by smoking and vaping status, Great Britain (2024)



ASH Smokefree GB Adult Survey 2024. *Unweighted base: Adults who have heard of vapes (Current smokers who currently vape=270, Ex-vapers who currently smoke=343, Current smokers who have never vaped=203, Ex-smokers who currently vape=375, Ex-smokers who quit in the last 5 years using a vape=333). Options not shown on the graph are 'Vapes are completely harmless' and 'NA – I believe cigarettes are harmless'. See also footnote i.*

Figure 11. Incorrect perceptions of relative harm of vaping among different groups, GB Adults (2014-2024)



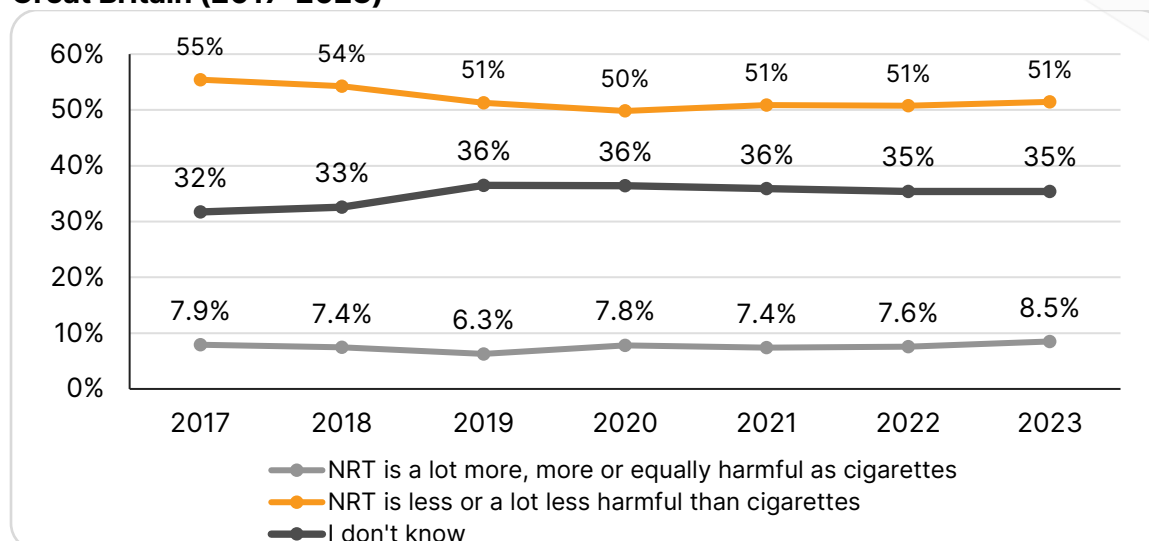
ASH Smokefree GB Adult Surveys 2014-2024. *Unweighted base: Current smokers with different vaping statuses – proportion who believe that e-cigarettes are more or equally harmful as cigarettes. Sample counts in Table 6 in the appendix.*

Perceptions of harm from Nicotine Replacement Therapies (NRT)

From 2017 to 2023 we also asked people for their views of the relative harms of NRT compared with tobacco smoking. NRT is a licensed medication with minor side effects, which is recognised as an essential medicine by the WHO.¹¹

Understanding of the relative risk of NRT compared to smoking among smokers remains poor. (Figure 12). However, it is considerably better than their understanding of the relative risk of vaping and smoking. (Figure 9). In 2023 a third (35%) of smokers said that they did not know how harmful NRT is compared to smoking, 8.5% thought it was more than or equally as harmful as smoking, and 51% correctly identified NRT as being *a lot* less harmful than smoking.

Figure 12. Adult smokers' perception of NRT compared with regular cigarettes, GB Great Britain (2017-2023)



ASH Smokefree GB Adult Surveys 2014-2023. Unweighted base: All adults (2017=12,696, 2018=12,767, 2019=12,393, 2020=12,809, 2021=12,247, 2022=13,088, 2023=12,271)

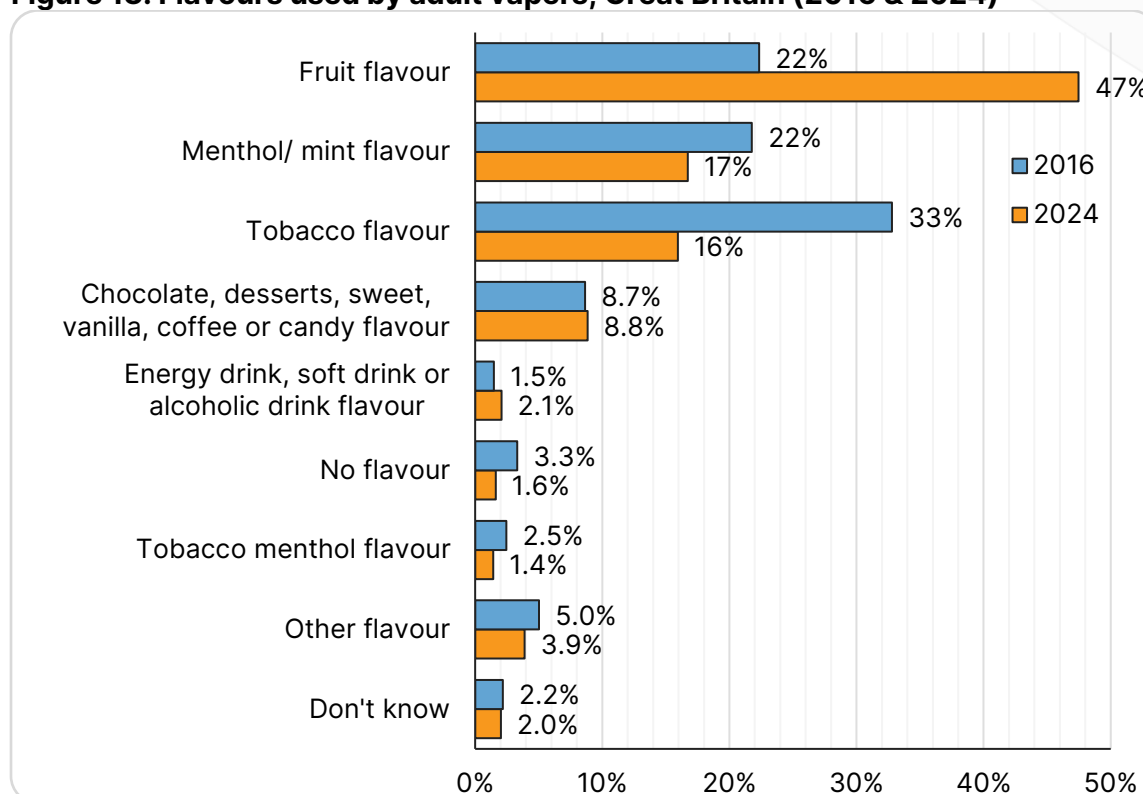
Types of device and e-liquids in use

Use of flavours

There have been significant changes in the most popular flavours used by adult vapers between 2016 and 2024. In 2016 tobacco was the most popular flavour (33%), followed by fruit and menthol/mint (both chosen by 22%). By 2024 fruit flavours were by far the most popular (47%), followed by menthol/mint (17%) and tobacco (16%). The next most popular are sweet flavours, little changed between 2016 and 2024 at 8.7% and 8.8% respectively. (Figure 13)

In 2020, we last asked vapers to say whether their use of flavours had changed over time. A higher proportion of ex-smokers who currently vape (74%) said they stick to the same flavours compared to dual users (61%).

Figure 13. Flavours used by adult vapers, Great Britain (2016 & 2024)



ASH Smokefree GB Adult Surveys 2024. Unweighted base: Adults current vapers (2016=667, 2024=1,408)

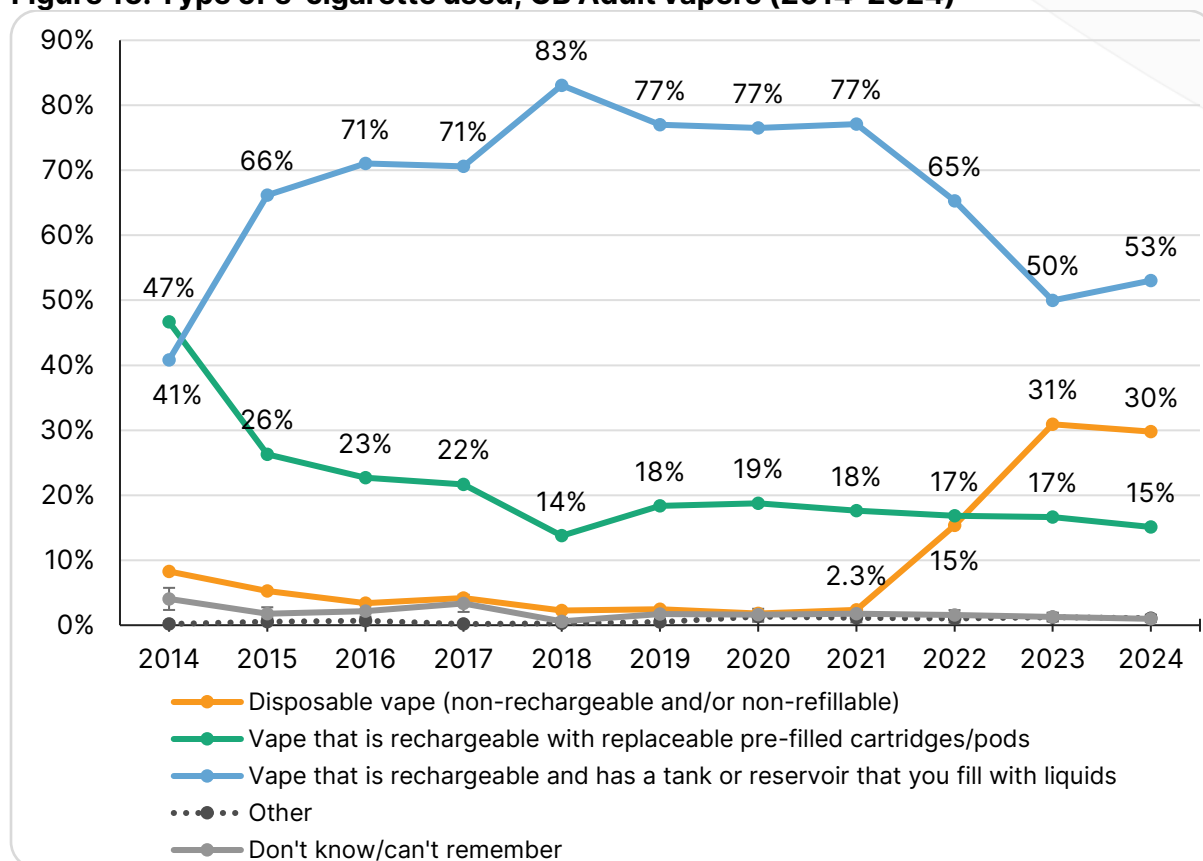
Ex-smokers are more likely to choose menthol/mint flavour (22%) than current smokers (12%). Dual users are more likely to choose tobacco flavour (23%, vs 13% of ex-smokers who vape). Among ex-smokers who vape, those who quit smoking over 5 years ago are significantly more likely to currently choose tobacco flavour vapes than those who quit more recently (18% vs 9.7%).

Fruit flavour vapes are the preference for the majority of never smokers who vape (61%). Fruit flavours are also popular with current (49%) and ex-smokers (45%).

E-cigarette device used

The most commonly used type of e-cigarette device remains a refillable tank system, with 53% of current vapers reporting that they currently use this as their main vaping device. (Figure 15). However, their popularity among vapers has fallen since 2021 (77%). The relative popularity of disposable vapes rose rapidly between 2021 and 2023 from 2.3% to 31% of current vapers but has since stabilised with 30% of current vapers reporting these as their main device. The proportion of adults who use vapes that are rechargeable with prefilled cartridges is 15% in 2024.

Figure 15. Type of e-cigarette used, GB Adult vapers (2014-2024)



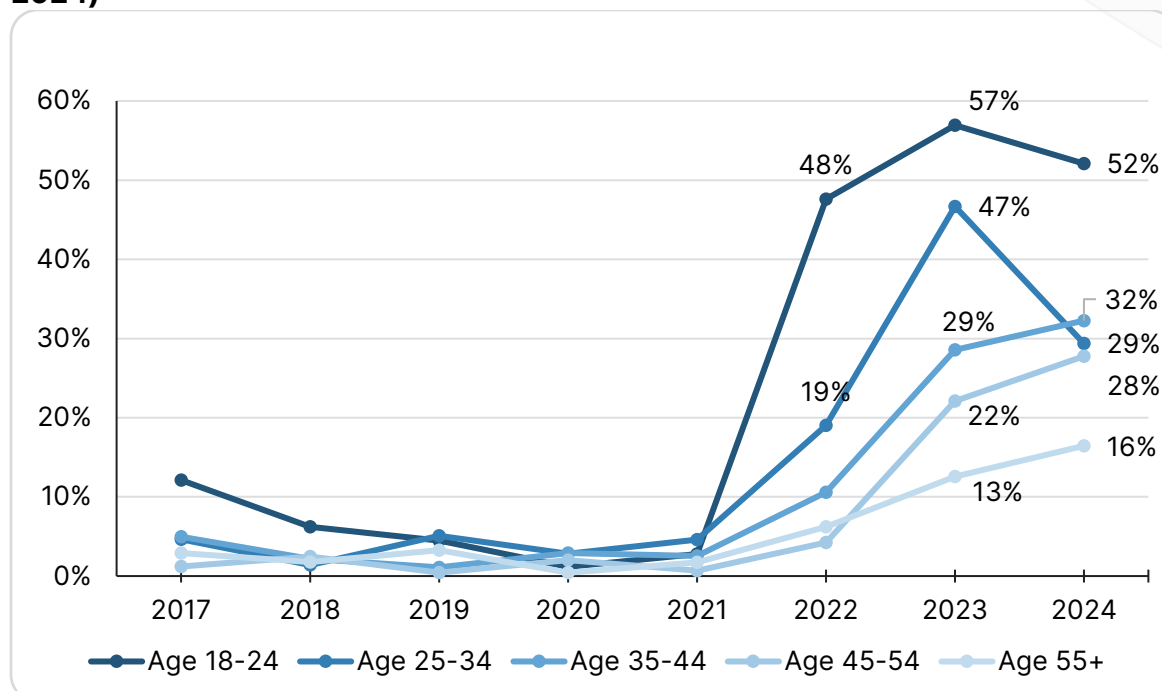
ASH Smokefree GB Adult Surveys 2014-2024. *Unweighted base: Adults who currently vape, excluding 'once or twice' and DK frequency from 2017 onwards (2014=498, 2015=614, 2016=667, 2017=657, 2018=715, 2019=800, 2020=767, 2021=790, 2022=1,033, 2023=1,042, 2024=1,374)*

As vaping prevalence has increased over the period 2021 – 2024, the fall in the relative popularity of tank-type devices didn't correspond with a fall in the absolute numbers of people using these devices. In 2021, 5.2% of all adults used tank type devices, compared with 4.4% in 2023 and 5.6% in 2024. In 2021, 0.2% of all adults used disposable type devices, compared with 3.1% in 2024.

Younger adults were the primary driver of the rapid rise in using disposable e-cigarettes as the main type of e-cigarette between 2021 and 2023. (Figure 16). For 18–24-year-olds, more than half of current e-cigarettes users (57%) used disposables as their main type in 2023, an increase from only 2.8% in 2021. In 2024, disposable e-cigarettes are also the most popular main device type among 11–17-year-old e-cigarette users (54%).¹²

However, in 2024 use of disposable vapes fell slightly year on year, following the announcement in January that the government would implement a ban on the sale of disposable vapes.¹³ In particular there has been a big decline in the proportion of 25–34-year-olds using disposable products falling from 47% in 2023 to 29% in 2024. Disposable vape use has remained stable in other age groups. (Figure 16)

Figure 16. Use of disposable e-cigarettes by age group, GB current vapers (2017-2024)



ASH Smokefree GB Adult Surveys 2017-2024. *Unweighted base: Adult current vapers, excluding only tried once or twice and don't know freq. of use. Sample counts in Table 7 in the appendix*

Two thirds (66%) of all current e-cigarette users said they only used one device.

In 2023, current vapers were asked about their reasons for choosing their preferred type of device over the other types. Convenience of use and price were important factors in the choice of device type, although there was no consensus about which types deliver these benefits (this question wasn't asked in 2024):

- The most common reasons for choosing a disposable vape are convenience of use (32%), being able to get desired flavours (21%) and that it's cheaper (11%).
- The most common reasons for choosing a cartridge type device are convenience of use (28%) and that it's cheaper (12%).
- The most common reasons for choosing a tank type device are that it's cheaper (25%), being able to choose the strength of nicotine (16%) and convenience of use (13%).

Brands of vapes used in 2024

- For current vapers who mainly use disposable vapes, the most popular brands are Elf Bar (52%), Lost Mary (40%) Crystal Bar (35%), Elux Legend (16%) and Vuse Go (13%).
- For current vapers who mainly use cartridge type devices, the most popular brands are Elf Bar (24%), Vuse (17%) and 88Vape (12%). This is a significant

increase in popularity for Elf Bar which was used by 13% of cartridge users in 2023.

- The most popular brands for current tank device users were Smok (19%), Aspire (18%) and Innokin (15%).

Nicotine consumption

The Tobacco Products Directive (TPD)¹⁴ imposed a cap on nicotine levels of 20 mg/ml or 2%, which does not exist in the US, which has no cap on nicotine levels.

In 2016, before the legislation was introduced, more than three quarters of current or former e-cigarette users surveyed by ASH vaped liquids with concentrations of nicotine of 18 mg/ml or less (77%), with nearly half (49%) using e-liquid containing 12 mg/ml or less. One in ten (10%) used more than 18 mg/ml (the legal limit of 20 mg/ml was only included as a specific break point from 2017 onwards). In 2017, at the time the sell through period was coming to an end, 5.9% of current vapers were using above the TPD limit, falling to 2.1% in 2018 (Table 4).

The ASH survey suggests that the current nicotine cap of 20 mg/ml is not a problem for the majority of e-cig users who use e-liquid containing nicotine, as they are using strengths at or under the legal limit. In 2024, 2.3% of current e-cigarette users said they use nicotine strengths above the legal limit, 12% did not know what strength they used.

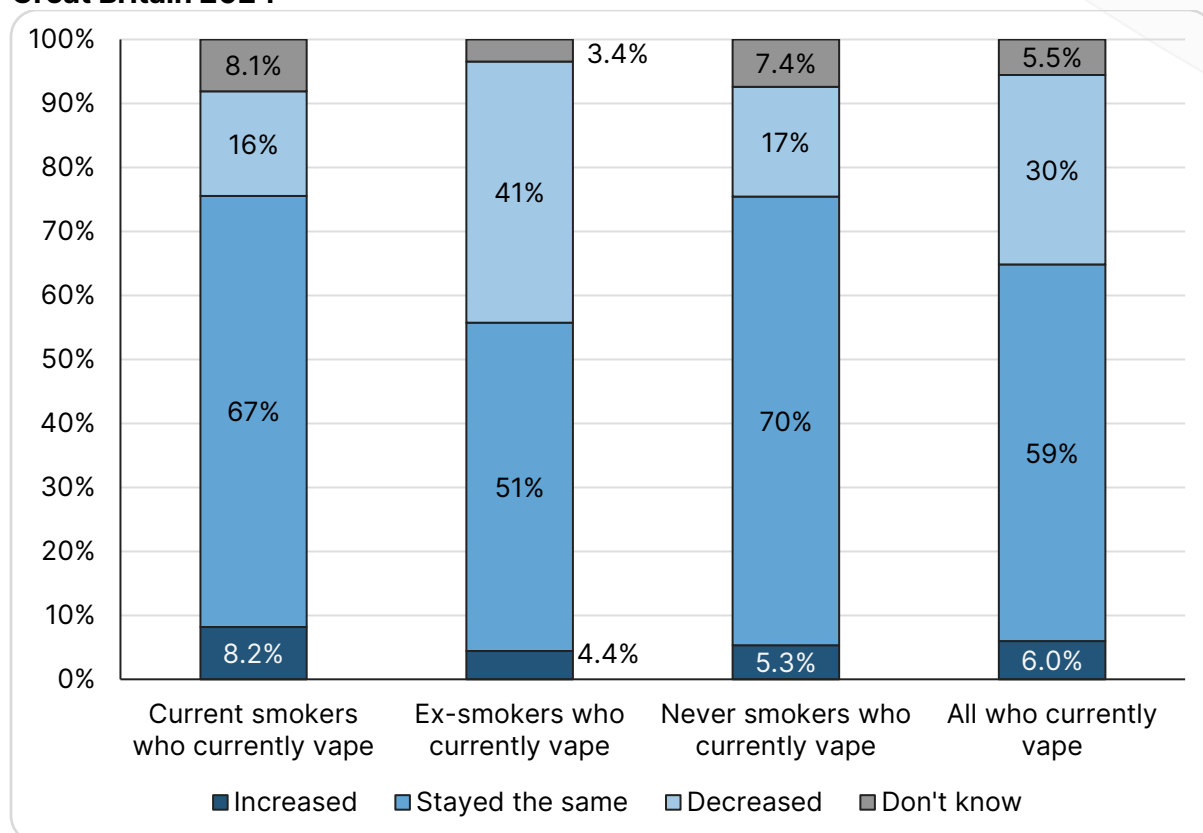
Table 4

Strength of nicotine used by current e-cigarette users								
Strength	2017	2018	2019	2020	2021	2022	2023	2024
TPD level (20mg/ml) and lower	85%	90%	88%	91%	92%	90%	86%	86%
Higher than TPD (20mg/ml)	5.9%	2.1%	2.0%	2.1%	1.5%	0.9%	1.2%	2.3%
Don't know	9.5%	8.4%	9.8%	7.0%	6.5%	9.0%	13%	12%

ASH Smokefree GB Adult Surveys 2017-2024. *Unweighted base: Current GB adult e-cigarette users who use nicotine. 2017 n=597; 2018 n=365; 2019 n=720; 2020 n=693; 2021 n=633; 2022 n=938, 2023 n=953, 2024 n=1,311*

In 2024, 59% of current vapers say they use the same strength e-liquid as when they started, while 30% have decreased the strength. Only 6.0% have increased the strength over time. (Figure 17). E-cigarette users who have quit smoking are more likely than dual users to report using a lower nicotine strength over time (41% of ex-smokers who vape say the strength they use has decreased compared with 16% of current dual users).

Figure 17. Change over time of e-liquid nicotine strength among current adult vapers, Great Britain 2024



ASH Smokefree GB Adult Surveys 2024. Unweighted base: Adult current vapers excluding once or twice and DK frequency (Current smokers=541, Ex-smokers=722, Never Smokers=111, All n= 1,374)

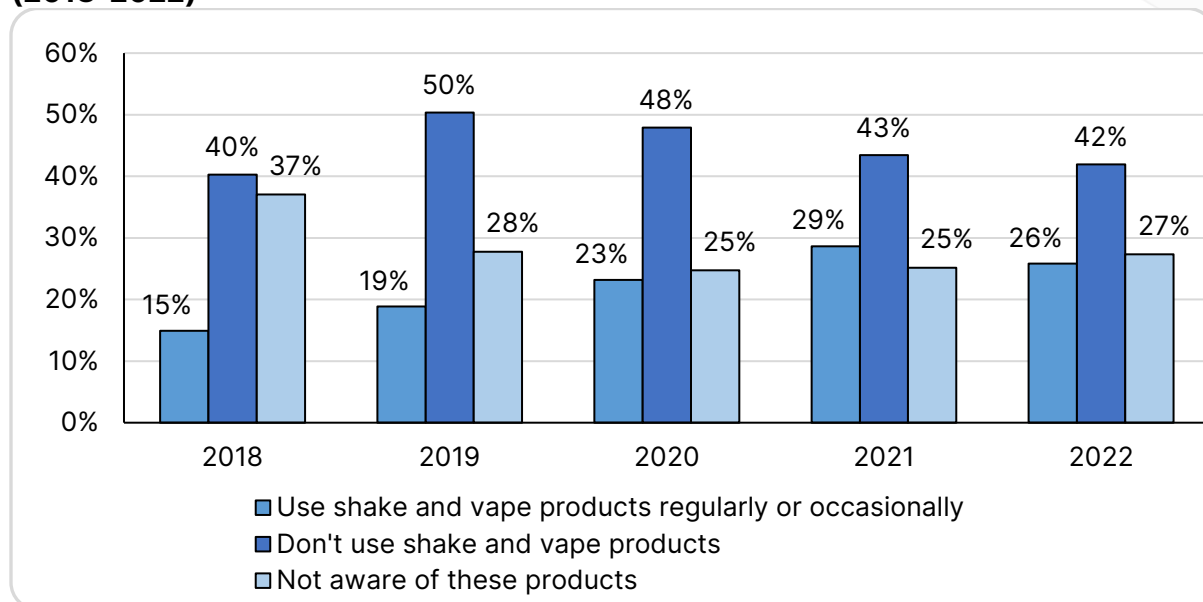
Amount of e-liquid used in tank-type e-cigarettes and dedicated refill bottles

Legislation limits the volume of e-liquid in an e-cigarette to less than 2ml and dedicated refill bottles for tank-type devices to 10ml.

In 2016, prior to this legislation coming into force, 44% of those vaping daily and using a tank device reported using 2ml or less a day with 0.2% reporting using more than 10ml of liquid a day. In 2023, 28% of all daily e-cig users used 2ml or less a day and 3.1% more than 10 ml a day. We have not asked why vapers have increased the amount of liquid they use, but the most likely reasons are either the cap on nicotine strengths and/or changes in the types of products being used.

To get around the limits, larger bottles of zero-strength liquid are on sale alongside smaller bottles with the highest legal limit nicotine strength liquid, sold to be mixed together. This is sometimes marketed as short-fills or 'shake and vape'. The 2023 and 2024 ASH YouGov surveys did not include this question, but in 2022 26% of current vapers who mainly use tank devices or who use nicotine reported using 'shake and vape' products. (Figure 18)

Figure 18. Change in awareness and use of 'shake and vape' products, Great Britain (2018-2022)



ASH Smokefree GB Adult Surveys 2018-2022. *Unweighted base: Current adult vapers using tank as main device or using nicotine (2018=696, 2019=775, 2020=744, 2021=769, 2022=993)*

Other alternatives to smoked tobacco

Marketing

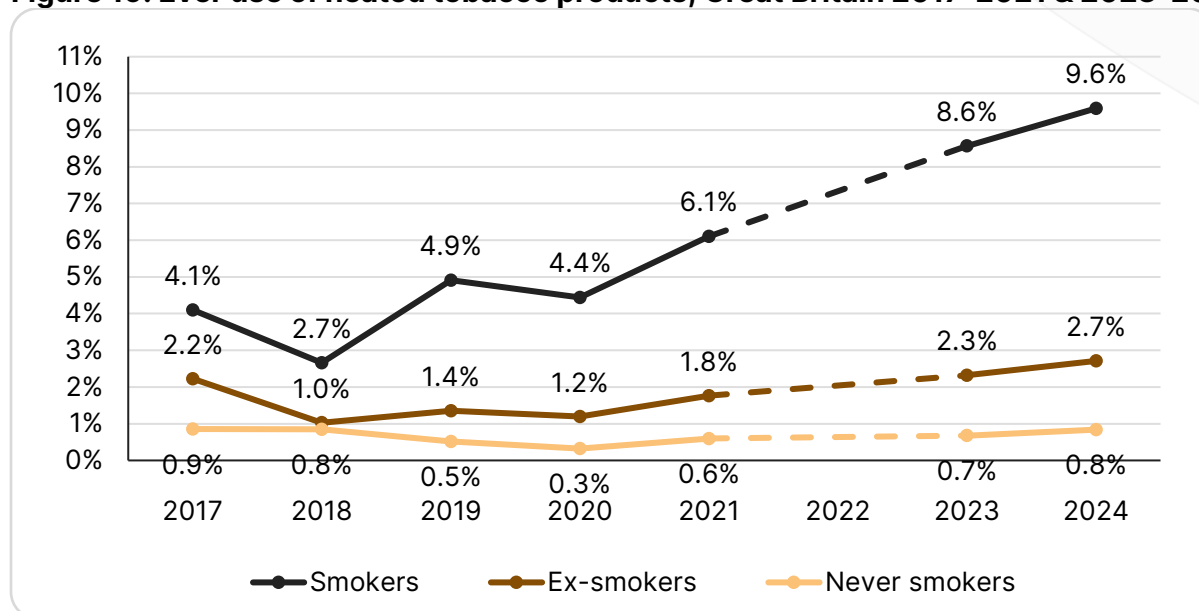
Although heated tobacco products and nicotine pouches are both very distinct from vapes, we discuss them here because they have recently been heavily marketed,^{15 16 17} and there are some indications of an increase in use.

Heated Tobacco

From 2017, after the launch of the Philip Morris International (PMI) product IQOS, the ASH Smokefree GB survey has asked about knowledge and use of heated tobacco products (also known as heat not burn). Population level of knowledge and use was low to start with. In 2021, 30% of smokers had heard of heated tobacco products and 6.1% had ever tried them. In 2024, smokers' knowledge of heated tobacco products had increased slightly to 37%, with 9.6% having ever tried them (Figure 19). Less than 1% of ex-smokers are current users of heated tobacco products (Figure 20) and 2.7% had tried them at some point. Only 0.1% of people who have never smoked and never vaped currently use heated tobacco products.

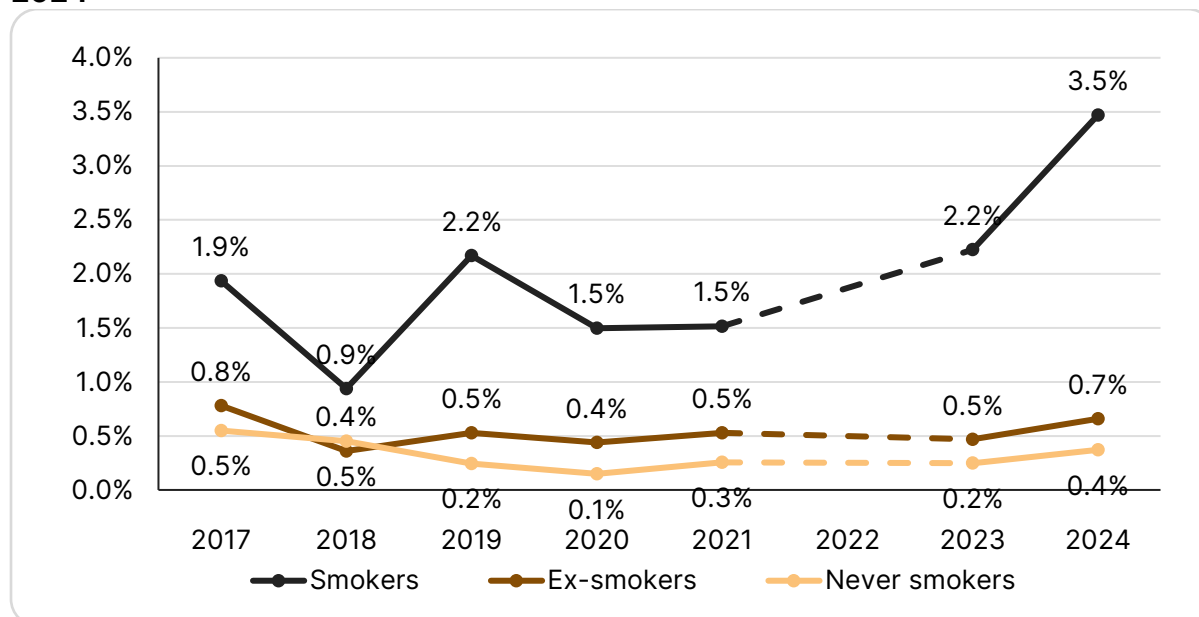
Among all adults, 19% had heard of heated tobacco products, 2.6% had ever tried them and 0.9% currently use them.

Figure 19. Ever use of heated tobacco products, Great Britain 2017-2021 & 2023-2024



ASH Smokefree GB Adult Surveys 2017-2021 & 2023-2024. Unweighted base: Adult smokers, ex-smokers and never smokers – proportion who have ever tried heated tobacco products. Dotted line shows trend from 2021 to 2023, as the question was not asked in 2022. Sample counts in Table 8 in the appendix

Figure 20. Current use of heated tobacco products, Great Britain 2017-2021 & 2023-2024



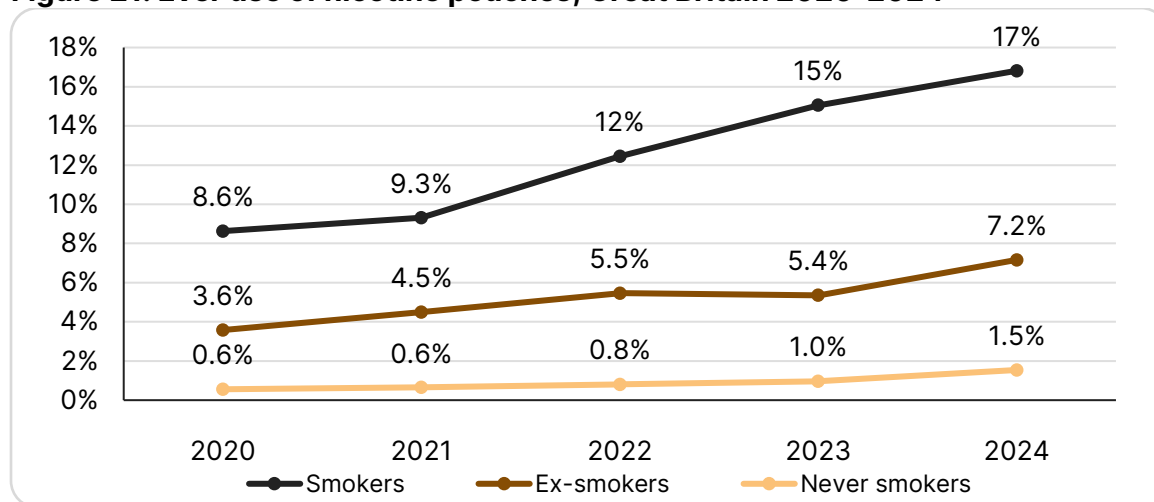
ASH Smokefree GB Adult Surveys 2017-2021 & 2023-2024. Unweighted base: Adult smokers, ex-smokers and never smokers – proportion who have ever tried heated tobacco products. Dotted line shows trend from 2021 to 2023, as the question was not asked in 2022. Sample counts in Table 8 in the appendix

Nicotine Pouches

Public awareness of nicotine pouches (which includes brands such as ZYN and Nordic Spirit) is greater than of heated tobacco products, with 61% of smokers reporting they have heard of these products in 2024. Current use by smokers is 3.3% and by ex-smokers is 0.8% (Figure 21). Ever use of nicotine pouches is at 17% among smokers in 2024, and 7.2% among ex-smokers (Figure 21). Only 0.2% of people who have never smoked and never vaped currently use nicotine pouches.

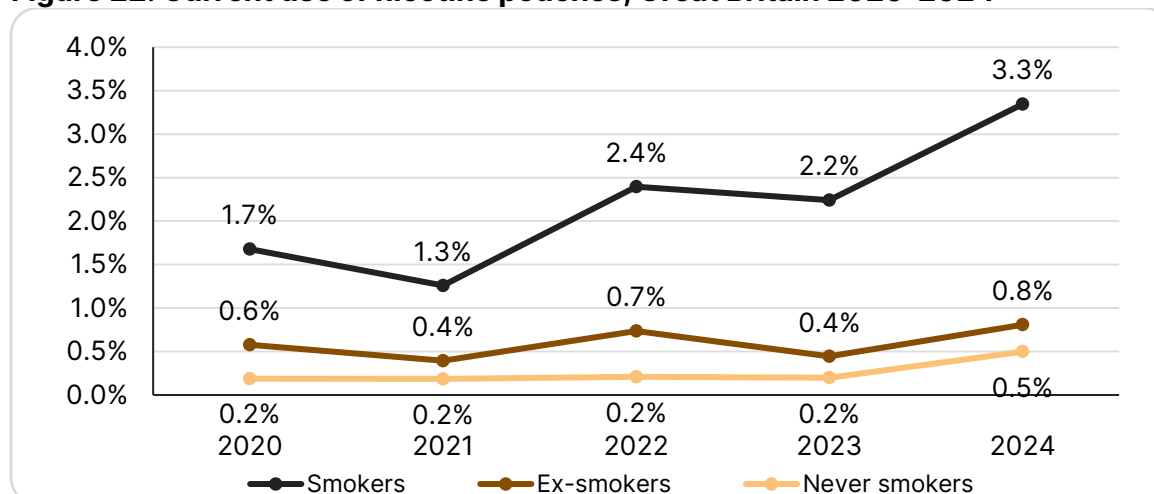
Among all adults, 56% had heard of nicotine pouches, 5.4% had ever tried them and 1.0% currently use them.

Figure 21. Ever use of nicotine pouches, Great Britain 2020-2024



ASH Smokefree GB Adult Surveys 2020-2024. Unweighted base: Adult smokers, ex-smokers and never smokers – proportion who currently use nicotine pouches. Sample counts in Table 8 in the appendix

Figure 22. Current use of nicotine pouches, Great Britain 2020-2024



ASH Smokefree GB Adult Surveys 2020-2024. Unweighted base: Adult smokers, ex-smokers and never smokers – proportion who currently use nicotine pouches. Sample counts in Table 8 in the appendix

Appendix 1

Methods

This briefing reports the results of the ASH Smokefree GB surveys on the use of e-cigarettes among adults in Great Britain. All figures, unless otherwise stated, are from YouGov Plc. ASH included questions on e-cigarette use in this annual survey starting in 2010 with questions initially addressed only to smokers. ASH updated its annual survey with questions on e-cigarettes addressed to all respondents from 2012 onwards. (Appendix Table 5). These surveys have all been carried out online once a year in Spring by YouGov. All figures have been weighted and are representative of GB adults (aged 18+). Not all questions are asked every year, especially where answers have proven stable in the past. A few new questions are also introduced each year. ASH has also carried out a survey of youth e-cigarette use (11-18-year-olds) since 2013. Analysis of e-cigarette use among youth is published separately.¹²

Calculations of the total number of vapers in Great Britain set out in Table 1 are by ASH. In each of the years we applied the proportions of e-cigarette use in the YouGov survey to the most recent available ONS mid-year GB population estimates at the time the YouGov data was gathered.¹⁸ In 2023 and 2024 the 2022 population estimate was used. Percentages in this report are given to the nearest whole number, or to one decimal place if under 10%. As a result, some sums may appear out by ± 0.1 percentage points due to rounding error.

The word significant is used where 95% CI error bars don't overlap, and all comparisons that are emphasised in the text are significant differences. However, no specific hypothesis test was used and there is no correction for multiple comparisons.

Table 5. History of ASH Smokefree GB Surveys

Year	Sample Size	Dates
2008	3,329	20 th – 25 th February
2009	13,075	25 th – 30 th March
2010	12,597	17 th - 22 nd March
2012	12,436	27 th February – 16 th March
2013	12,171	1 st – 19 th February
2014	12,269	5 th – 14 th March
2015	12,055	26 th February – 12 th March
2016	12,157	2 nd – 23 rd March
2017	12,696	16 th February – 19 th March
2018	12,767	8 th February – 6 th March
2019	12,393	12 th February – 10 th March
2020	12,809	17 th February – 11 th March
2021	12,247	18 th February – 18 th March

2022	13,088	16 th February – 21 st March
2023	12,271	22 nd February – 15 th March
2024	13,266	29 th February – 18 th March

Other surveys on vaping

Since the ASH-commissioned Smokefree GB survey first started, there have been a number of other surveys which have gathered data on e-cigarette use. The Smoking Toolkit Study is probably the most extensive of these and tracks both smoking and e-cigarette use throughout the year.¹⁹ The study started in England in January 2007 and expanded to Scotland and Wales in December 2020. The countries' surveys are reported separately rather than together as Great Britain, and only the England data are discussed here.

The trends are similar in both surveys,²⁰ although the vaping prevalence among never smokers has always been a little lower in the ASH survey. However, both surveys find a similar trend over time, with a recent increase in vaping among never smokers. The surveys specifically differ in the rates of vaping among younger adults and those with lower socio-economic status, with STS finding a higher vaping rate among these groups compared with the ASH Smokefree Survey 2024. The difference is likely due to different sampling methods, question design or collection methods. For further information see the [Smoking Toolkit Study](#).

Another major survey covering vaping in GB is the Annual Population Survey, conducted by the ONS. In 2022, their most recent survey at the time of publication, they found that "Around 2.4% of people who have never smoked reported that they were daily or occasional e-cigarette users [...], an increase from 1.5% in 2021."²¹ Like the STS, this rate is higher than is found in the 2022 and 2021 ASH surveys (1.3% and 0.7%, respectively). However, all three surveys do find a significant recent increase of vaping among never smokers.

COVID-19

The YouGov data collection for the ASH Smokefree surveys occurs in February and March, so we do not expect that the 2020 data was significantly affected by the COVID-19 pandemic. The data in subsequent years may capture changes in smoking and vaping attitudes and behaviours that are causally related to the pandemic or lockdown. In 2020, data collection for both the Annual Population Survey²² and the Smoking Toolkit Study²³ had to be changed from face-to-face to telephone interviews. This means it is difficult to determine how far the changes in vaping patterns in these surveys were due to changes in the mode of data collection and how far they were directly due to COVID-19. To compensate for the change of modality, the APS made a statistical adjustment to the data for 2020 onwards.²⁴ The ASH Smokefree survey has always been online, so did not have a discontinuity in method during the pandemic.

Table 6 – Sample sizes for Figure 11

Sample counts	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Ex-smokers who currently vape	167	239	329	361	403	465	475	541	594	617	375
Current smokers who have never vaped	816	768	606	548	563	492	417	432	372	203	203
Current smokers who currently vape	324	366	330	308	335	292	250	394	388	270	270
Current smokers who are ex-vapers	565	811	703	710	781	815	771	815	666	343	343

Table 7 – Sample sizes for Figure 16

Sample counts		2017	2018	2019	2020	2021	2022	2023	2024
Age	18-24	52	50	56	55	52	217	147	247
	25-34	53	68	101	104	129	181	192	309
	35-44	127	129	159	168	177	217	238	302
	45-54	190	199	223	176	156	188	207	241
	55+	235	269	261	264	276	230	258	275

Table 8 – Sample sizes for Figures 19 to 22

Sample counts	2017	2018	2019	2020	2021	2022	2023	2024
Current smokers	1632	1633	1777	1694	1512	1751	1517	1695
Ex-smokers	4438	4388	4150	4283	4228	4207	4105	4232
Never smokers	6626	6746	6466	6832	6507	7130	6649	7339

Appendix 2

E-cigarette regulations

In 2015, a minimum age of sale for e-cigarettes of 18 was introduced, making it illegal to sell e-cigarettes containing nicotine to under 18s or to purchase them on behalf of under 18s.²⁵

From 20th May 2016, a regulatory framework for e-cigarettes was introduced in the UK under the EU Tobacco Products Directive (TPD) Article 20.¹⁴ The regulations are due to be updated and strengthened following a review in 2023, but the timescale and content of the revised regulations has still to be decided at time of publication of this factsheet.

In line with the TPD since 2016 the advertising or promotion, directly or indirectly, of electronic cigarettes and re-fill containers on a number of media platforms, including on television, radio, newspapers and magazines, was prohibited. The only advertising still allowed is at point of sale and other local advertising such as on billboards and public transport.

The new product rules under the TPD for electronic cigarettes introduced a notification process for manufacturers and importers in May 2016.²⁶ See below for a summary of the key product standards:

Nicotine strength of e-liquid

- Electronic cigarettes which contain up to 20 mg per ml of nicotine are regulated as consumer products.
- Products containing over 20mg per ml of nicotine cannot be sold unless they have a medicinal licence.²⁷
- Zero nicotine products are not included in the TPD and do not require a medicinal licence.

Quantity of e-liquid

- Disposable electronic cigarettes, cartridges and tanks can contain a maximum of 2ml of e-liquid, while dedicated refill containers can contain up to 10ml.

Safety

- Products must be child-resistant and tamper evident.

Health warnings

- The pack must carry a health warning covering 30% of the surfaces of the unit packet and any outside packaging stating *'This product contains nicotine which is a highly addictive substance.'*

The Medicines and Healthcare products Regulatory Agency (MHRA) is the competent authority for the notification scheme for e-cigarettes and refill containers in the UK.²⁸ Consumers and healthcare professionals can report side effects and safety concerns with e-cigarettes or refill containers to the MHRA through the Yellow Card reporting system.²⁹ They can also report products suspected to be defective or non-compliant to their local Trading Standards service or to TPDsafety@mhra.gov.uk.

The Yellow Card Scheme was put in place for e-cigarettes on 20 May 2016. Between then and January 2022, MHRA received 257 Yellow Card adverse reaction reports covering 720 adverse reactions.³⁰ The MHRA assesses all reports received in associated with nicotine-containing e-cigarettes and should any potential safety concerns be identified regulatory action would be taken and communicated as appropriate. The MHRA also receives reports of potential safety concerns and works with local Trading Standards teams to investigate as needed.

ASH asks e-cigarette users questions about the type of product they use to inform our understanding of the impact of the current regulations and how the market for e-cigarettes is evolving.

Appendix 3

Vaping and smoking questions and definitions

This is the question that adults were asked about their vaping status.

The following question relates to vapes. These products are sometimes called e-cigarettes. Which of the following statements BEST applies to you?

- 1) I have never heard of vapes (e-cigarettes) and have never tried them
- 2) I have heard of vapes (e-cigarettes) but have never tried them
- 3) I have tried vapes (e-cigarettes) but do not use them (anymore)
- 4) I have tried vapes (e-cigarettes) and still use them
- 5) Don't know

"Current vapers" are defined as those answering 4)

"Ex-vapers" are defined as those answering 3)

"Never vapers" are defined as those answering 1) or 2)

Before 2024, the question was phrased as "E-cigarettes are also sometimes called vapes or vaping devices. Which of the following statements BEST applies to you?". Before 2024 answers had the words "vapes" and "e-cigarettes" in swapped positions.

This is the question that adults were asked about their smoking status.

Smoking in this survey refers to all burnt tobacco products. It does NOT include vapes (e-cigarettes). Which of the following statements BEST applies to you?

- 1) I have never smoked
- 2) I used to smoke but I have given up now
- 3) I smoke but I don't smoke every day
- 4) I smoke every day

"Current smokers" are defined as those answering 3) or 4)

"Ex-smokers" are defined as those answering 2)

"Never smokers" are defined as those answering 1)

Before 2024 the question had the words "vapes" and "e-cigarettes" in swapped positions.

References

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- Prof Leonie Brose, IoPPN, King's College London
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- ²³ Jackson S, Beard E, Angus C, Field M & Brown J [Moderators of changes in smoking, drinking and quitting behaviour associated with the first COVID-19 lockdown in England](#), *Addiction*, August 2021.
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- ²⁶ [Tobacco and Related Products Regulations 2016](#)
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- ²⁸ [Medicines and Healthcare products regulatory agency guidance](#), February 2016.
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