

# Use of e-cigarettes among young people in Great Britain

August 2018

## KEY FINDINGS IN THE 2018 ASH SMOKEFREE GB YOUTH SURVEY

- Use of e-cigarettes remains very low among young people (11-18 year olds) in Great Britain; just 2% use e-cigarettes at least weekly, another 2% use them once a month or less and 12% of youths have tried them just once or twice. A majority haven't tried e-cigarettes (76%) while 7% are unaware of e-cigarettes altogether.
- E-cigarette use is confined almost entirely to those who currently or have previously smoked tobacco cigarettes. Of those who have never tried or used tobacco cigarettes, 87% haven't tried e-cigarettes, 7% are unaware of e-cigarettes, 5% have tried them just once or twice and less than 1% use them with any regularity. These low levels have been found consistently across all waves of the youth survey.
- Use or experimentation with e-cigarettes increases with age; 3% of 11 year olds said they've tried an e-cigarette once or twice and this rises to 23% of 18 year olds. At least weekly use is 0% for 11 year olds increasing to 3% of 18 year olds.
- A growing proportion of young people incorrectly believe that e-cigarettes are as harmful as tobacco cigarettes. In 2013, 11% of respondents said e-cigarettes had 'about the same' level of harm as tobacco cigarettes and this has increased to 28% in 2018

## INTRODUCTION TO THE ASH SMOKEFREE GB YOUTH SURVEY

This factsheet focuses on the results of the 2018 ASH Smokefree GB Youth Survey. This is an online survey which is conducted annually by YouGov and is commissioned by Action on Smoking and Health (ASH), it has been running since 2013. The survey focuses on young people in Great Britain aged between 11 and 18. It includes questions on both tobacco and electronic cigarettes. This year's survey was carried out in February/March 2018 and relevant comparisons with previous years<sup>12345</sup> are presented here.

The results of the latest ASH Smokefree GB Youth Survey are also compared with other studies which have looked at youth use of e-cigarettes.

## HEALTH EFFECTS OF VAPING

Using e-cigarettes (or 'vaping') is considerably less harmful than smoking tobacco cigarettes. This is because the danger from smoking primarily comes from the inhalation of, and exposure to, tobacco smoke. The smoke from tobacco cigarettes contains a huge number of toxicants which can be incredibly damaging to the health of users.

E-cigarettes, in contrast, do not burn tobacco or produce smoke. Instead, they heat a solution typically containing nicotine, propylene glycol and/or vegetable glycerine and flavourings. They deliver nicotine to the user in vapour.

The current best estimate is that e-cigarettes are at least 95% less harmful to your health than tobacco cigarettes, a figure which has been endorsed by Public Health England<sup>6</sup> and the Royal College of Physicians<sup>7</sup>.

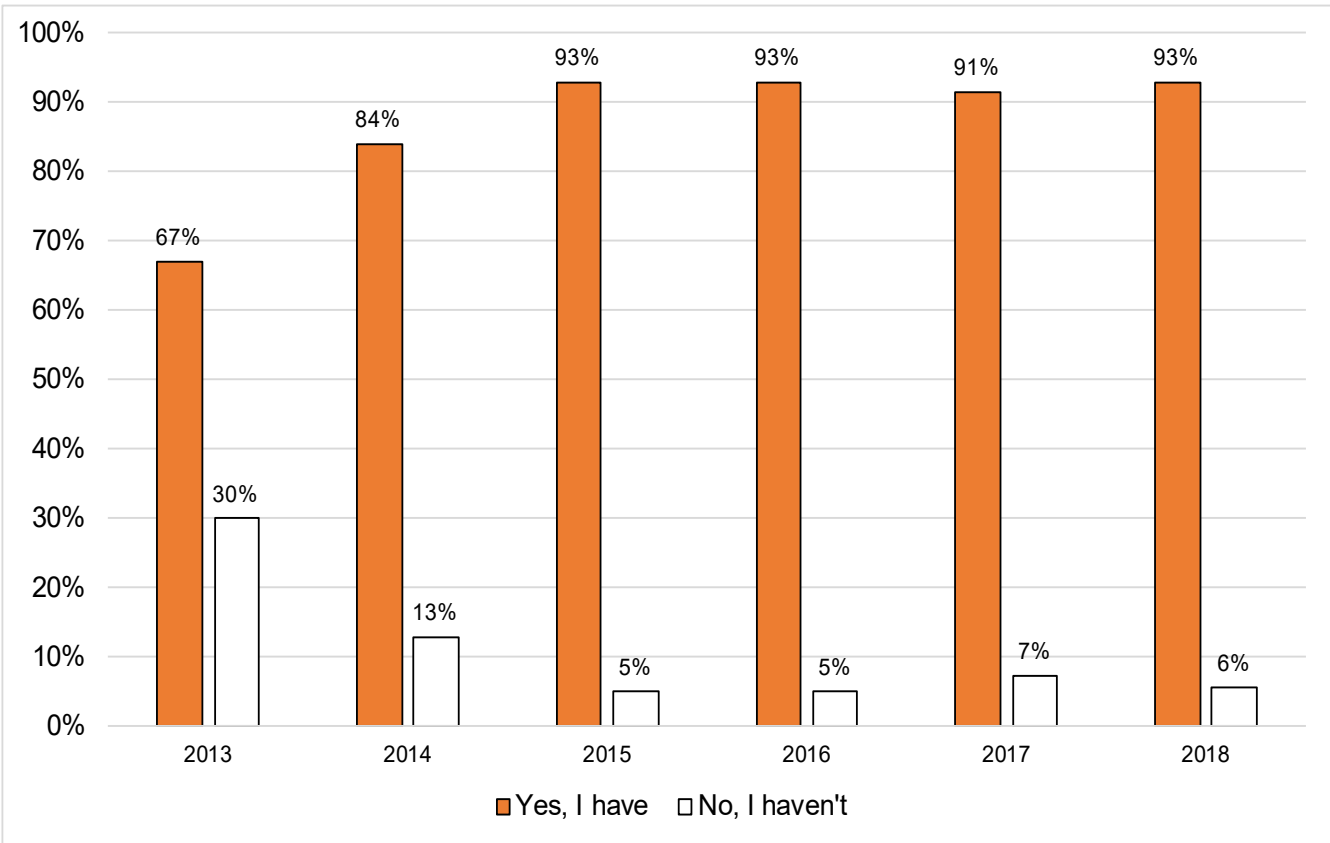
The EU Tobacco Products Directive<sup>8</sup> regulates e-cigarette products in member states. Regulations on products include a limit on nicotine strength of e-liquids to 20mg/ml. Marketing of products is also restricted with all 'cross-boarder' advertising prohibited. In the UK sale to under 18s is also prohibited.

## AWARENESS OF E-CIGARETTES IS HIGH BUT REGULAR USE REMAINS VERY LOW

Awareness of e-cigarettes amongst young people has increased since 2013; whilst in 2013 just 67% of 11-18 year olds said they had heard of e-cigarettes, this number had risen to 93% by 2015 and has remained fairly stable since (figure 1).

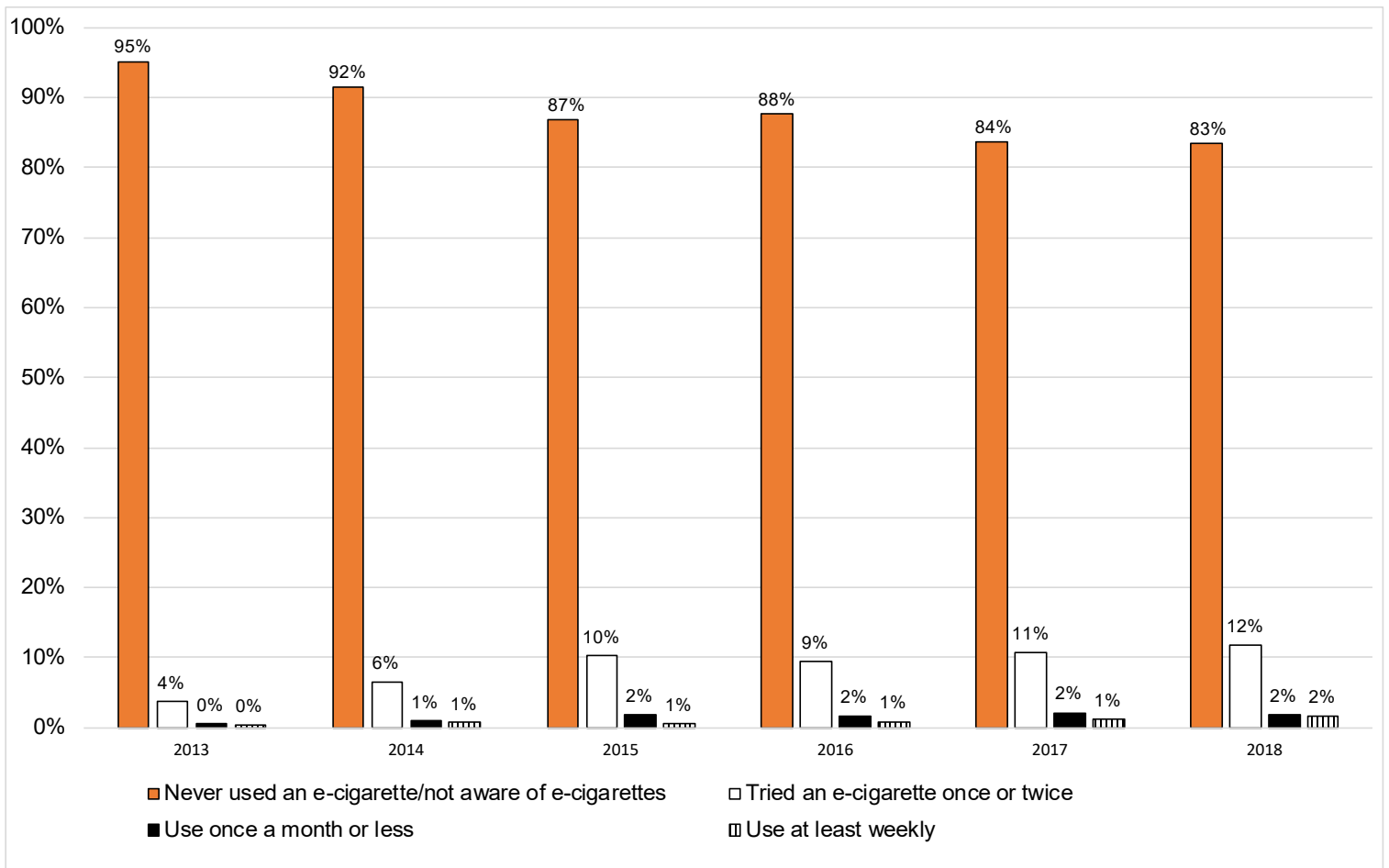
Use of e-cigarettes continues to be rare and is confined largely to youths who currently or have previously smoked. In 2018 2% of respondents said they use e-cigarettes at least weekly while 2% said they use them once a month or less (figure 2).

Since the first ASH Smokefree GB Youth Survey, there has been a gradual increase in youth experimentation with e-cigarettes. The percentage of respondents in 2018 who have tried an e-cigarette 'once or twice' was 12%, an increase from 4% in 2013 (figure 2).



**Figure 1:** Proportion of GB youth who have heard of e-cigarettes, 2013-2018

ASH Smokefree GB Youth Survey(s). Unweighted base: All 11-18 year olds (2013 = 2,178, 2014 = 2,068, 2015 = 2,291, 2016 = 2,331, 2017 = 2,623, 2018 = 2,291). Percentages have been rounded to the nearest whole number, excludes don't knows.



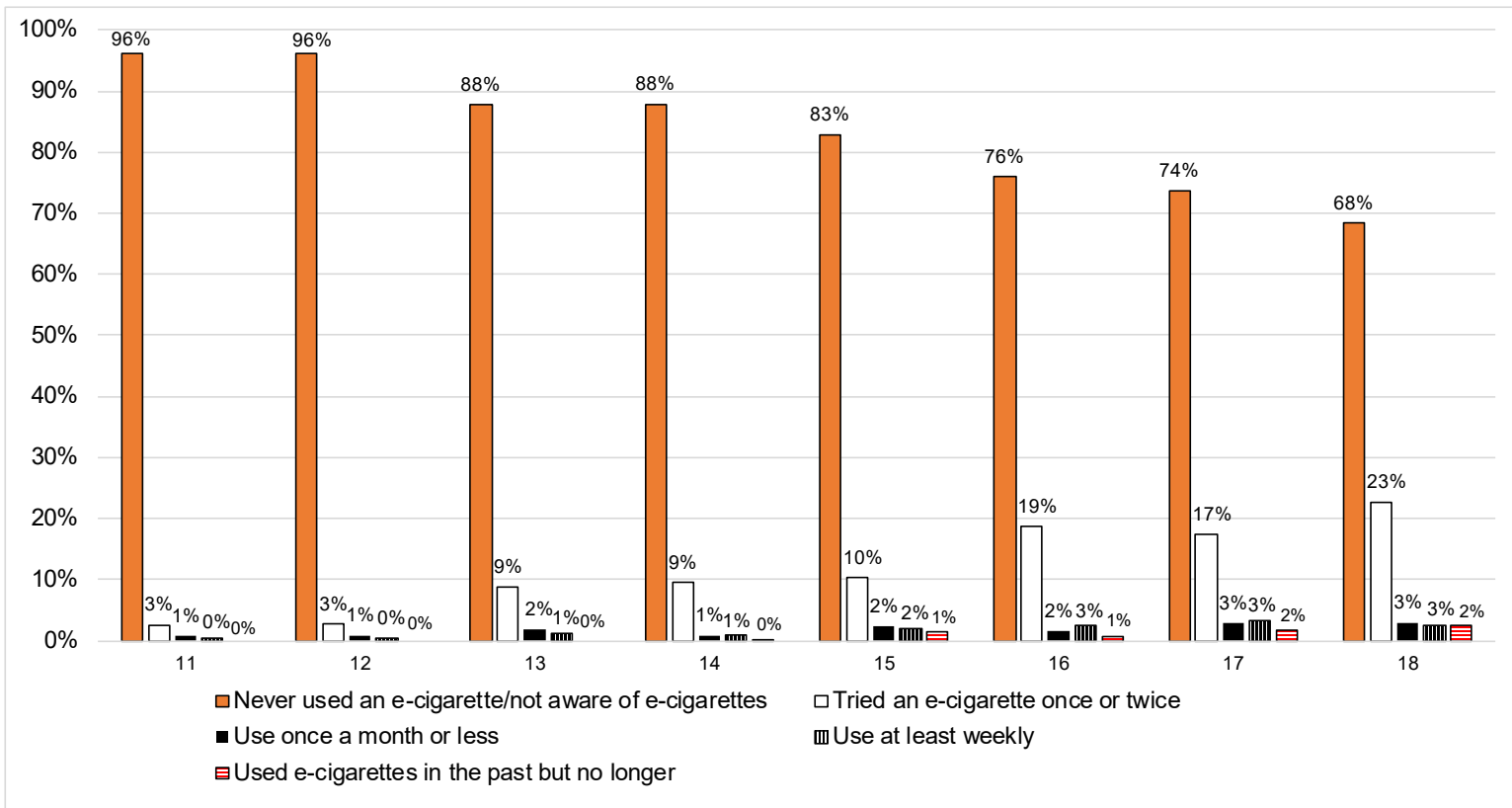
**Figure 2.** GB youth use of e-cigarettes among young people, 2013-2018

ASH Smokefree GB Youth Survey(s). Unweighted base: All 11-18 year olds (2013 = 2,178, 2014 = 2,068, 2015 = 2,291, 2016 = 2,331, 2017 = 2,623, 2018 = 2,291). Percentages have been rounded to the nearest whole number.

## BEING OLDER OR HAVING SMOKED INCREASES LIKLIHOOD OF TRYING AN E-CIGARETTE

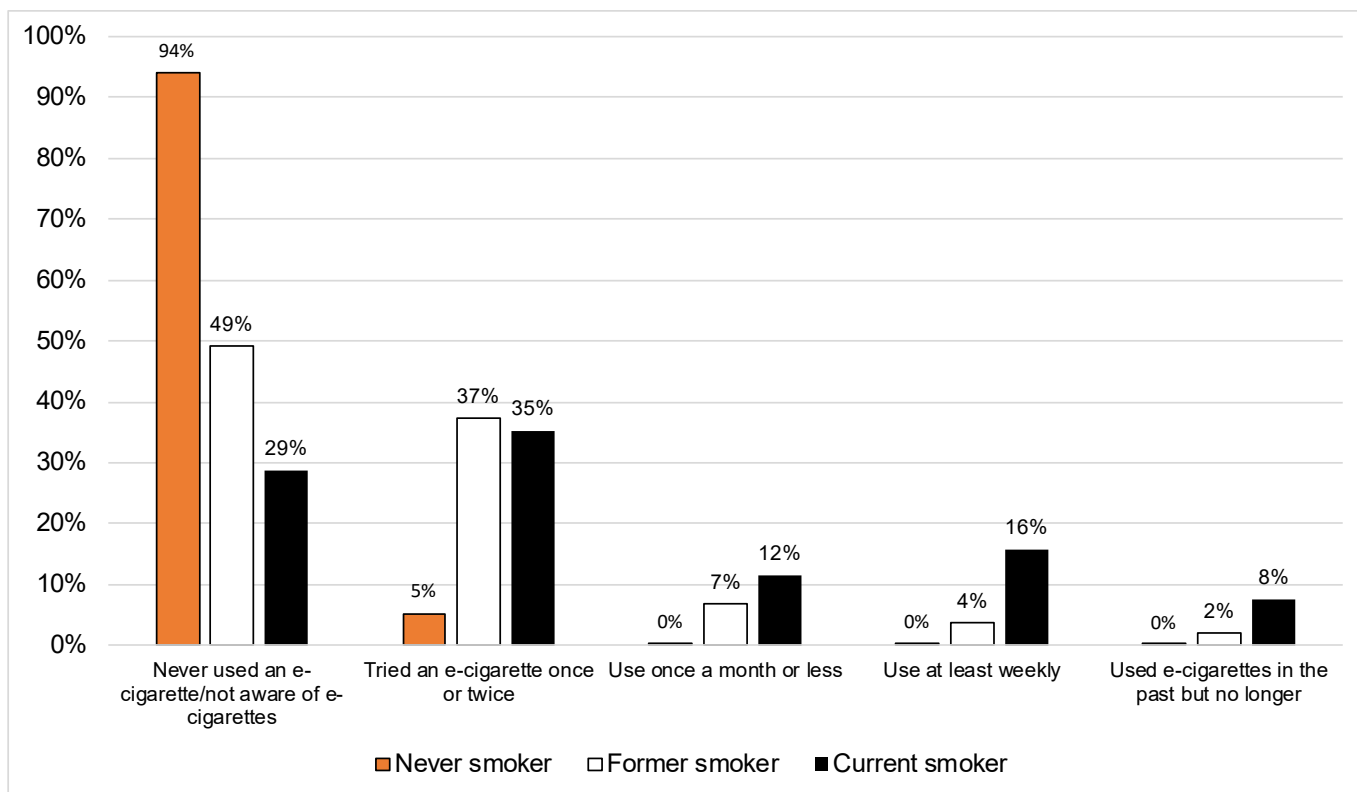
The prevalence of regular use and experimentation increases with age (figure 3). Only 3% of 11 year olds have tried e-cigarettes once or twice, increasing to 23% of 18 year olds. At least weekly use is 0% for 11 year olds increasing to 3% of 18 year olds.

Of 'never tobacco smokers', 87% have never used an e-cigarette, 7% are not aware of them, 5% have tried them just once or twice, 0% use them once a month or less and 0% use them at least weekly (figure 4). Current tobacco smokers are much more likely to be 'at least weekly' users of e-cigarettes (16%) than former tobacco smokers (4%).



**Figure 3. Use of e-cigarettes by age, GB youth (11-18), 2018**

ASH Smokefree GB Youth Survey, 2018. Unweighted bases: All 11-18 year olds (11 = 189, 12 = 242, 13 = 270, 14 = 322, 15 = 265, 16 = 182, 17 = 337, 18 = 484). Percentages have been rounded to the nearest whole number.



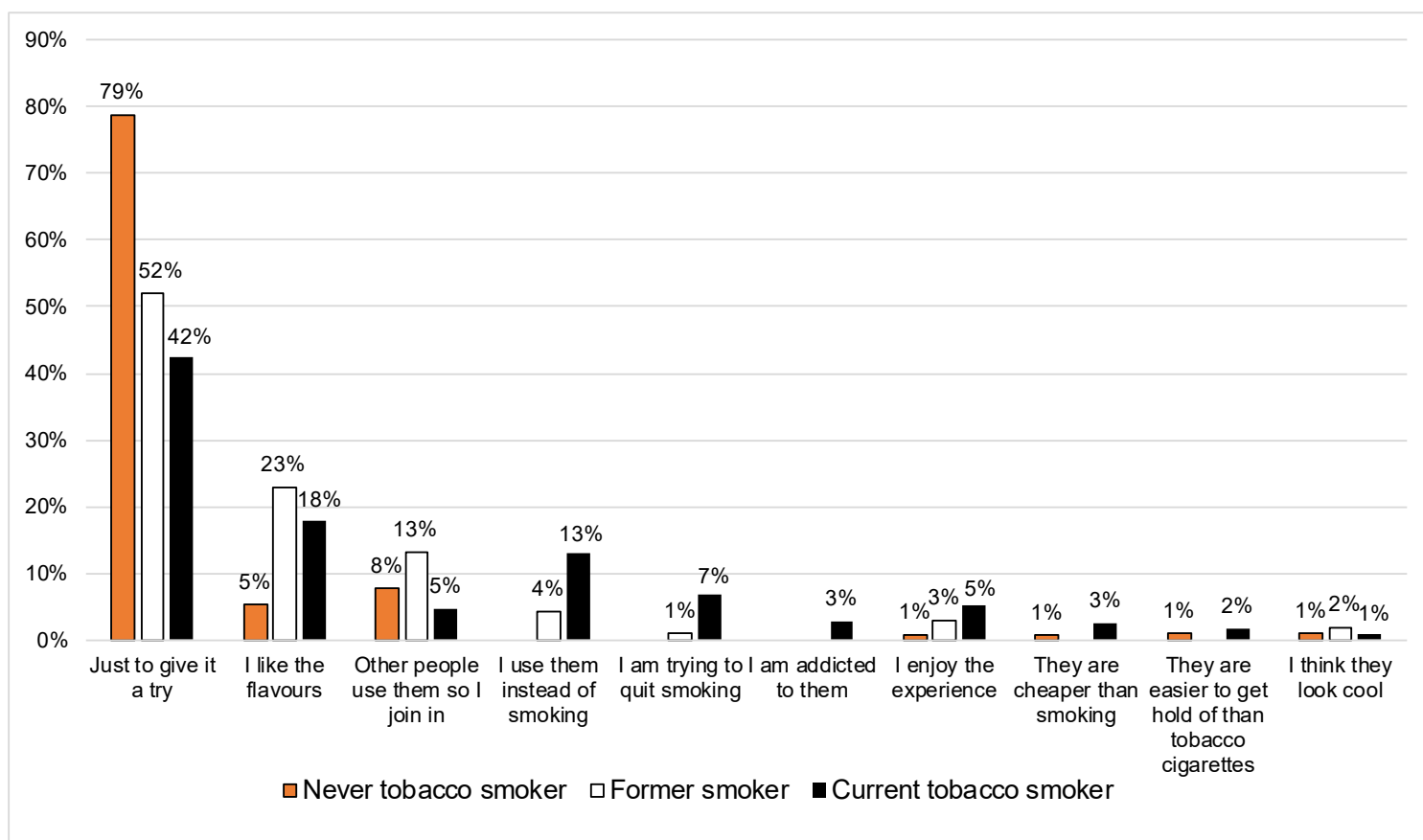
**Figure 4. Use of e-cigarettes by tobacco smoking status, GB youth (11-18), 2018**

ASH Smokefree GB Youth Survey, 2018 (Unweighted bases: Never smokers = 1,739, former smokers = 359, current smokers = 162). Percentages have been rounded to the nearest whole number.

## YOUTHS EXPERIMENT WITH, AND USE, E-CIGARETTES FOR A VARIETY OF REASONS

Those that had ever used an e-cigarette (including current, ex-users and those who had tried at least once or twice) were asked why they use or used an e-cigarette. The most common reason picked was 'Just to give it a try'; 79% of never smokers, 52% of former smokers and 42% of current smokers chose this response (figure 5). The next most common answer on average was: 'I like the flavours', which was selected by 5% of never smokers, 23% of former smokers and 18% of current smokers.

Amongst these three groups the least common responses were 'I think they look cool', 'They are easier to get hold of than tobacco cigarettes' and 'They are cheaper than smoking'.



**Figure 5.** Reasons for e-cigarette use, GB youth (11-18), 2018

ASH Smokefree GB Youth Survey, 2018. Respondents that have tried e-cigarettes (Unweighted bases: Never smokers = 105, former smokers = 179, current smokers = 112). Percentages have been rounded to the nearest whole number.

## AN INCREASING NUMBER OF GB YOUTHS ARE TRYING E-CIGARETTES BUT NOT TOBACCO CIGARETTES

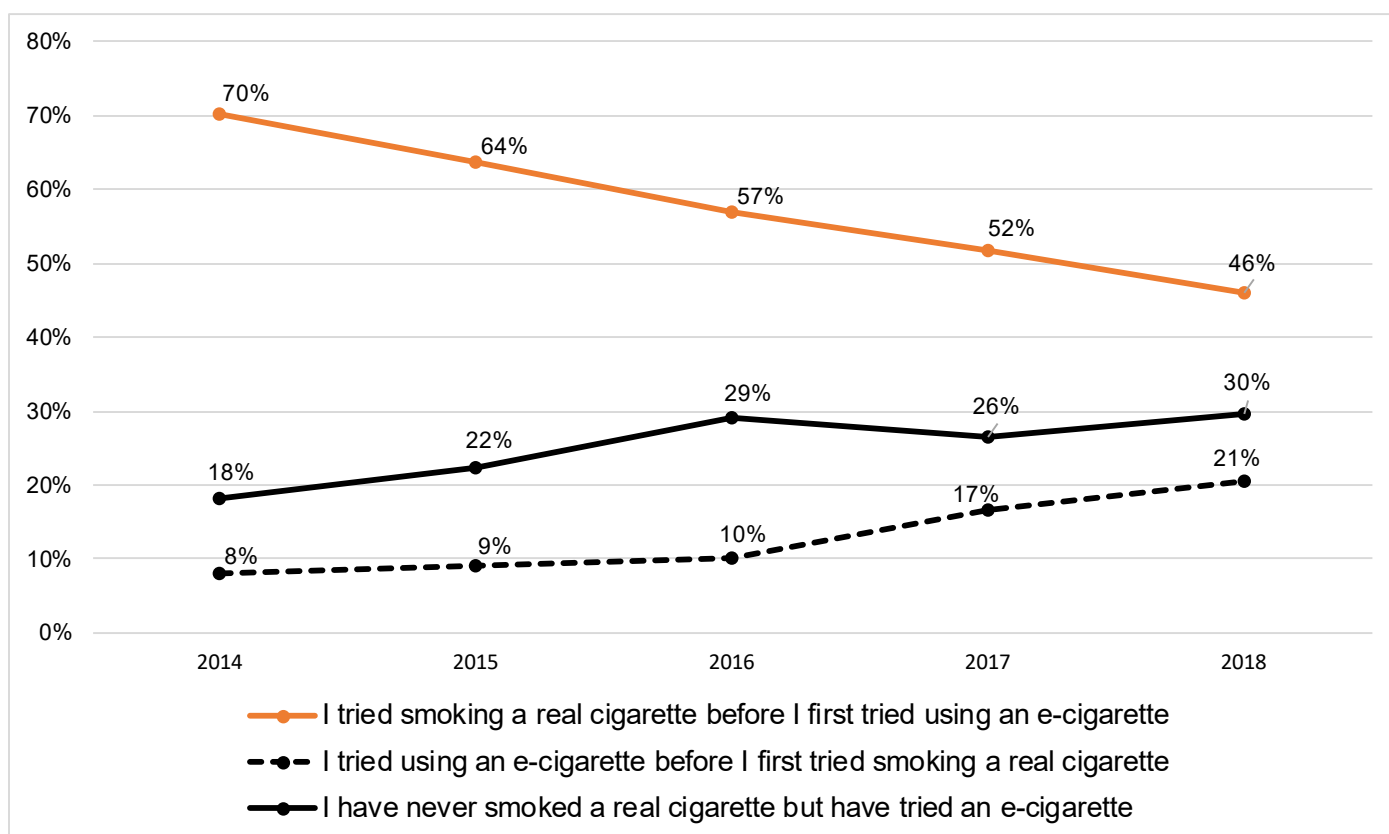
As can be seen in figure 6, there is an ongoing shift in the order of use between tobacco cigarettes and e-cigarettes. In 2014, 70% who had tried e-cigarettes had tried a tobacco cigarette beforehand, while just 8% had tried an e-cigarette before a tobacco cigarette. These proportions have been converging and are now at 46% and 21%, respectively.

Interpreting the data in figure 6 is complicated by the fact that across the same period, the proportion of young people who have tried smoking or who smoke has fallen (in the 2013 ASH GB smokefree Youth Survey 22% had tried tobacco smoking at least once and 8% were current smokers whereas in the 2018 survey 20% had tried smoking and 6% are current smokers).

These findings are reflected in other surveys; the NHS Smoking, drinking and drug use among young people survey<sup>9</sup> shows that tobacco smoking is on a downwards trajectory. Additionally, the latest ONS adult smoking data<sup>10</sup> shows that between 2011-2017 the largest decline in smoking prevalence by age group was among those aged 18-24 (25.7% to 17.8%). This means that despite more young people experimenting with e-cigarettes, and an increasing number using e-cigarettes before tobacco cigarettes, overall tobacco use continues to fall steadily.

In 2017 an ASH and King's College London study<sup>11</sup> attempted to track the smoking behaviour of young people over time to better understand the relationship between smoking and vaping. There were only a small number of young people who vaped before they smoked in the study and further research is needed. However, the analysis found that young people who try e-cigarettes first were as likely to try smoking as those who smoked first were to try vaping. This does not support the hypothesis that e-cigarettes are a 'gateway' to smoking. Rather, it seems more credible that there are common reasons which cause young people to try either e-cigarettes or smoking; this is sometimes called the 'common liability' hypothesis.

Continued surveillance is needed of young peoples' relationship to tobacco and e-cigarettes.

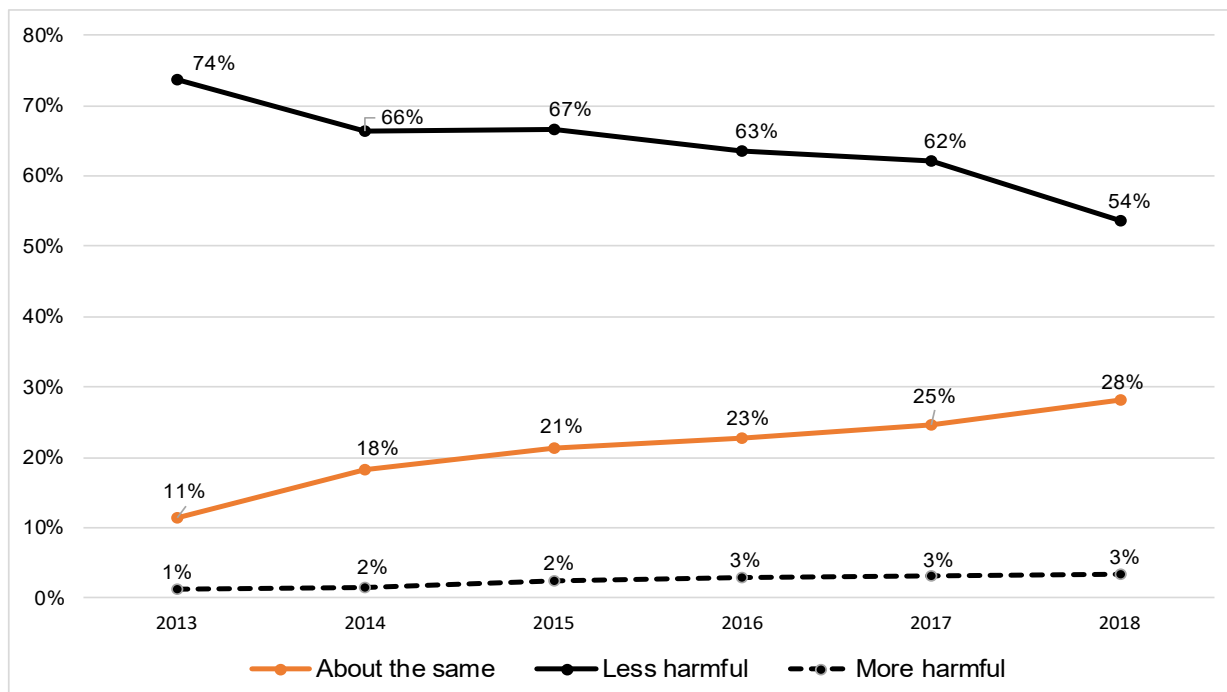


**Figure 6.** Order of use between tobacco cigarettes and e-cigarettes, GB youth (11-18), 2018

ASH Smokefree GB Youth Surveys, 2014-2018 Respondents who said they have tried an e-cigarette (Unweighted bases: 2014 = 157, 2015 = 301, 2016 = 318, 2017 = 425, 2018 = 402). Percentages have been rounded to the nearest whole number.

## AN INCREASING PROPORTION OF YOUNG PEOPLE INCORRECTLY BELIEVE THAT E-CIGARETTES ARE AS HARMFUL AS TOBACCO CIGARETTES

Since 2013 there has been a gradual fall in the number of young people who correctly identify vaping as being relatively less harmful than tobacco smoking (as discussed earlier, it is currently thought that e-cigarettes are at least 95% less harmful than cigarettes<sup>6,7</sup>). In 2013, 74% of young people correctly said that e-cigarettes are less harmful than smoking but this has fallen to 54% in 2018 (figure 7). The proportion of young people incorrectly saying that e-cigarettes have 'about the same' level of harm as tobacco cigarettes has crept up over the last few years, from 11% in 2013 to 28% in 2018.



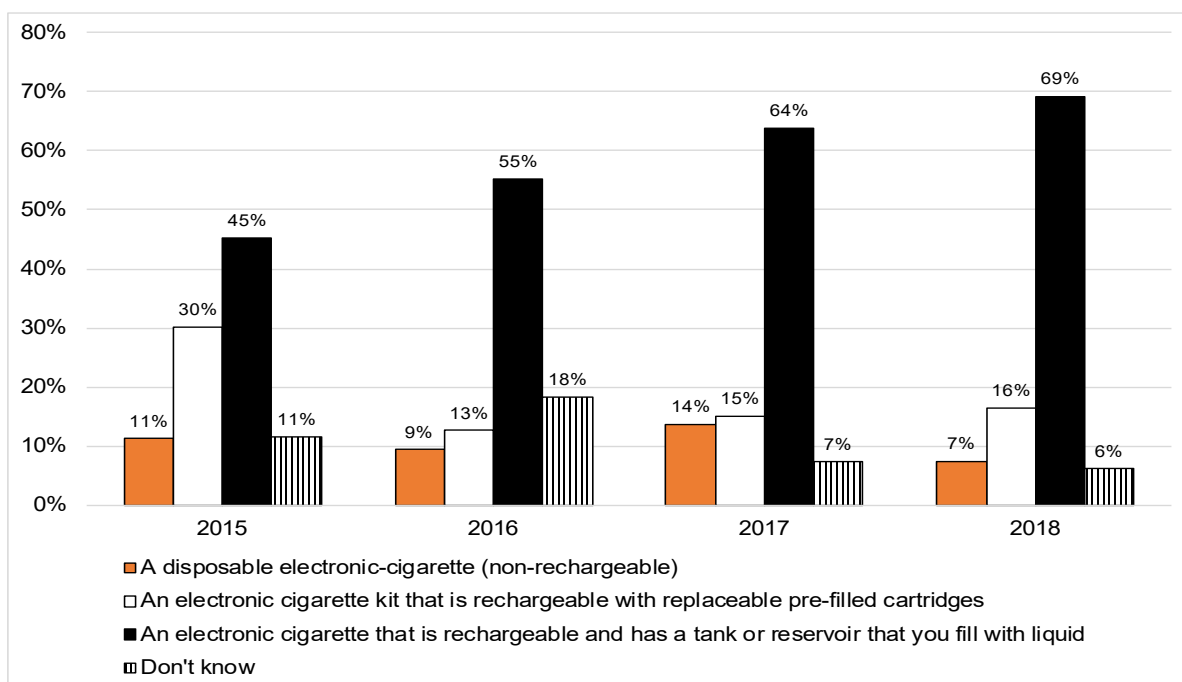
**Figure 7:** Perceptions of harm of e-cigarettes compared to smoking, GB youth (11-18), 2018

ASH Smokefree GB Youth Survey(s). Unweighted base: All 11-18 year olds aware of e-cigarettes (2013 = 1,428, 2014 = 1,716, 2015 = 2,143, 2016 = 2,172, 2017 = 2,413, 2018 = 2,142) Percentages have been rounded up to the nearest whole number.

## THE MOST POPULAR TYPE OF E-CIGARETTE ARE RECHARGEABLE DEVICES WITH REFILLABLE TANKS

The most popular type of e-cigarette amongst GB youth who currently use e-cigarettes are rechargeable devices with a tank which you can fill with liquid (69%, figure 8). Since this question was first asked in 2015, the proportion of respondents selecting this option has increased each year.

In the previous 2017 ASH Smokefree GB Youth Survey, a question on the respondents' usual choice of e-cigarette flavourings was included and 'fruit flavour' was the top answer (45%). Tobacco flavours were favoured by 5%.



**Figure 8:** Use of e-cigarettes by device type, current GB youth (11-18) users of e-cigarettes, 2018

ASH Smokefree GB Youth Survey, 2018. Unweighted base: 11-18 year olds, respondents who are current users of e-cigarettes (2018 = 85, 2017 = 92, 2016 = 66, 2015 = 59) Percentages have been rounded up to the nearest whole number.

# HOW THE ASH SMOKEFREE GB YOUTH SURVEY COMPARES WITH OTHER RESEARCH

The results and trends described in the latest ASH Smokefree GB Youth Survey are broadly in line with other findings focusing on the GB youth population. A previous analysis<sup>12</sup> examined five large-scale GB surveys (including two previous ASH Smokefree GB Youth Surveys), which were all conducted in the period of 2015-17. In total, these surveys garnered responses from over 60,000 11-16 year-olds.

The findings of that analysis showed a consistent pattern: most e-cigarette experimentation among young people does not lead to regular use. Moreover, the rate of regular e-cigarette use in young people who have never smoked is very low. Regular (at least weekly) use of e-cigarettes amongst all young people surveyed was 3% or less. This was highly concentrated in those who also smoked tobacco. Among young people who smoke regularly (at least weekly), use of electronic cigarettes ranged from 7% to 38%. However, among young people who have never smoked, regular use of e-cigarettes was negligible – between 0.1% and 0.5% across the five surveys examined<sup>12</sup>.

The key findings from the surveys looked at can be found in table 1 (in addition to some data not examined in that analysis).

**Table 1.** E-cigarette use among young people

Source	Ever tried (at least once)	Regular users (using e-cigarette at least once a week)	Regular smokers who have tried e-cigarettes
ASH Smokefree GB Youth Survey (11-18 years) 2018	16.0%	2%	68%
Youth Tobacco Policy Survey (YTPS) <sup>12</sup> , United Kingdom 2016	17%	1%	77%
The smoking, drinking and drug use survey <sup>9</sup> (England, 11-15 year olds) 2016	23%	3%	93%
What about YOUth Survey <sup>13</sup> (England, 15 year olds) 2014	18%	1%	84%
Health Behaviour in School-aged Children <sup>14</sup> , (Wales, 11-16 years) 2014	12.3%	2%	N/A (data not collected in this survey)
Schools Health Research Network (SHRN) <sup>12</sup> , Wales, (11-16 years) 2015	18%	3%	92%
SALSUS Scotland survey <sup>15</sup> (15 and 13 year olds) 2015	23.5%	1.5%	91%

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