

# The UK Electronic Cigarette Research Forum Briefing

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## Electronic Cigarette Research Briefing – May 2026

This research briefing is part of a series of quarterly updates aiming to provide an overview of new studies on electronic cigarettes (e-cigarettes). The briefings are intended for researchers, policy makers, health professionals and others who may not have time to keep up to date with new findings and would like to access a summary that goes beyond the study abstract. The text below provides a critical overview of each of the selected studies then puts the study findings in the context of the wider literature and research gaps.

The studies selected do not cover every e-cigarette-related study published each quarter. Instead, they include high profile studies most relevant to key themes identified by the UK Electronic Cigarette Research Forum, including efficacy and safety, smoking cessation, population level impact and marketing. For an explanation of the search strategy used, please see the end of this briefing.

**Let's talk e-cigarettes – University of Oxford podcasts** Jamie Hartmann-Boyce and Nicola Lindson discuss emerging evidence in e-cigarette research. In the latest episode, they interview Jonathan Livingstone-Banks, University of Oxford, UK. This podcast is a companion to the Cochrane living systematic reviews of e-cigarettes for smoking cessation and interventions for vaping cessation and shares the evidence from the monthly searches. Subscribe with [iTunes](#) or [Spotify](#) to listen to regular updates or find all episodes on the [University of Oxford Podcasts site](#). This podcast series is funded by Cancer Research UK (CRUK).

### **Cochrane Living Systematic Review of E-cigarettes for Smoking Cessation update**

The latest update to the CRUK-funded Cochrane Living Systematic Review of E-cigarettes for Smoking Cessation was published in November 2025 and includes 14 new studies. A further update is currently underway.

### **New Cochrane Living Systematic Review of Interventions for Quitting Vaping**

A new Cochrane Living Systematic Review of interventions for vaping cessation was published in November 2025. It includes 15 studies, with low certainty evidence of effectiveness of a text message-based intervention in young people and of varenicline; there wasn't enough evidence on other interventions to draw any conclusions. Searches for this review are now undertaken monthly, with the review updated any time new studies emerge that could change, strengthen or weaken the conclusions.

Visit the website (<https://www.cebm.ox.ac.uk/research/electronic-cigarettes-for-smoking-cessation-cochrane-living-systematic-review-1>) for full information on both living systematic reviews, including briefing documents, and new studies found since the latest versions.

You can find our previous research briefings at [www.cruk.org/UKECRF](http://www.cruk.org/UKECRF).

If you would prefer not to receive this briefing in future, just let us know.

## Commentary

This quarter's summary covers four papers using population-level data, and one paper using secondary analysis from a randomized controlled trial; all investigate important questions about vaping policy and/or use of vaping for quitting smoking.

**Jackson *et al.*** investigate changes in harm perceptions of e-cigarettes compared with cigarettes following the announcement in January 2024 of the disposable vape ban in Britain, which came into force in June 2025, using data from the Smoking Toolkit Study. Though concerns had been expressed that the ban of disposable vapes might exacerbate misperceptions that vaping was more harmful than smoking, particularly among people who smoke, there was no evidence that the policy announcement did so. However, these misperceptions persist – only one in five adults who smoked recognized that e-cigarettes are less harmful than cigarettes. The authors call for clear communication from public health bodies, the government, and the media, as well as further research on this topic now that the ban has been implemented.

Moving outside of Britain, **Hellmich *et al.*** report that e-cigarette use was reduced following an e-cigarette flavour ban in the Netherlands. Though 6% of all participants who had originally vaped reported started smoking due to the flavour ban, the authors report that overall prevalence of cigarette, cigarillo and waterpipe smoking declined post ban. This flags that such bans may have different impacts on different individuals – increasing smoking in some and decreasing smoking in others. The authors looked for differences by age group but found none.

Returning to Britain, **Brose *et al.*** and **Buss *et al.*** also use Smoking Toolkit Study data, this time to investigate questions related to the 'Swap to Stop' initiative in England, which provides free vapes and behavioural support for smoking cessation. **Brose *et al.*** found around a quarter of the target population had heard about the initiative; **Buss *et al.*** found that the introduction of the scheme was associated with a 1.5% absolute increase in the proportion of people in England using vapes to quit smoking. Had awareness of the scheme been higher, and misperceptions about vaping lower, one wonders if the percentage using vapes to quit would have been higher, too.

Finally, **Hajek *et al.*** present a secondary analysis of data from a large randomized controlled trial of e-cigarettes. In this analysis, the authors investigate relapse to smoking and continuing vaping at one year. Relapse rates were lower in people randomized to e-cigarettes, and among that group, were lower in those who continued vaping during the follow-up period, suggesting that substitution of smoking with vaping can continue to be effective in the longer term.

[\*\*Jackson \*et al.\* Changes in harm perceptions of e-cigarettes compared with cigarettes following the announcement of the disposable vape ban in Great Britain\*\*](#)

## Study aims

This study used data from the Smoking Toolkit Study to investigate monthly trends in harm perceptions of e-cigarettes among adults (16+) who smoked in Britain (n=16,489) between January 2022 and June 2025. Participants were asked whether e-cigarettes were more, less or equally harmful to health compared with smoking, or could respond that they were unsure. Trends were compared in particular before and after the announcement in January 2024 of the forthcoming ban on disposable

vapes, which came into force in June 2025. Data were stratified by vaping status into respondents who both smoked and vaped and those who exclusively smoked.

### Key findings

- Between January 2022 and January 2024, the proportion of respondents who agreed that vaping was less harmful than smoking was decreasing by 19.6% per year (RR 0.804, 95% CI 0.764–0.846) and the proportion who were unsure by 14.1% per year (RR 0.859, 95% CI 0.805–0.917).
- During the same period, the proportion of respondents who agreed that vaping was equally harmful compared to smoking was increasing by 7.8% per year (RR 1.078, 95% CI 1.033–1.124) and those who agreed that it was more harmful by 30% per year (RR 1.300, 95% CI 1.226–1.379).
- Following the announcement of the ban in January 2024, the decline in the proportion of respondents agreeing that vaping was less harmful than smoking (RR 0.922, 95% CI 0.806–1.055) and the increase in the proportion agreeing that it was more harmful (RR 1.073, 95% CI 0.939–1.227) slowed significantly in comparison to their pre-announcement trends but did not reverse.
- There was no significant change in the trend of the proportion responding that it was equally harmful or unsure.
- Stratified analyses found that the changes in trends were primarily driven by people who exclusively smoked and there were no significant changes in trends among those who both smoked and vaped.

### Limitations

- The analyses were not preregistered and should be considered exploratory.
- As an observational study, it is unable to establish causality.
- The sample consisted only of adults who smoke and so the study does not reflect any trends in harm perceptions among people who exclusively vape or do neither.
- The data analysed are up to June 2025 and so do not capture any longer-term changes, particularly any changes following implementation rather than announcement of the ban on disposable devices.

Jackson SE, Brown J, Kimber C, East K, MRes EB, Cox S. Changes in harm perceptions of e-cigarettes compared with cigarettes following the announcement of the disposable vape ban in Great Britain. *Nicotine Tob Res.* 2026 Feb 12;ntag030. doi: 10.1093/ntr/ntag030. Epub ahead of print. PMID: 41674155.

## [Hellmich \*et al.\* Reduced vaping and smoking prevalence among people using e-cigarettes after implementation of an e-cigarette flavour ban in the Netherlands](#)

### **Study aims**

This cross-sectional survey compared vaping and other nicotine use behaviour in the Netherlands before and after the implementation on 1 January 2023 of a restriction of e-cigarette flavours to tobacco and unflavoured only. Products with other flavours were permitted to be sold until 1 January 2024. Adolescents and young adults ('AYA') aged 13-24 (n=548) and adults aged 25+ (n=457) who vaped at least monthly throughout 2023 were asked in September 2024 about their vaping and use of other nicotine products before the flavour ban and currently (multiple answers were possible). Participants reported their nicotine use behaviour before the ban retrospectively and current product use at the time of the survey. They also reported changes in their product use behaviour that they specifically attributed to the ban, including using a previously-used alternative product more often and initiation of other products.

### **Key findings**

- Prevalence of e-cigarette use declined significantly (-51.5, 95% CI -48.2 to -54.7, p<0.001), with little difference between the AYA (-53.6, 95% CI -49.2 to -57.8, p<0.001) and adult (-49.0, -44.0 to -53.7, p<0.001) age groups.
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- Prevalence of use of banned flavours decreased significantly in the whole sample (-44.1, 95% CI -40.8 to -47.2, p<0.001) with little difference between the AYA (-45.5, 95% CI -40.9 to -49.6, p<0.001) and adults (-42.4, 95% CI -37.4 to -47.0, p<0.001).
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- Overall prevalence of use of cigarettes (-7.7, 95% CI -4.3 to -11.0, p<0.001), cigars/cigarillos (-2.5, 95% CI -0.4 to -4.6, p=0.036) and waterpipes (-4.9, 95% CI -2.7 to -7.1, p>0.001)) declined, outweighing the proportion who reported initiating alternative product use due to the ban.
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- 9.1 ± 0.9% of respondents attributed initiation of other tobacco (combustible and non-combustible) and nicotine products, mostly cigarettes (5.5 ± 0.7%), to the flavour ban.
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- 10.8 ± 1.0% of respondents reported increasing their use of nicotine or tobacco products they had already used prior to the ban, mostly cigarettes (10% ± 0.9%), and attributed this to the flavour ban.
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### **Limitations**

- The study was carried out in the Netherlands, so findings may not generalise to the UK population.
- Respondents were asked retrospectively about their product use behaviours before the ban, introducing potential recall bias.
- All participants were already vaping regularly before the ban, so the study is unable to investigate any changes in vaping initiation.

- Participants were not asked about their reasons for vaping, so the study is unable to investigate any differences between, for example, those vaping for smoking cessation or those who had never smoked.
- The survey was carried out within two years of the introduction of the ban and within one year of the last date when the banned flavours could be sold, so it does not reflect any longer-term changes.

Hellmich IM, Havermans A, Pauwels CGGM, *et al.* Reduced vaping and smoking prevalence among people using e-cigarettes after implementation of an e-cigarette flavour ban in the Netherlands. *Tobacco Control* Published Online First: 01 April 2026. doi: 10.1136/tc-2025-059567

[Brose \*et al.\* Awareness of a national initiative to provide free vapes for smoking cessation \(Swap to Stop\): A survey of adults in England](#)

**Study aims**

This study used data from the Smoking Toolkit Study between January 2024 and December 2025 to investigate awareness of the ‘Swap to Stop’ programme in England, which provides free vapes and behavioural support for smoking cessation. Respondents aged 16+ who had smoked in the past year (n=6,950) reported whether they were aware of the programme and any past-year smoking cessation attempts. Associations were investigated between sociodemographic, smoking and vaping characteristics and awareness. Associations were also investigated between awareness and having made a past-year smoking cessation attempt and, if so, any support used in the most recent attempt.

**Key findings**

- 24.1% (95% CI: 23.0–25.2) of respondents had heard of the scheme, 74.4% (95% CI 73.2-75.5) had not and 1.5% (95% CI 1.3-1.9) were unsure.
- The 45-54 age group were less likely than the 16-24 age group to be aware of the scheme (aOR 0.78, 95% CI 0.64 – 0.97), p= 0.02.
- Participants from Asian, Black and Mixed/Other ethnic groups were less likely than those from white ethnic groups to be aware of the scheme (aOR 0.82, 95% CI 0.70-0.96, p=0.01).
- Participants reporting slight (aOR 1.22, 95% CI 1.02 - 1.46, p=0.03) and moderate (aOR 1.27, 95% CI 1.08 - 1.50, p=0.004) urges to smoke were significantly more likely to be aware than those reporting no urges to smoke.
- There was no significant association between awareness of ‘Swap to Stop’ and having made a past-year smoking cessation attempt, but there was a significant association with using vapes during the most recent quit attempt (aOR 1.40, 95% CI 1.09-1.80, p=0.01).

**Limitations**

- The study investigated awareness of the scheme but not quit rates or success rates of quit attempts.
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- Self-reported data may be affected by participants' interpretation of the question or recall or other response biases.
- Responses on awareness may be affected by social desirability and acquiescence bias.

Brose L, Buss V, Brown J, McNeill A, Simonavičius E. Awareness of a national initiative to provide free vapes for smoking cessation (Swap to Stop): A survey of adults in England. *Nicotine Tob Res.* 2026 Apr 9;ntag077. doi: 10.1093/ntr/ntag077. Epub ahead of print. PMID: 41967008.

[Buss et al. Associations between the national 'Swap to Stop' programme offering free vapes for smoking cessation and quit attempts in England: Results from a population-based survey](#)

### Study aims

This study used modelled data from the Smoking Toolkit Study from December 2021 to December 2024 to investigate any association between the introduction of the 'Swap to Stop' scheme in December 2023 and the prevalence of use of vapes in an attempt to stop smoking. 'Swap to Stop' involves offering free vaping starter kits and behavioural support to people in England who smoke. Adults (16+) in England (n=13,678), Wales and Scotland (n= 1,775) who had smoked in the past year (defined as those reporting current smoking) were asked whether they had made a quit attempt in the past year and, if so, what cessation method(s) they used in their most recent attempt. The outcome measured was the monthly prevalence of respondents reporting using vapes in their most recent quit attempt. In England, data were compared before and after the introduction of 'Swap to Stop.' Covariates adjusted for were age, gender and socio-economic status, with additional adjustment for tobacco-related tax increases. Data were also compared between respondents in England as the intervention group and those in Wales and Scotland, which did not introduce 'Swap to Stop,' as the control group.

### Key findings

- There was a significant step change increase in December 2023 of 1.5% ( $\beta = 0.015$ , 95% 0.005–0.025,  $p=0.004$ ) in proportion of people using a vape in a past-year quit attempt.
- Sensitivity analyses using a step change in April 2024 and using past-month rather than past-year quit attempts did not find significant effects.
- Wales and Scotland were found not to be suitable control populations, due to differences in demographic aspects and the pre-intervention trends differed from England's.

### Limitations

- The findings relate to data from England and so may not generalise to the wider UK population.
- The survey asked only about use of vapes in a quit attempt and so would not reflect any respondents who stopped without making a defined attempt to stop.
- The survey relies on self-reported data relating to the past year, which is subject to inaccurate recollection.

- Respondents were asked which cessation method(s) they had used in the most recent quit attempt, which would not capture any earlier quit attempts within the past year.

Buss VH, Beard E, Shahab L, Simonavičius E, Bauld L, Brown J, Brose L. Associations between the national 'Swap to Stop' programme offering free vapes for smoking cessation and quit attempts in England: Results from a population-based survey. *Addiction*. 2026 Mar 5. doi: 10.1111/add.70332. Epub ahead of print. PMID: 41785407.

### [Hajek et al. Continuing use of e-cigarettes after stopping smoking and relapse: Secondary analysis of a large randomised controlled trial](#)

#### **Study aims**

This secondary analysis used data from participants in a randomised controlled trial comparing e-cigarettes with NRT for smoking cessation. Participants (n=884) were randomised to receive their choice of a combination of NRT products or an e-cigarette starter kit. Rates of relapse were compared between participants randomised to the e-cigarette arm of the trial and those in the NRT arm and between participants abstaining from smoking who used e-cigarettes at least once a week and those who did not use e-cigarettes. The main outcome was relapse to smoking by 12 months, defined as seven-day point prevalence abstinence (self-reporting not smoking a puff in the previous seven days) at four weeks or 6 months but not at 12 months. Analyses were adjusted for age, sex, Fagerström Test for Cigarette Dependence and study site.

#### **Key findings**

- Participants who were abstinent at four weeks were significantly less likely to relapse in the e-cigarette arm than those in the NRT arm (RR = 0.78, 95% CI 0.64–0.96).
- Participants who were abstinent at six months in the e-cigarette arm were significantly less likely to relapse than those in the NRT arm (RR = 0.71, 95% CI 0.55–0.93).
- Participants who were abstinent at four weeks and using e-cigarettes were significantly less likely to relapse at 12 months than those not using e-cigarettes (RR = 0.79, 95% CI 0.65–0.97).
- Participants who were abstinent at six months and using e-cigarettes were significantly less likely to relapse at 12 months than those not using e-cigarettes (RR = 0.75, 95% CI 0.57–0.98).

#### **Limitations**

- Abstinence was only biochemically verified at 12 months and self-reported at 4 weeks and 6 months.
- Follow-up was one year, so the study is unable to investigate any longer-term effects.
- The original trial was conducted in England between 2015 and 2018, so the findings may not generalise to the wider UK population or the current vaping landscape.

Hajek P, Przulj D, Myers Smith K, Li J, Sasieni P, Ross L, McRobbie H, Goniewicz M, Pesola F. Continuing use of e-cigarettes after stopping smoking and relapse: Secondary analysis of a large randomised

controlled trial. *Addiction*. 2026 Apr;121(4):994-997. doi: 10.1111/add.70294. Epub 2026 Jan 21. PMID: 41560608; PMCID: PMC12980290.

### **Search strategy**

The PubMed database is searched in the middle of every third month, for the previous three months using the following search terms: e-cigarette\*[title/abstract] OR electronic cigarette\*[title/abstract] OR e-cig[title/abstract] OR (nicotine AND (vaporizer OR vapourizer OR vaporiser OR vapouriser OR vaping)).

Based on the titles and abstracts new studies on e-cigarettes that may be relevant to health, the UK and the UKECRF, key questions are identified. The findings of the included studies and the views expressed are those of the authors and do not necessarily reflect those of Cancer Research UK. Only peer-reviewed primary studies and systematic reviews are included – commentaries are not included. Please note studies funded by the tobacco industry are also excluded.

*This briefing is produced by Julia Cotterill from Cancer Research UK with assistance from Associate Professor Jamie Hartmann-Boyce at the University of Massachusetts Amherst, primarily for the benefit of attendees of the CRUK UK E-Cigarette Research Forum. If you wish to circulate to external parties, do not make any alterations to the contents and provide a full acknowledgement. Kindly note Cancer Research UK cannot be responsible for the contents once externally circulated.*