

# Vaping & the vulnerable

**Ann McNeill**

International scientific conference on e-cigarettes, Paris December 2022

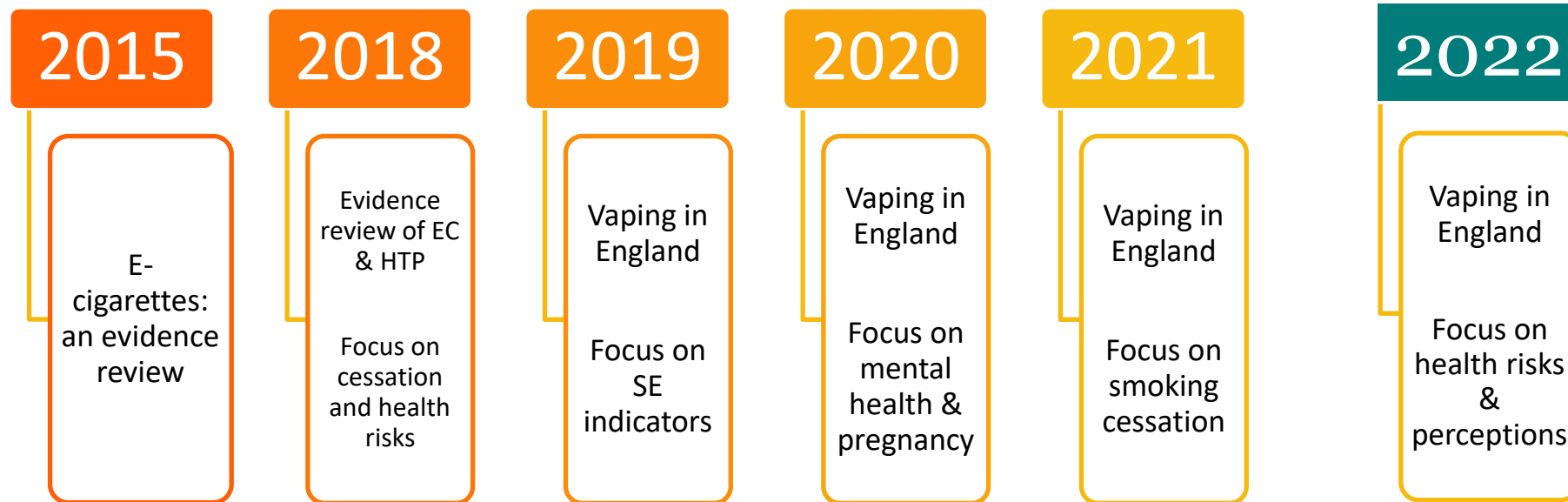
# No competing interests

- No funding from pharmaceutical, e-cigarette or tobacco industries
- My funding is from governmental & non-governmental sectors

# Overview

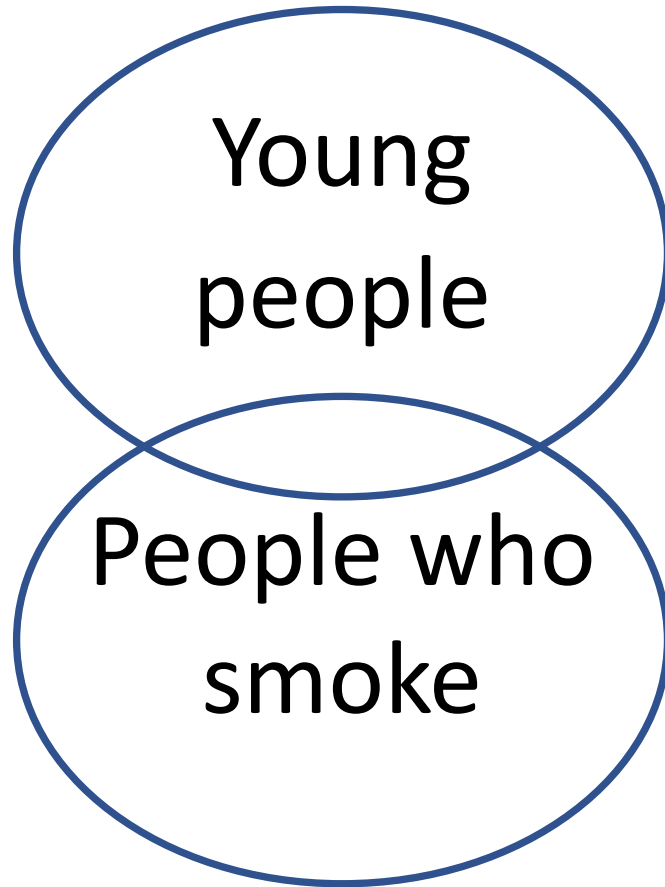
- Context: e-cigarette evidence reviews in England
- Who are the vulnerable?
- Smoking, vaping & quitting behaviours in context of vulnerability
- How do we ensure smokefree targets include the most vulnerable?

# 6 commissioned e-cigarette evidence reviews carried out by Nicotine Research Group at King's



English government's commitment to regularly review the evidence on e-cigarettes

# Vulnerable? ..state of being exposed to the potential of being harmed



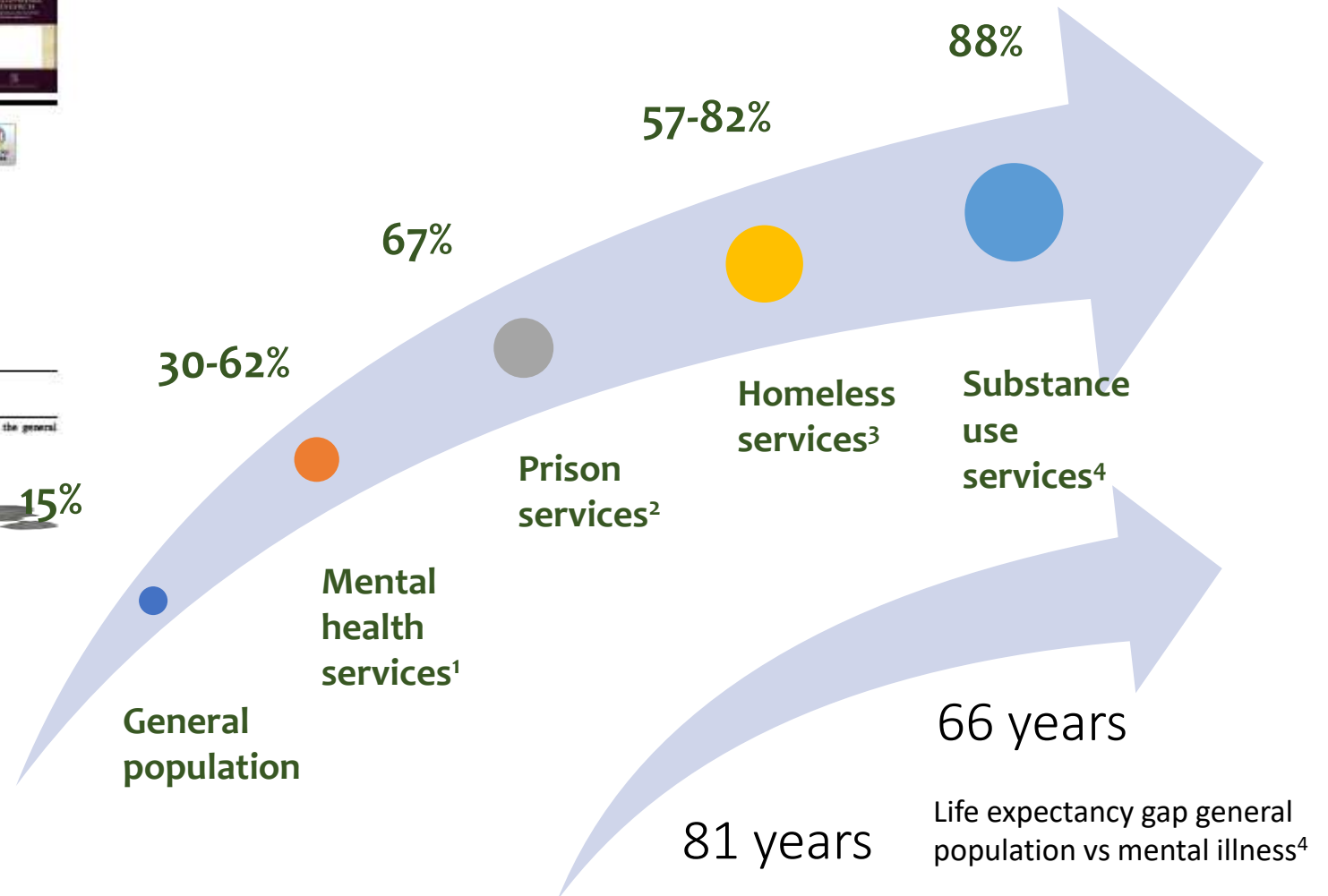
*“any marker of **disadvantage** that can be envisaged & measured, whether personal, material or cultural, is likely to have an independent association with cigarette smoking”*



Professor Martin Jarvis, OBE, 1999



# Smoking & the vulnerable



1. Wu CY, Chang CK, Robson, D et al. (2013) Plos One , 8 (9)
2. Smith, Eastwood, Robson (2021)
3. Soar, Dawkins, Robson, Cox . Journal of Smoking Cessation (2020), 1–15,
4. Cookson, Strang, Ratschen, Sutherland, Finch, McNeill (2018) BMC 14:304.

# Health inequities & social justice

*“Differences in health that are not only unnecessary & avoidable but, in addition, are considered unfair & unjust”*



Dame Professor  
Margaret  
Whitehead  
The concepts &  
principles of equity  
in health, 1992

**2015**



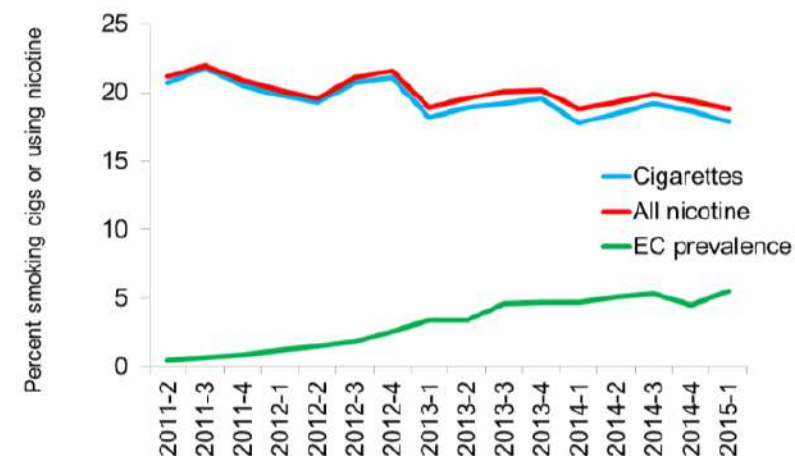
# 2015 report



109 pages

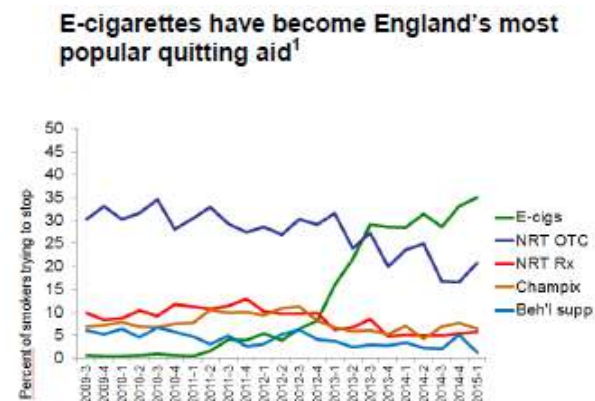
- E-cigarettes rapidly taken up without any persuasion
- Adults:
  - 5% using e-cigarettes, 0.2% never smokers
  - Smoking declining ~19%

The rise of e-cigarette use in England

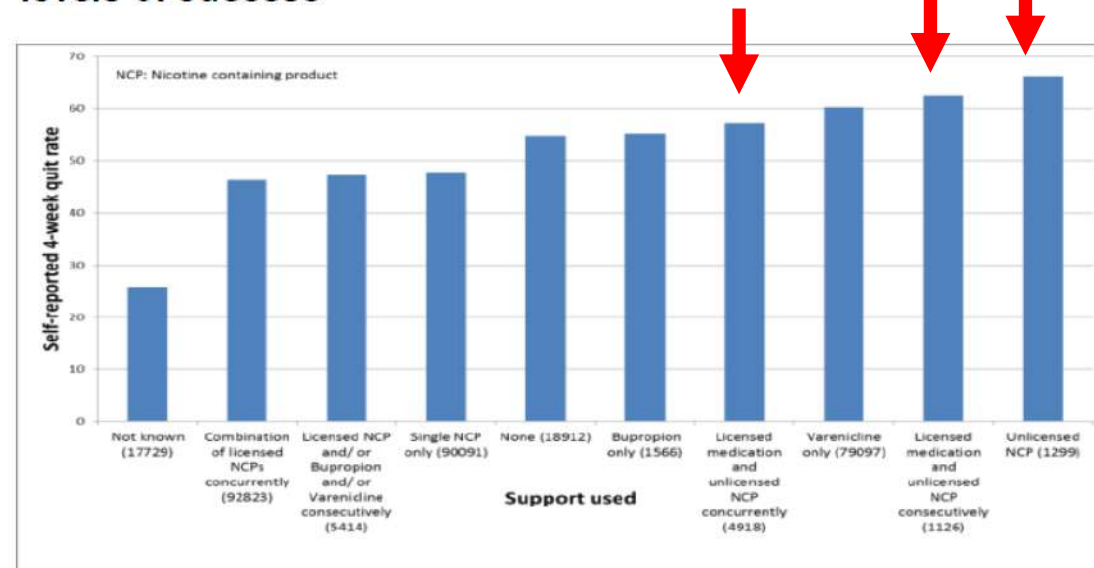


# 2015: Emerging evidence of e-cigarettes aiding quitting

- E-cigarettes the most popular quit support aid after no support
- High success rates in smokers attending Stop Smoking Services & using e-cigarettes
- Observational & RCT evidence

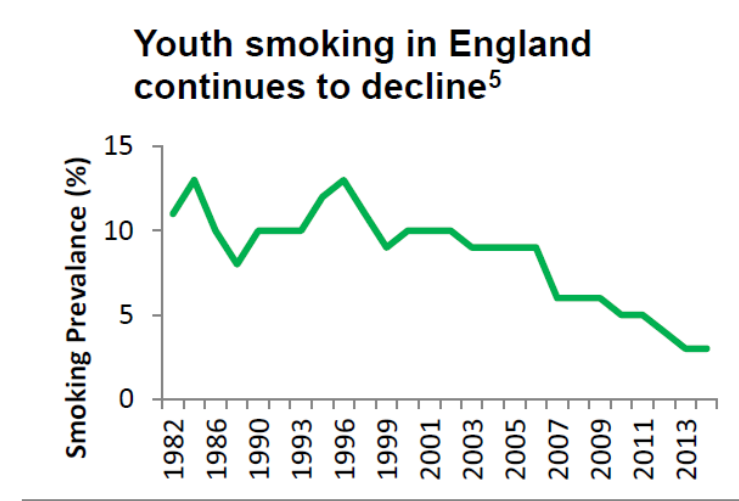


**Smokers using EC with expert support to quit enjoy high levels of success<sup>6</sup>**



# 2015: No evidence of 'gateway'

No evidence of vaping  
renormalising smoking or  
increasing smoking uptake



11-15 yr olds (Smoking, Drinking & Drugs Survey, 2014)

Action on Smoking & Health (ASH) Youth Surveys:  
Youth (11-18 yr olds, at least monthly)

- 2% e-cigarette users, 0.3% never smokers
- 7% cigarette smokers

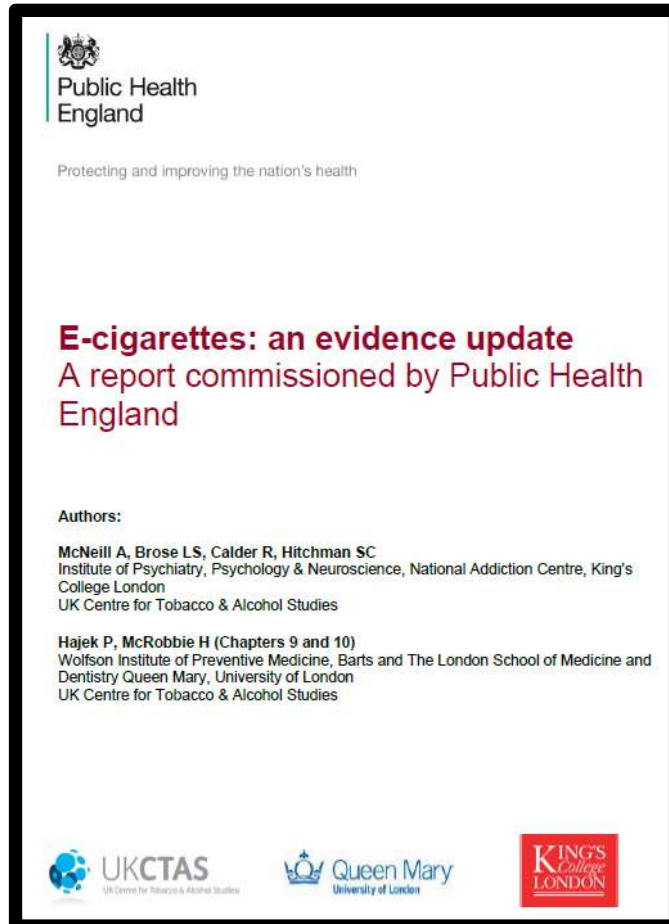
# 2015: What did we conclude?

- Smokers *who have tried other methods of quitting without success* could be encouraged to try e-cigarettes to stop smoking
- *Stop smoking services* should support smokers using e-cigarettes to quit by offering them behavioural support
- E-cigarettes potentially offer a wide reach, low-cost intervention to *reduce smoking & improve health in disadvantaged groups*

## 2015: We also called for

- **Licensed/medicinal e-cigarettes** as they could:
  - Have higher nicotine content
  - Be promoted for smoking cessation
  - Reassure health professionals &
  - Enable more **disadvantaged smokers to get e-cigarettes for free**
- **Lots more research** particularly longitudinal research on e-cigarette use, including smokers who have not used e-cigarettes at study outset

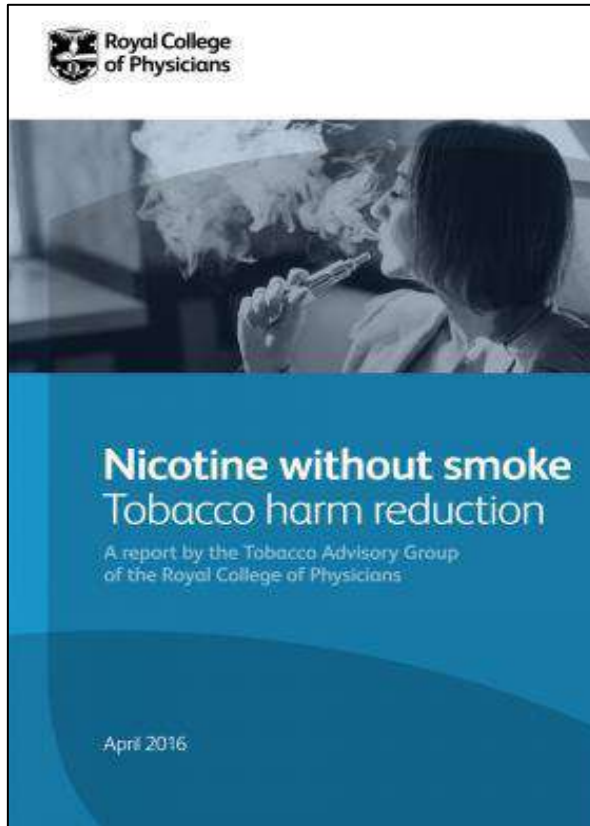
# 2015: But...



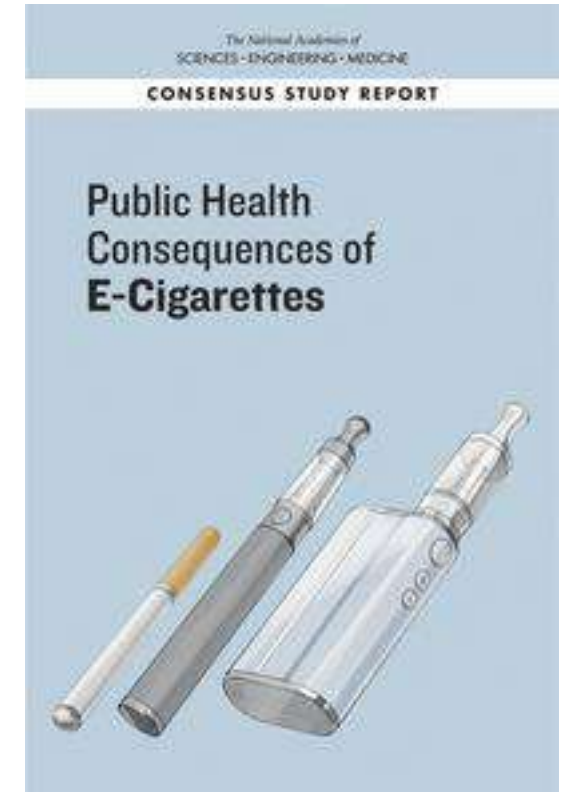
*'It has been previously estimated that e-cigarettes are around 95% safer than smoking. This appears to remain a reasonable estimate'*



# Broadly corroborated by subsequent reviews

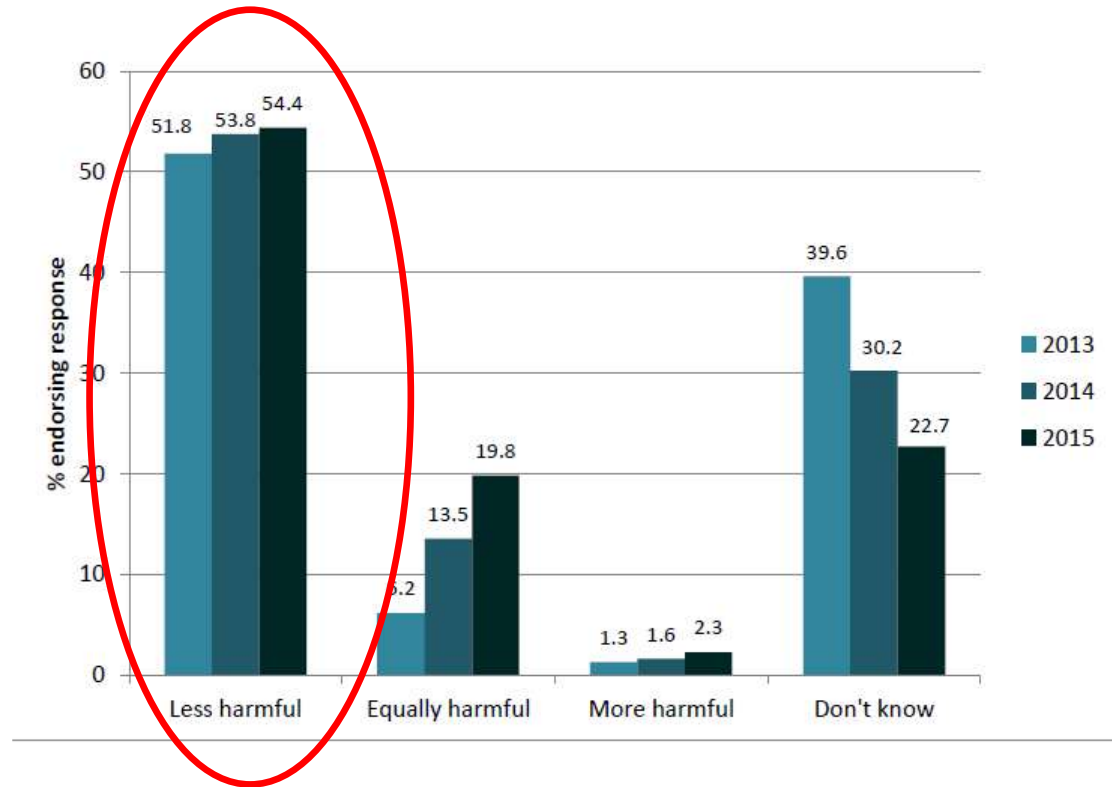


‘...the hazard to health arising from long-term vapour inhalation from the e-cigarettes available today is unlikely to exceed **5% of the harm from smoking tobacco...**’

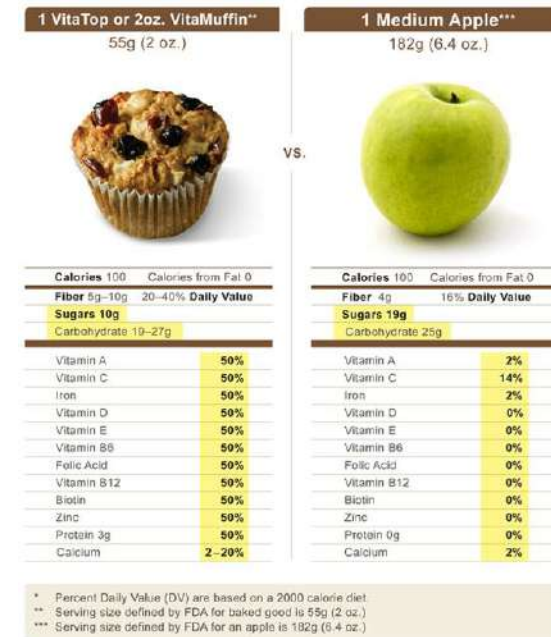
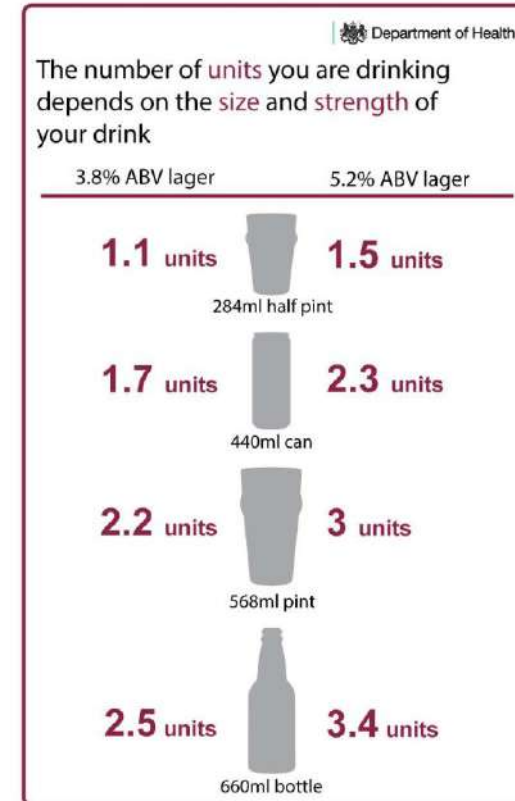


Conclusion 18-1. There is conclusive evidence that completely substituting e-cigarettes for combustible tobacco cigarettes **reduces users' exposure to numerous toxicants and carcinogens present in combustible tobacco cigarettes**

# To address misperceptions of relative risks of vaping vs smoking



Adult perceptions about e-cigarette harms compared with smoking (Figure 17, 2015 report) ASH Adult Surveys





Public Health  
England

Protecting and improving the nation's health

## Underpinning evidence for the estimate that e-cigarette use is around 95% safer than smoking: authors' note

The estimate that e-cigarette use is around 95% safer than smoking is based on the facts that:

- the constituents of cigarette smoke that harm health – including carcinogens – are either absent in e-cigarette vapour or, if present, they are mostly at levels much below 5% of smoking doses (mostly below 1% and far below safety limits for occupational exposure)
- the main chemicals present in e-cigarettes only have not been associated with any serious risk

Our review<sup>1</sup> aimed to assess whether studies that have recently been widely reported as raising new alarming concerns on the risks of e-cigarettes changed the conclusions of the previous independent review (Britton and Bogdanovica, 2014) and other reassuring reviews.

We concluded that these new studies do not in fact demonstrate substantial new risks and that the previous estimate by an international expert panel (Nutt et al, 2014) endorsed in an expert review (West et al, 2014) that e-cigarette use is around 95% safer than smoking, remains valid as the current best estimate based on the peer-reviewed literature.

Some flavourings and constituents in e-cigarettes may pose risks over the long term. We consider the 5% residual risk to be a cautious estimate allowing for this uncertainty.

Ongoing monitoring is needed to ensure that if any new risks emerge, recommendations to smokers and regulatory requirements are revised accordingly.

On current evidence, there is no doubt that smokers who switch to vaping reduce the risks to their health dramatically.

Published in final edited form as:

Addiction. 2014 November; 109(11): 1801–1810. doi:10.1111/add.12699.

## Electronic cigarettes: Review of use, content, safety, effects on smokers, and potential for harm and benefit

Peter Hajek,

UK Centre for Tobacco and Alcohol Studies, Wolfson Institute of Preventive Medicine, Queen Mary University of London, UK

Jean-François Etter,

Institute of Social and Preventive Medicine, Faculty of Medicine, University of Zurich, Switzerland

Neal Benowitz,

Division of Clinical Pharmacology and Experimental Bioengineering & Therapeutic Sciences, School of Medicine, University of California, San Francisco, USA

Thomas Eissenberg, and

Center for the Study of Tobacco Products, Department of Psychology, University of New Orleans, USA

Hayden McRobbie

Tobacco Dependence Research Unit, Wolfson Institute of Preventive Medicine, Queen Mary University of London, UK

European  
Addiction  
Research

Eur Add  
DOI: 10.1111/add.12699

## Electronic cigarettes: what we know so far

Robert West, University College London ([robert.west@ucl.ac.uk](mailto:robert.west@ucl.ac.uk)); Peter Hajek, Queen Mary University of London; Ann McNeill, Kings College London; Jamie Brown, University College London; Deborah Arnott Action on Smoking and Health

Version 1 of this document was presented to the UK All-Party Parliamentary Group on Pharmacy: 10<sup>th</sup> June 2014.

Version 3 is being presented to the UK's All Party Parliamentary Group on Smoking and Health: 4<sup>th</sup> March 2015

Cite as: West R, Hajek P, McNeill A, Brown J, Arnott D (2014) Electronic cigarettes: what we know so far. A report to UK All Party Parliamentary Groups. [www.smokinginengland.info/reports/](http://www.smokinginengland.info/reports/)

Current version: 2<sup>nd</sup> March 2015

This paper summarises evidence relating to key issues surrounding e-cigarettes. It will be updated as new information emerges. Updated versions are made available on [www.smokinginengland.info](http://www.smokinginengland.info)

*Safety: E-cigarettes are much less harmful than smoking but not 100% safe*

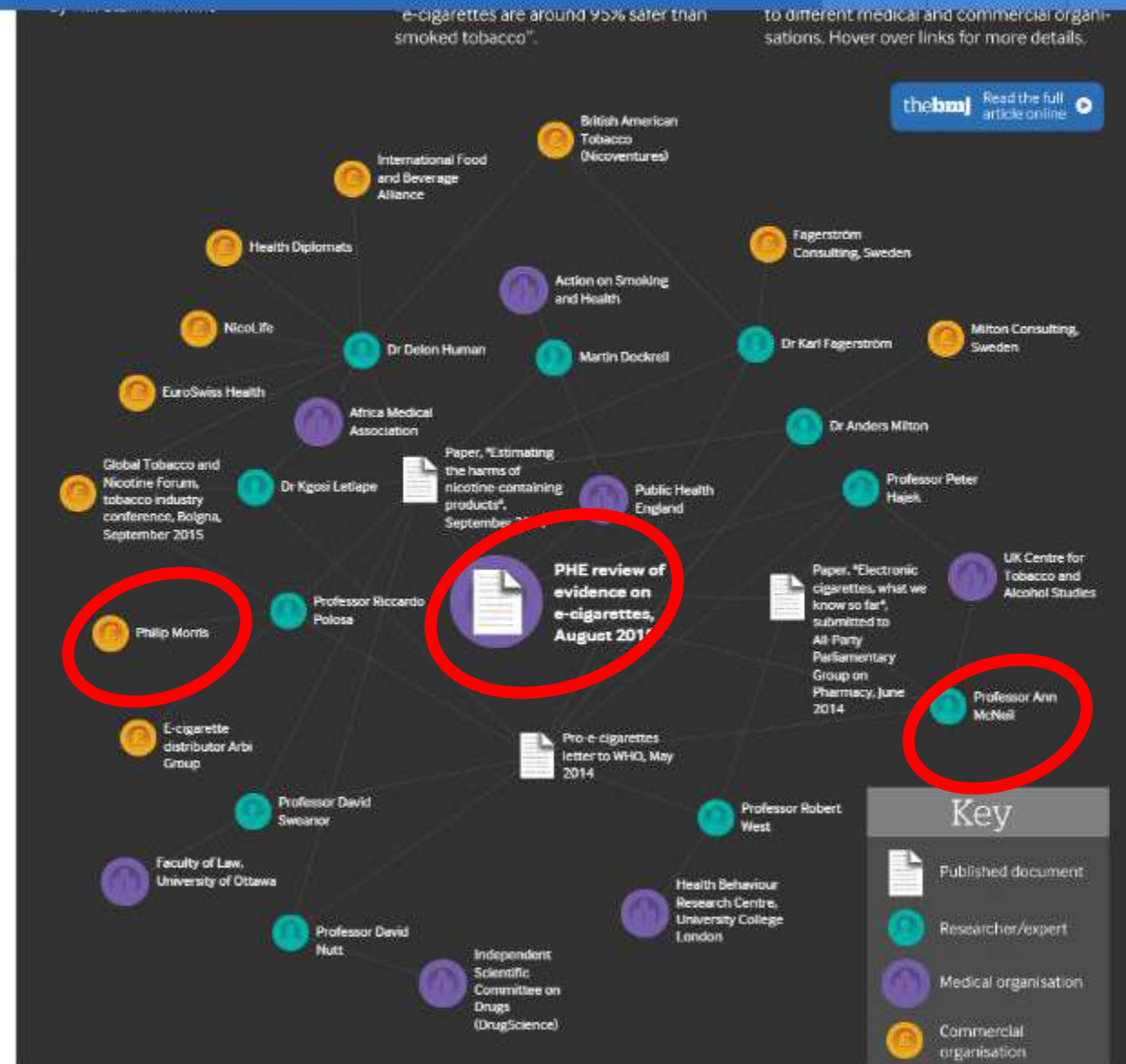
- From the concentrations of potentially harmful inhalants in vapour, e-cigarette use from brands that have been tested so far would be expected much less harmful to health than smoking tobacco cigarettes (1-3). Well publicised reports of potential harmfulness of e-cigarette vapour have typically not compared this with tobacco cigarettes and/or have set up unrealistic conditions, e.g. (4). The precise extent of harm from long-term use is not known but from the toxicological evidence to date it would be expected to be 95% less than that of smoking tobacco cigarettes (5).

## Estimating the Harms of Nicotine-Containing Products Using the MCDA Approach

David J. Nutt<sup>a</sup> Lawrence D. Phillips<sup>b</sup> David Balfour<sup>f</sup> H. Valerie Curran<sup>c</sup>  
Martin Dockrell<sup>d</sup> Jonathan Foulds<sup>h</sup> Karl Fagerstrom<sup>i</sup> Kgosi Letlape<sup>k</sup>  
Anders Milton<sup>j</sup> Riccardo Polosa<sup>l</sup> John Ramsey<sup>e</sup> David Swenor<sup>g</sup>







# Whilst we are arguing, people are dying

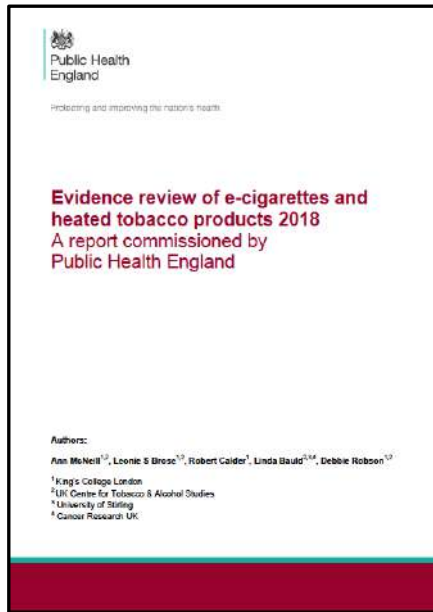
Mental health problems (adults & children)  
Substance use problems  
Learning difficulties  
In/released from prison  
Homeless  
Unemployed  
Low education  
Low income  
Job type (R&M vs professional)  
Housing type (e.g. social housing vs owned)  
Location

Multiple risk factors  
cluster together in  
the same individual

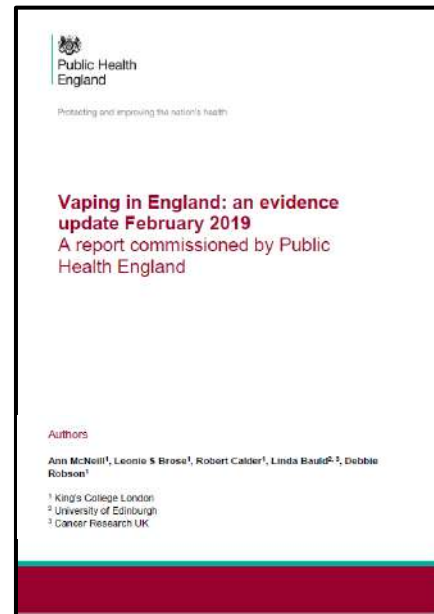




# PHE Reports 2018 – 2021



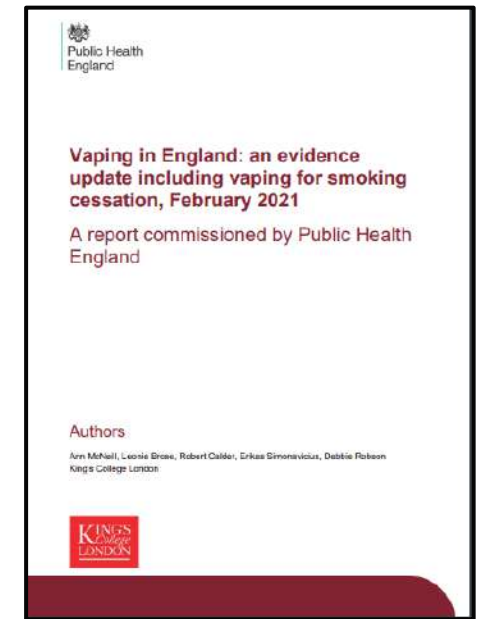
New health risks  
e.g fires, poisons,  
explosions, & harm  
perceptions



Focused on SE  
indicators & e-  
cigarettes in Stop  
Smoking Services.



2 new systematic  
reviews of e-  
cigarettes in mental  
health & pregnancy



COVID19. New  
systematic review  
of e-cigarettes &  
smoking cessation

# Progress....

2015



2018



**2022**

# Government-commissioned evidence review series

2022

2015

E-  
cigarettes:  
an evidence  
review

2018

Evidence  
review of EC  
& HTP

Focus on  
cessation  
and health  
risks

2019

Vaping in  
England

Focus on  
SE  
indicators

2020

Vaping in  
England

Focus on  
mental  
health &  
pregnancy

2021

Vaping in  
England

Focus on  
smoking  
cessation

## **Nicotine vaping in England: an evidence update including health risks and perceptions, 2022**

**A report commissioned by the Office for Health  
Improvement and Disparities**

Published 29 September 2022

### **Authors**

Ann McNeill, Erikas Simonavičius, Leonie Brose, Eve Taylor, Katherine East, Elizabeth Zuikova, Robert Calder, Debbie Robson

# Chapters

1. Introduction
2. Methods
3. Vaping among young people
4. Vaping among adults
5. Nicotine
6. Flavours in vaping products
7. Biomarkers of exposure to nicotine and potential toxicants
8. Biomarkers of potential harm cutting across several diseases
9. Cancers
10. Respiratory diseases
11. Cardiovascular diseases
12. Other health outcomes
13. Poisonings, fires & explosions
14. Heated tobacco products
15. Harm perceptions & communications
16. Conclusions

1400 pages

# Overall findings

Vaping poses only a small fraction of the risks of smoking in the short to medium term

Vaping is not risk-free, particularly for people who have never smoked

Methodological limitations common in studies



# Overall findings

Vaping poses only a small fraction of the risks of smoking, even in the short to medium term

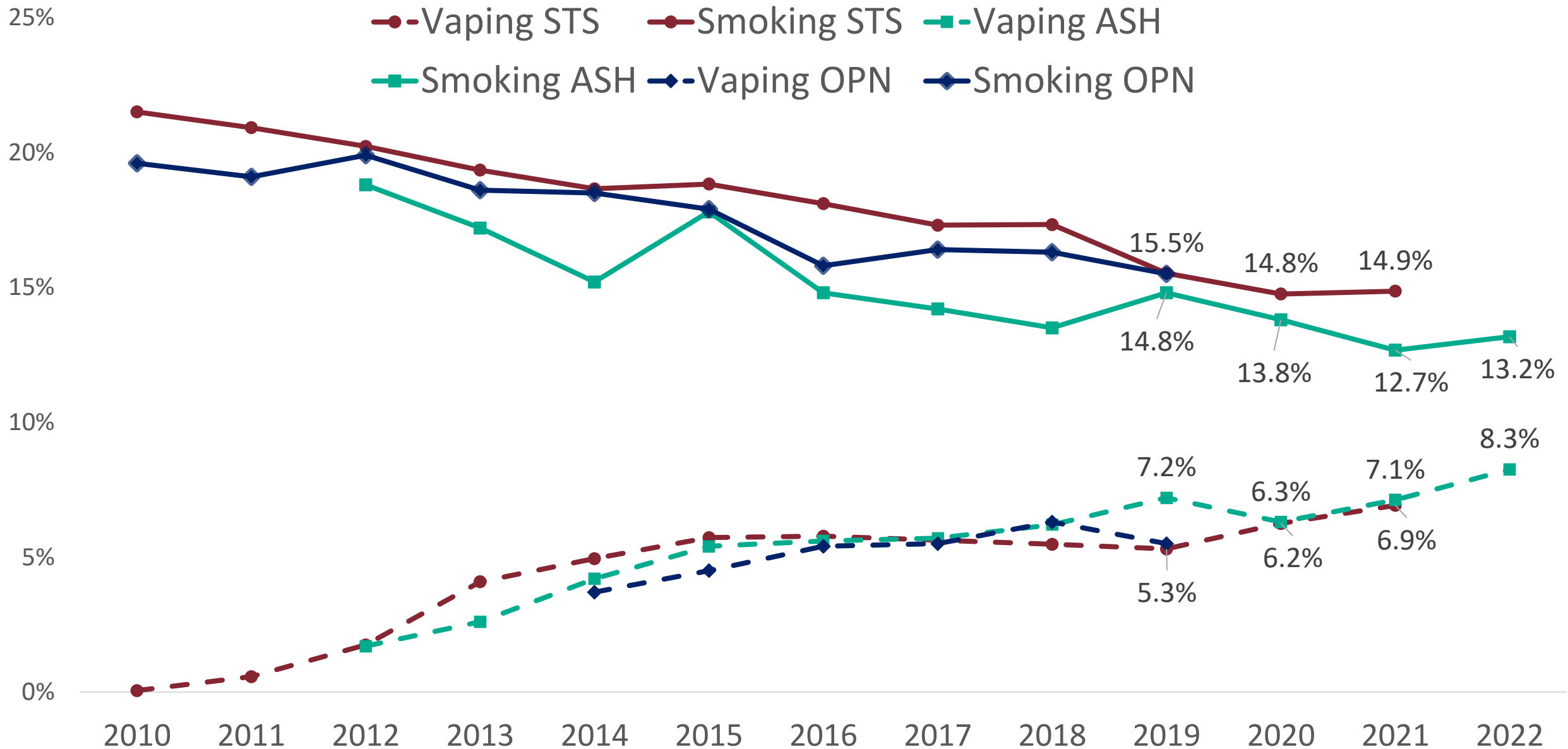
Vaping is not risk-free, particularly for people who have never smoked

Methodological issues common in studies

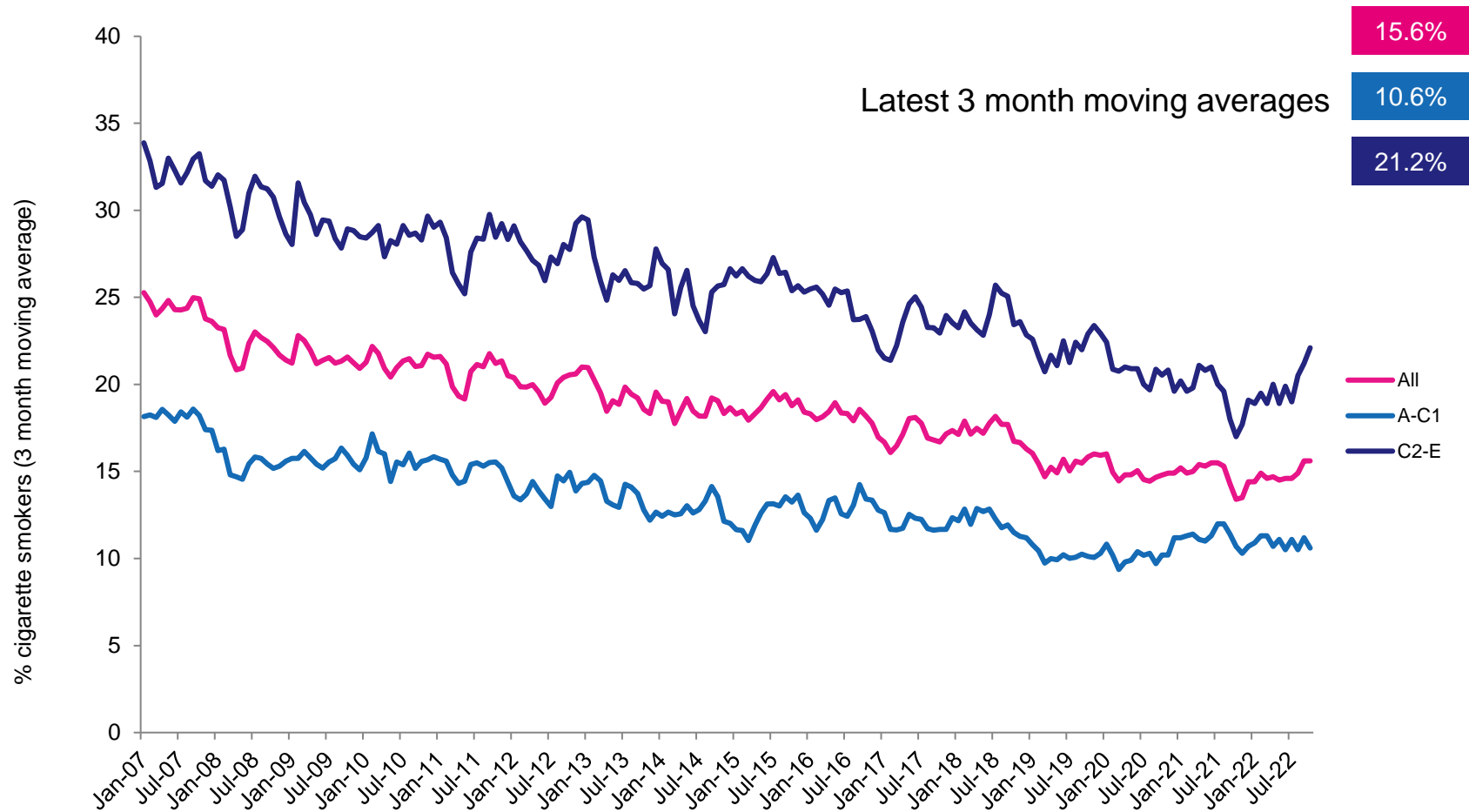
**Symposium at 2.15pm!**

# **2022 PATTERNS OF SMOKING, VAPING & QUITTING SMOKING**

# Smoking & vaping among adults in England



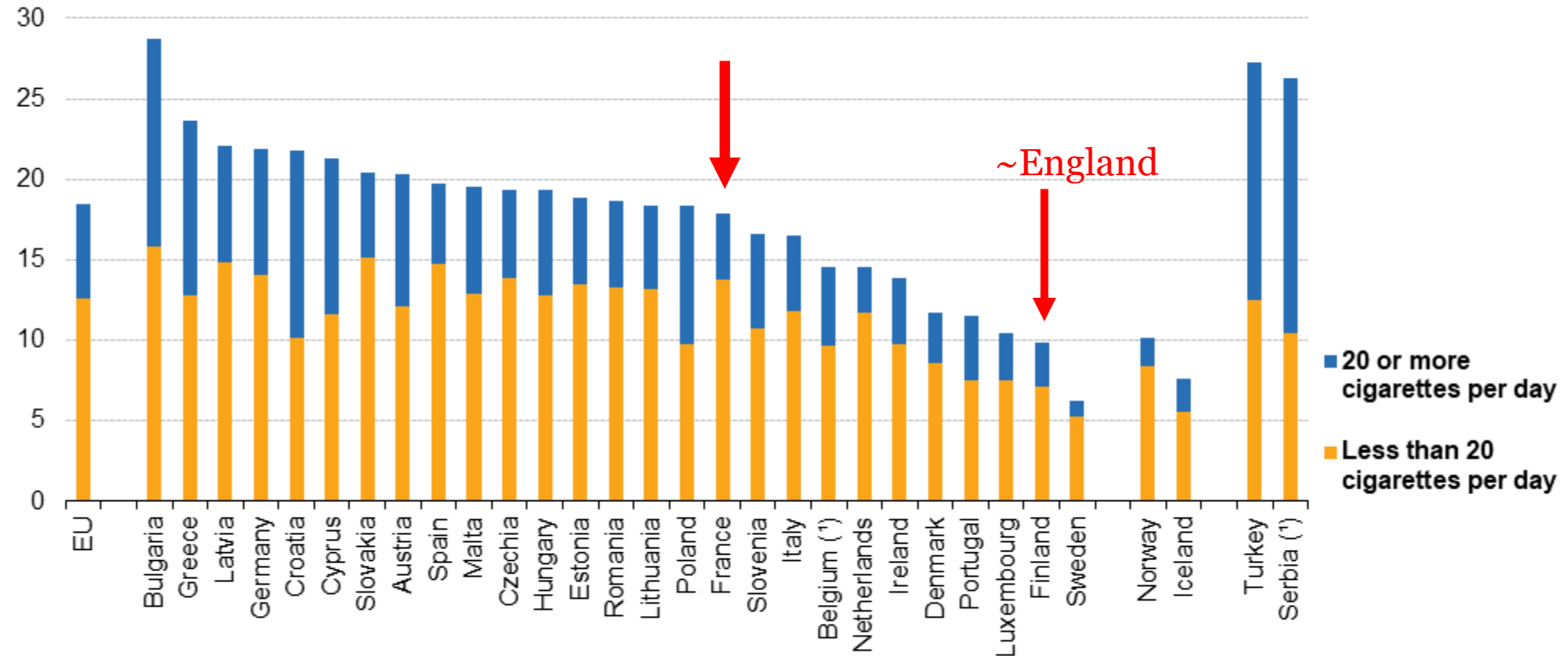
# Prevalence of cigarette smoking by social grade



A-C1: Professional to clerical occupation C2-E: Manual occupation

# Share of daily smokers of cigarettes among persons aged 15 and over, by level of consumption, 2019

(%)



Note: ranked on the share of all daily smokers.

(\*) Low reliability.

Source: Eurostat (online data code: hlth\_ehis\_sk3e)

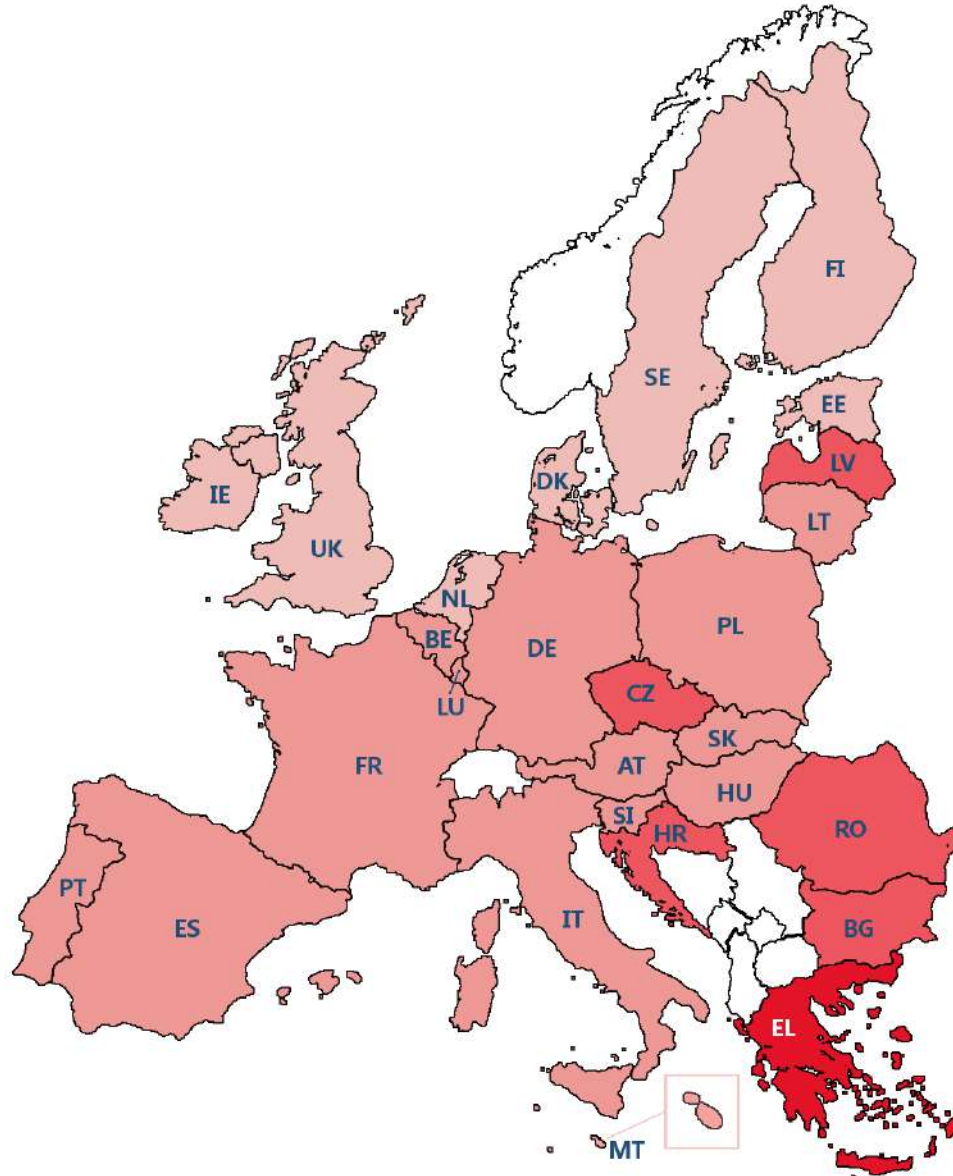
European Health Interview Survey,  
2019

eurostat

England data roughly based on 2/3 of current smokers being daily smokers, i.e. 10%

QC1

EL		42
BG		38
HR		36
LV		32
CZ		30
RO		30
CY		28
HU		28
IT		28
FR		28
SI		27
PL		26
AT		25
SK		25
ES		24
DE		24
LU		23
IT		23
EU27+UK		23
BE		21
PT		21
MT		20
EE		18
IE		18
DK		16
FI		15
UK		12
NL		12
SE		7

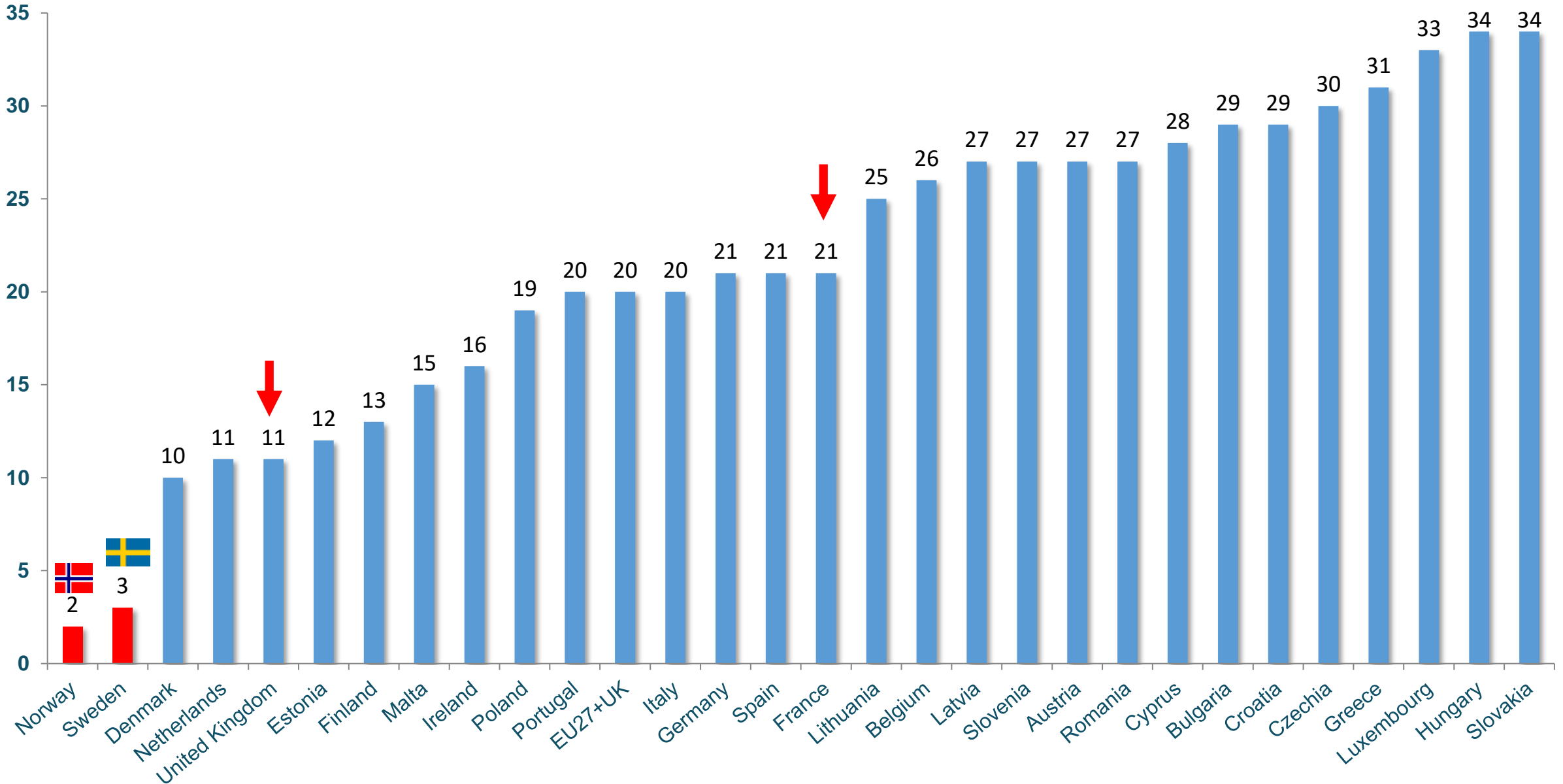


Fieldwork:  
Aug-Sept 2020,  
Special  
Eurobarometer 506 –  
Wave EB93.2 –  
Kantar  
Source:  
[file:///C:/Users/k1213128/Downloads/ebs\\_506\\_en.pdf](file:///C:/Users/k1213128/Downloads/ebs_506_en.pdf)

Greatest  
reduction seen  
in the UK



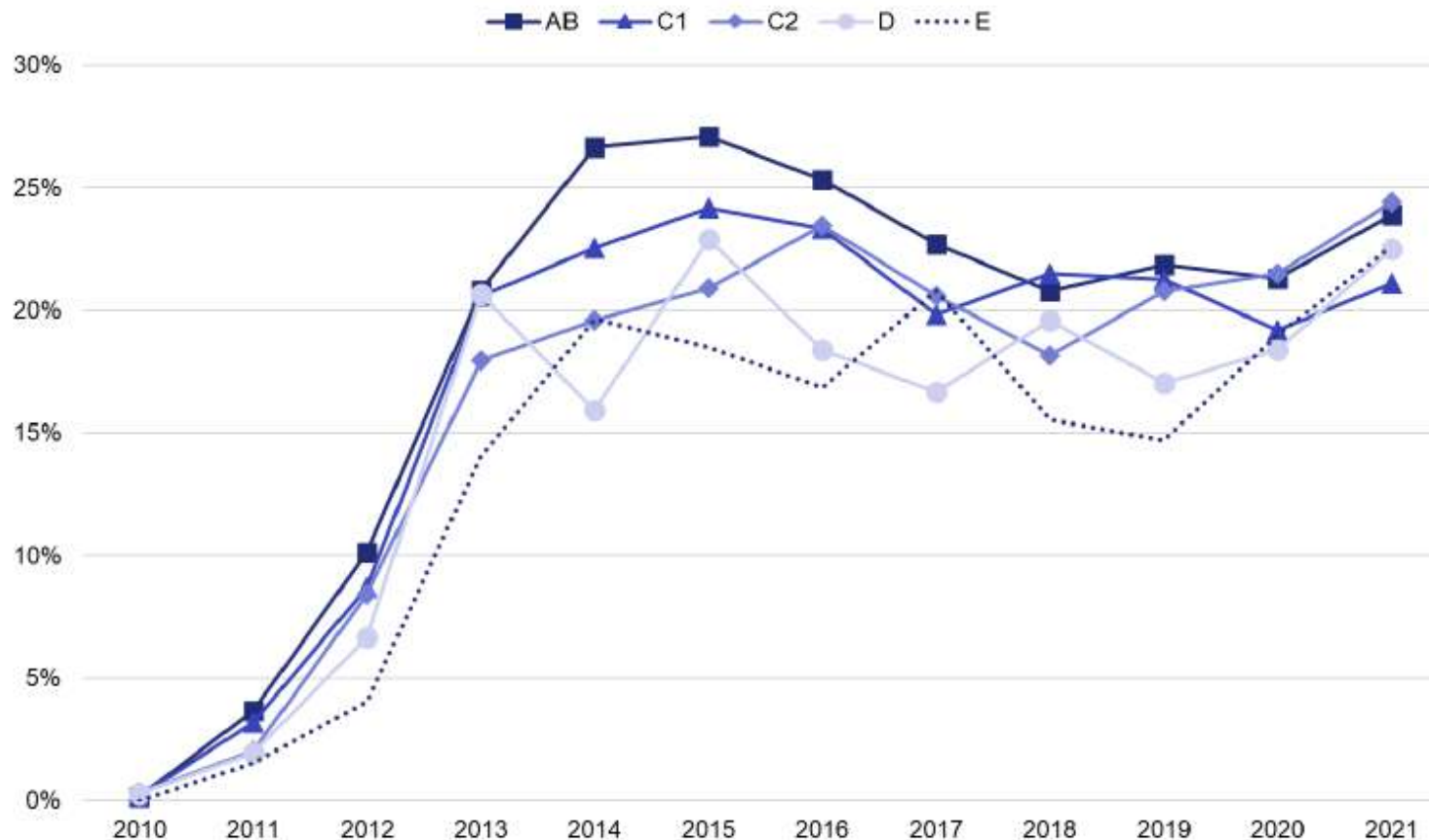
# Tobacco smokers aged 15-24 years in Europe, 2021



Slide courtesy of Karl Erik Lund (arrows added)

Source: Eurobarometer 506, February 2021. Central Bureau of Statistics Norway, chart 05307, 2019. 33

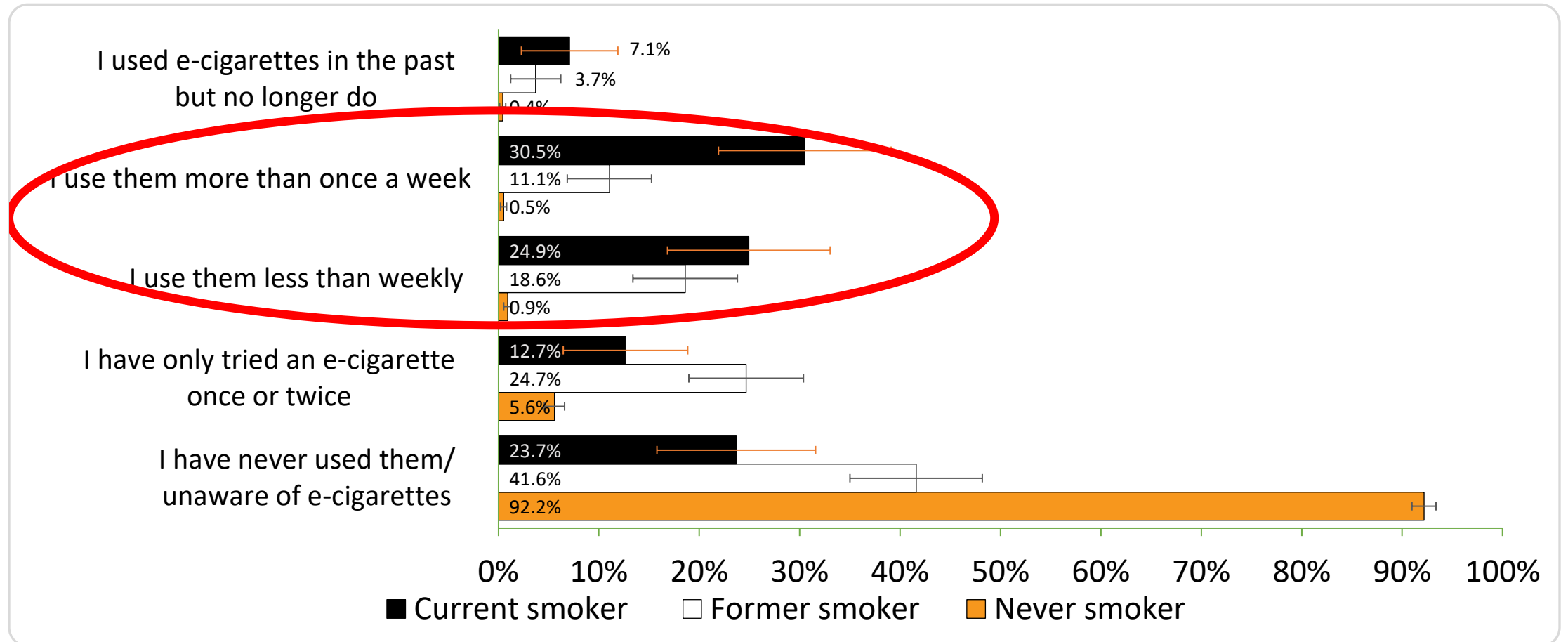
# E-cigarette use among smokers from different socioeconomic groups (England, STS, 2022 report)



# Smoking & vaping among young people (11-18 yrs) in England (ASH-Youth Surveys)

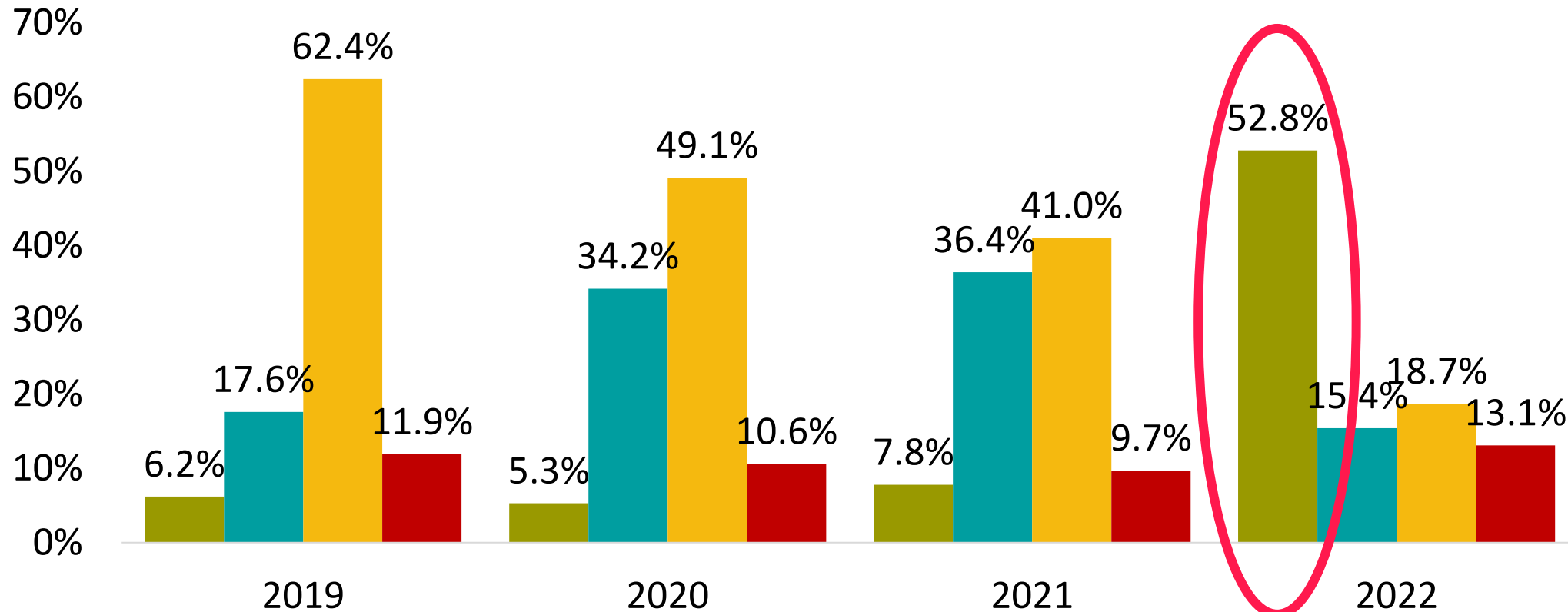
ASH Surveys	2015	2016	2017	2018	2019	2020	2021	2022
Unweighted sample size	1,926	1,999	2,260	2,011	2,173	2,168	2,151	2,259
Smoking status %								
Never tried	77.1	80.3	76.9	78.6	79.7	80.9	83.5	80.2
Tried only	11.7	9.7	10.7	10.2	9.0	8.3	8.6	8.1
Former	3.0	3.3	3.6	3.5	3.4	3.0	3.0	3.7
Current	7.1	5.2	7.8	6.1	6.3	6.7	4.1	6.0
Vaping status %								
Never tried	93.9	87.8	83.2	82.8	83.6	82.8	86.3	80.9
Tried only	4.7	9.3	10.9	12.3	9.4	10.0	8.6	9.1
Former	-	-	1.7	0.8	0.9	1.8	1.2	1.4
Current	1.2	2.5	3.5	3.5	4.8	4.8	4.0	8.6

# Most GB 11-17 yr olds (92.2%) who have never smoked have also never vaped, with ~1.4% current vaping



ASH, 2022. Use of e-cigarettes (vapes) among young people in Great Britain

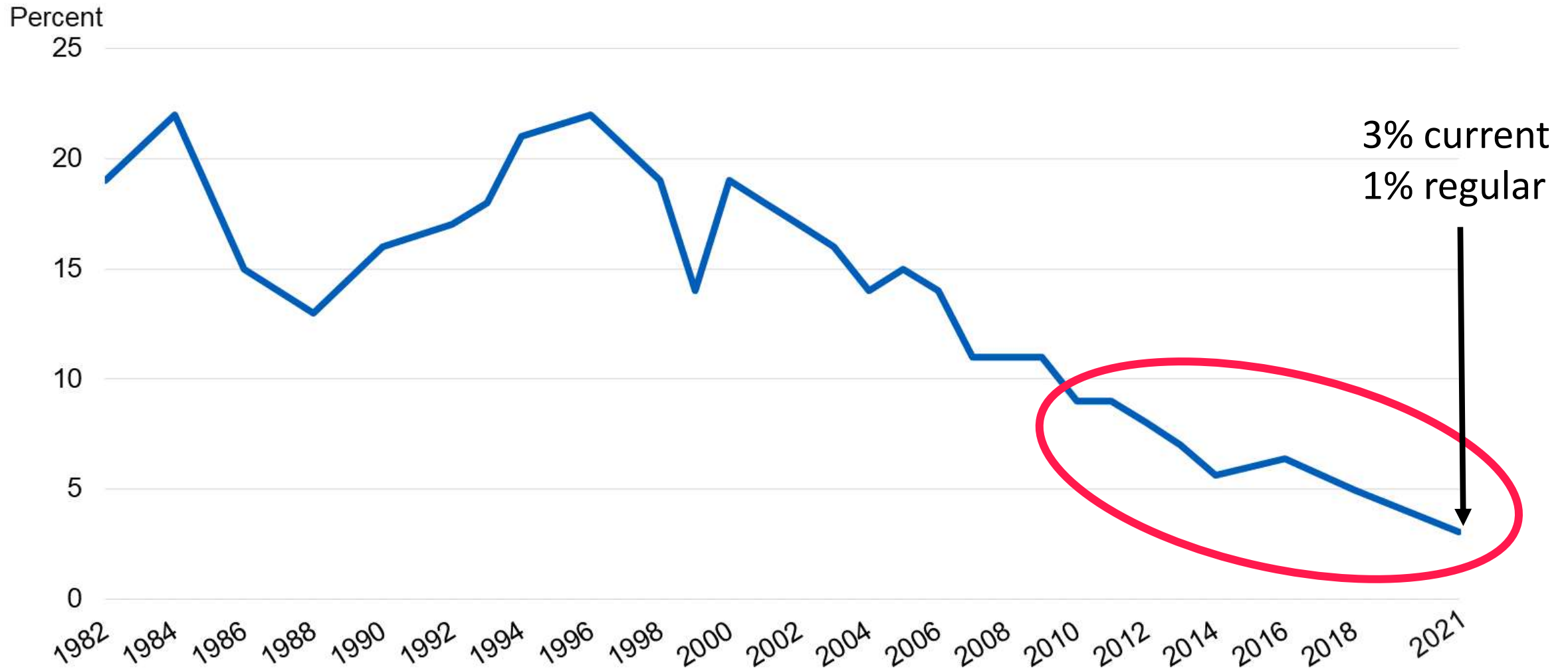
# Type of vaping product used by 11-18 yr olds who currently vape, England 2019-2022 (Zeller Qu5)



- A disposable electronic-cigarette (non-rechargeable)
- An electronic cigarette kit that is rechargeable with replaceable pre-filled cartridges
- An electronic cigarette kit that is rechargeable and has a tank or reservoir
- Don't know



# Smoking prevalence in 11-15 year olds in England



Source: <https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021>

# Smoking Toolkit Study: Individual-level analysis estimating trends in disposable e-cigarette use

Received: 6 May 2022 | Accepted: 24 August 2022  
DOI: 10.1111/add.16044

**DATA INSIGHT**

**ADDICTION** **SSA**

## Rapid growth in disposable e-cigarette vaping among young adults in Great Britain from 2021 to 2022: a repeat cross-sectional survey

Harry Tattan-Birch<sup>1,2</sup> | Sarah E. Jackson<sup>1,2</sup> | Loren Kock<sup>1,2</sup> | Martin Dockrell<sup>3</sup> | Jamie Brown<sup>1,2</sup>

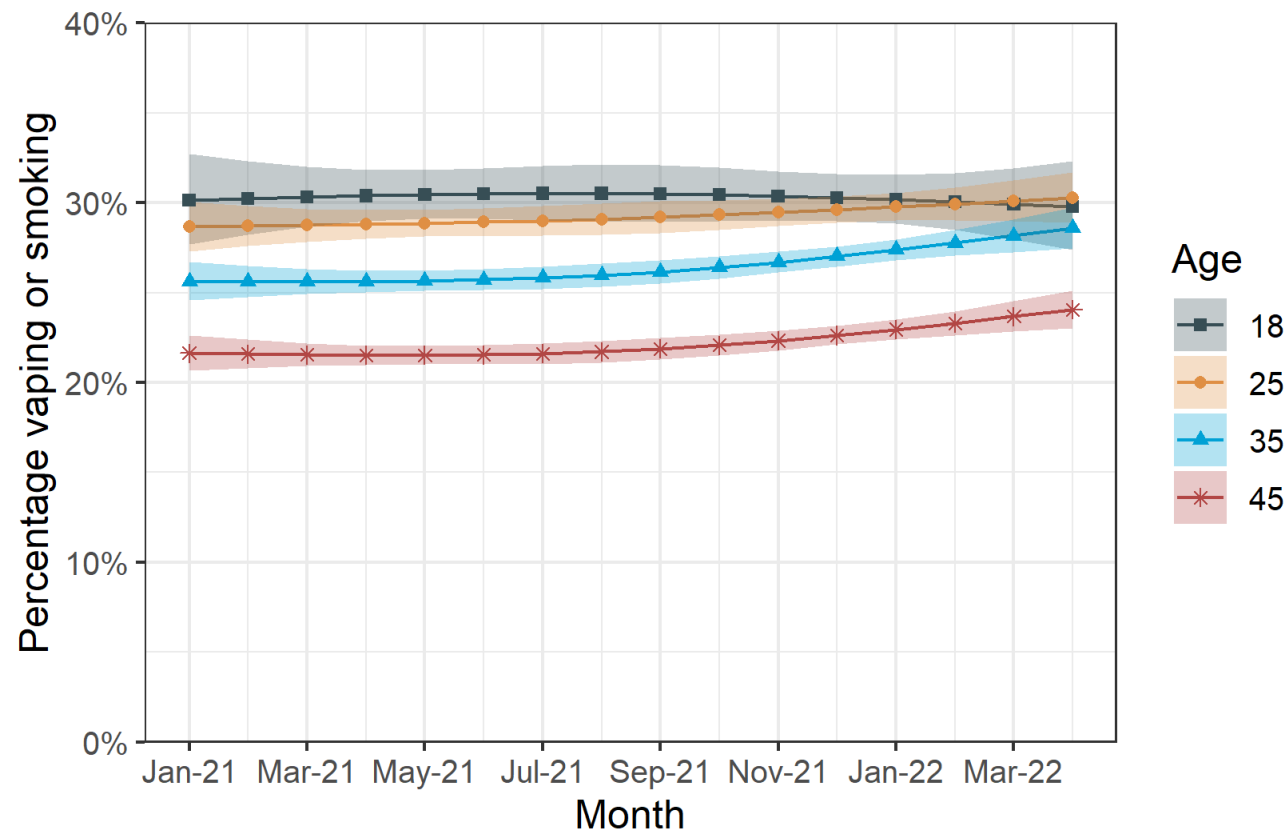
<sup>1</sup>Department of Behavioural Science and Health, University College London, London, UK  
<sup>2</sup>SPECTRUM Consortium, London, UK  
<sup>3</sup>Addictions and Inclusion Office for Health

**Abstract**  
**Aims:** To estimate recent trends in the prevalence of disposable e-cigarette vaping in Great Britain, overall and across ages, and to measure these trends in the context of changes in smoking and vaping prevalence.

Jan 2021-Jan 2022:

- 14-fold increase in use of disposables (1.2% to 16.7%)
- Overall largest increase **from 0.9% to 56.7% for 18-year olds**

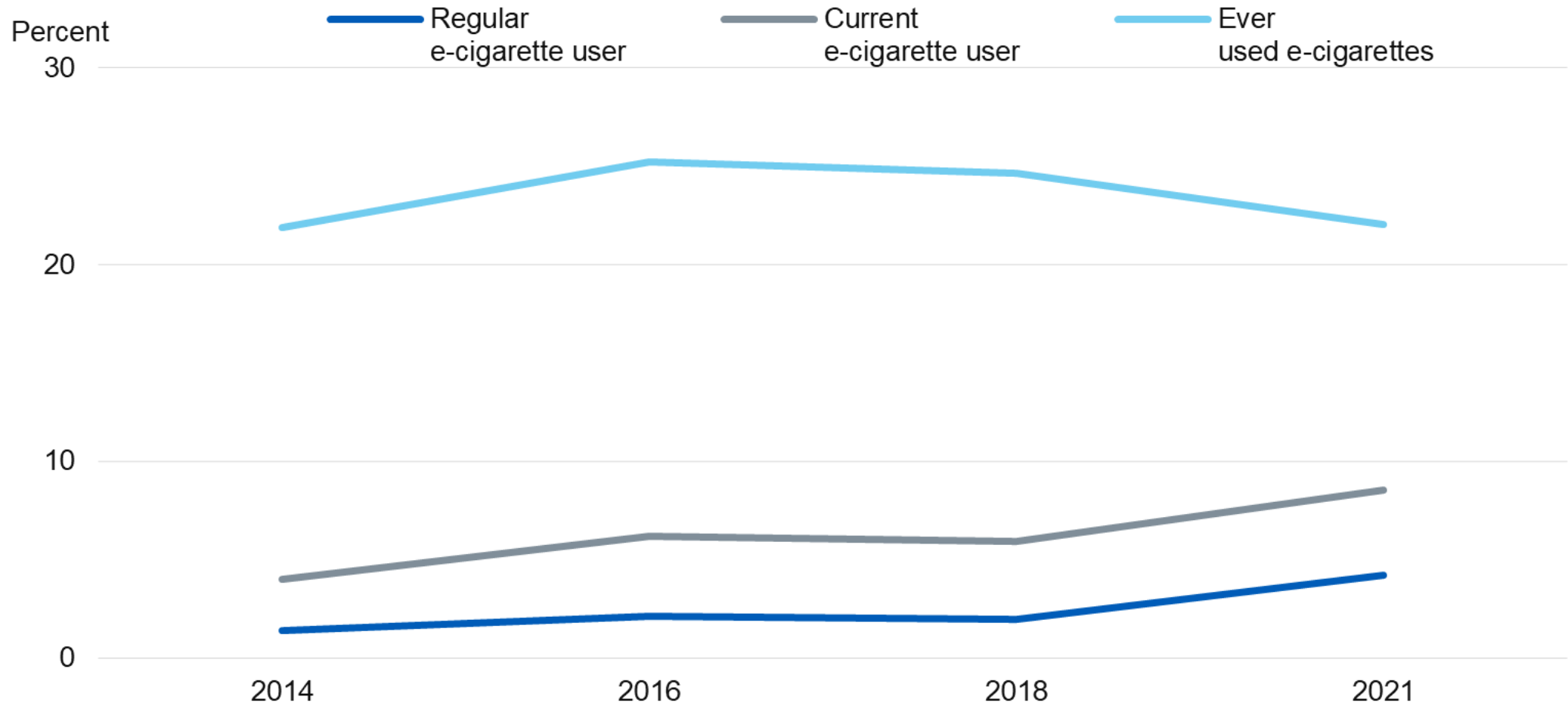
# Smoking Toolkit Study: Individual-level analysis estimating trends in disposable e-cigarette use



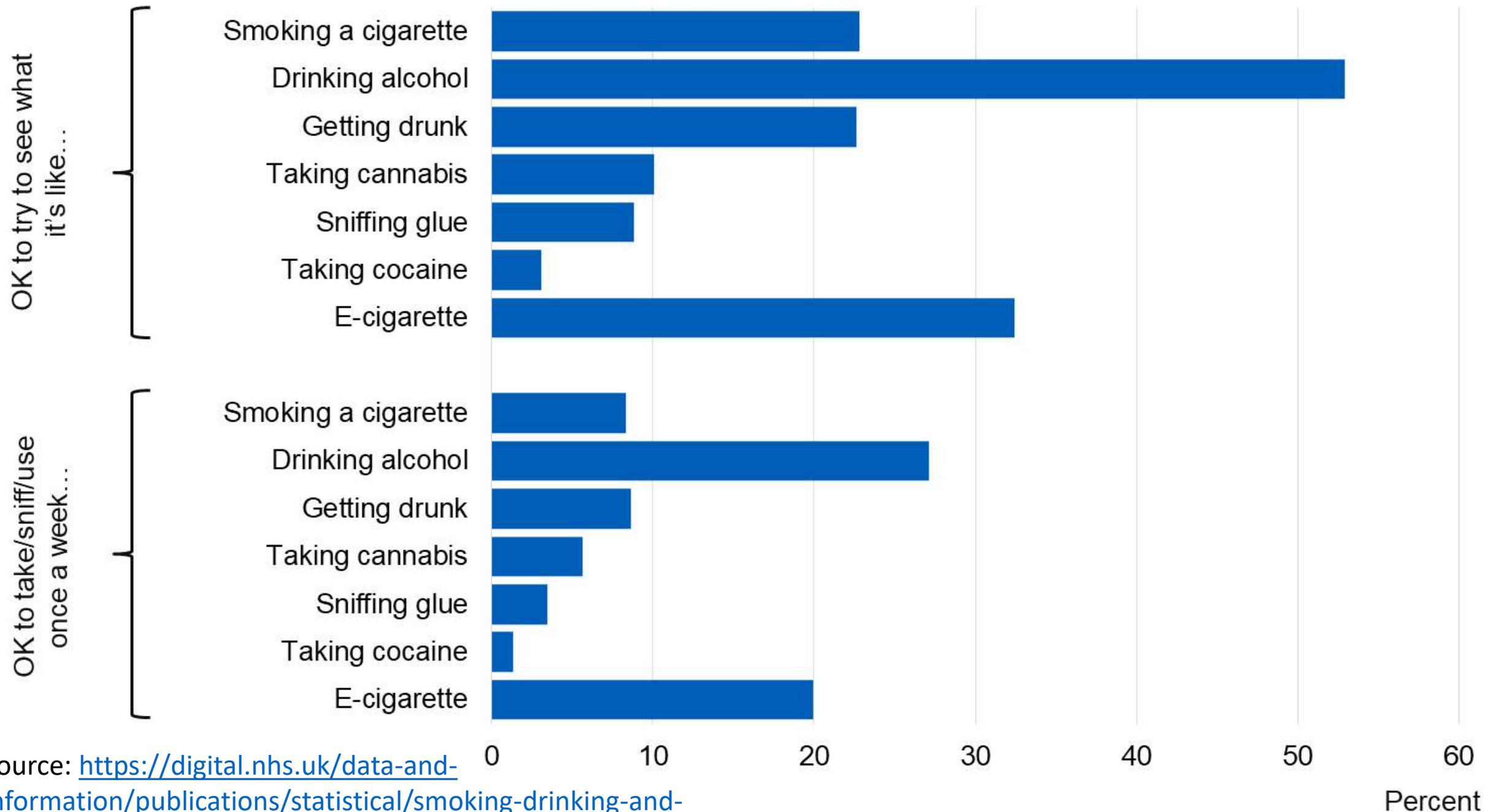
Inhaled nicotine  
use changed little  
over time



# Vaping prevalence in 11-15 year olds in England



Source: <https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021>



Source: <https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021>

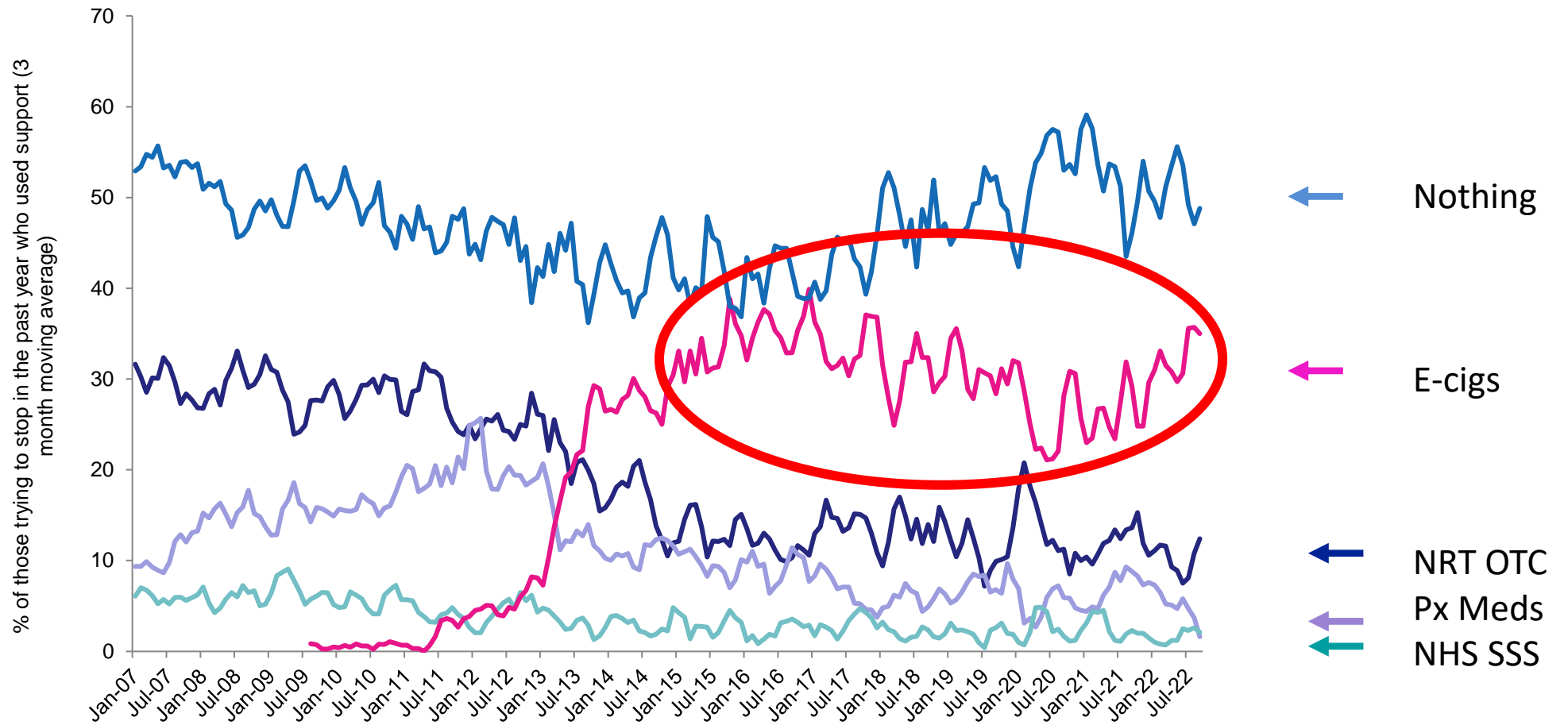
# Drinking & drug use 11-15 year olds in England

- Weekly alcohol **drinking** stayed same:
  - 6% of all pupils said they usually drank alcohol at least once per week, the same as in 2018
- Fall in prevalence of lifetime & recent **illicit drug use**:
  - 18% of pupils reported they had ever taken drugs (24% in 2018)
  - 12% had taken drugs in the last year (17% in 2018)
  - 6% in the last month (9% in 2018)

Source: <https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021>

# **E-CIGARETTES & QUITTING SMOKING**

# E-cigarettes remained the most popular support for quit attempts after no support



NRT OTC: Nicotine replacement therapy bought over the counter; Med Rx: Prescription medication; NHS: NHS Stop Smoking Service; E-cig: E-cigarette. Method is coded hierarchically with smokers using more than one method classified into most intensive by the following scheme: 1. Nothing, 2. NRT OTC, 3. E-cigarette, 4. Med Rx, 5. NHS. In updates until June 2015, NRT OTC was coded above e-cigarette - earlier figures have now been revised. See e-cigarette tracking slides for any use of different treatments.

# Population-level impact: time-series

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**Research**

**Association between electronic cigarette use and changes in quit attempts, success of quit attempts, use of smoking cessation pharmacotherapy, and use of stop smoking services in England: time series analysis of population trends**

BMJ 2016 ; 354 doi: <https://doi.org/10.1136/bmj.i4645> (Published 13 September 2016)  
Cite this as: BMJ 2016;354:i4645

Article Related content Metrics Responses Peer review

Emma Beard, senior research fellow<sup>1 2</sup>, Robert West, professor of health psychology<sup>2</sup>, Susan Michie, professor of health psychology<sup>1</sup>, Jamie Brown, principal research fellow<sup>1 2</sup>

Author affiliations ▼

Correspondence to: E Beard [e.beard@ucl.ac.uk](mailto:e.beard@ucl.ac.uk)

Accepted 15 August 2016

**Abstract**

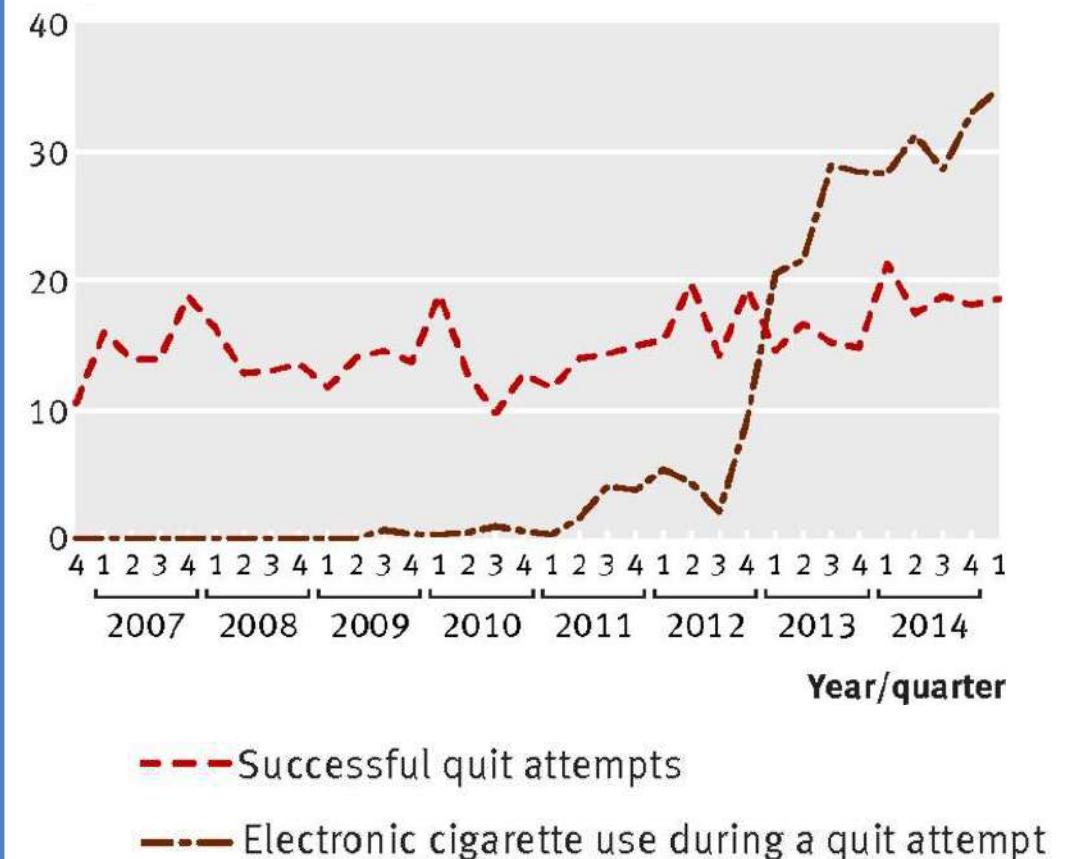
**Objectives** To estimate how far changes in the prevalence of electronic cigarette (e-cigarette) use in England have been associated with changes in quit success, quit attempts, and use of licensed medication and behavioural support in quit attempts.

**Design** Time series analysis of population trends.

**Participants** Participants came from the Smoking Toolkit Study, which involves repeated, cross sectional household surveys of individuals aged 16 years and older in England. Data were aggregated on about 1200 smokers quarterly between 2006 and 2015. Monitoring data were also used from the national behavioural support programme; during the study, 8 029 012 quit dates were set with this programme.

**Setting** England

The success rate of quit attempts statistically significantly increased for every 1% increase in prevalence of e-cigarette use by smokers & e-cigarette during a recent quit attempt



# Population-level analysis: time-series

INDEPENDENT

NEWS POLITICS VOICES FINAL SAY SPORT CULTURE VIDEO **INDY LIFE** BLACK FRIDAY INDYBEST LONG READS INDY100 VOUCHERS PREMIUM



Millions of smokers are using them to try to stop smoking

Sabrina Barr | @fabssb5 | 1 day ago |



Use of e-cigarettes may help between 50,000 and 70,000 smokers in England quit every year, new research has shown.

Researchers from University College London (UCL) assessed the correlation between the use of e-cigarettes and success rate of quitting smoking.



ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

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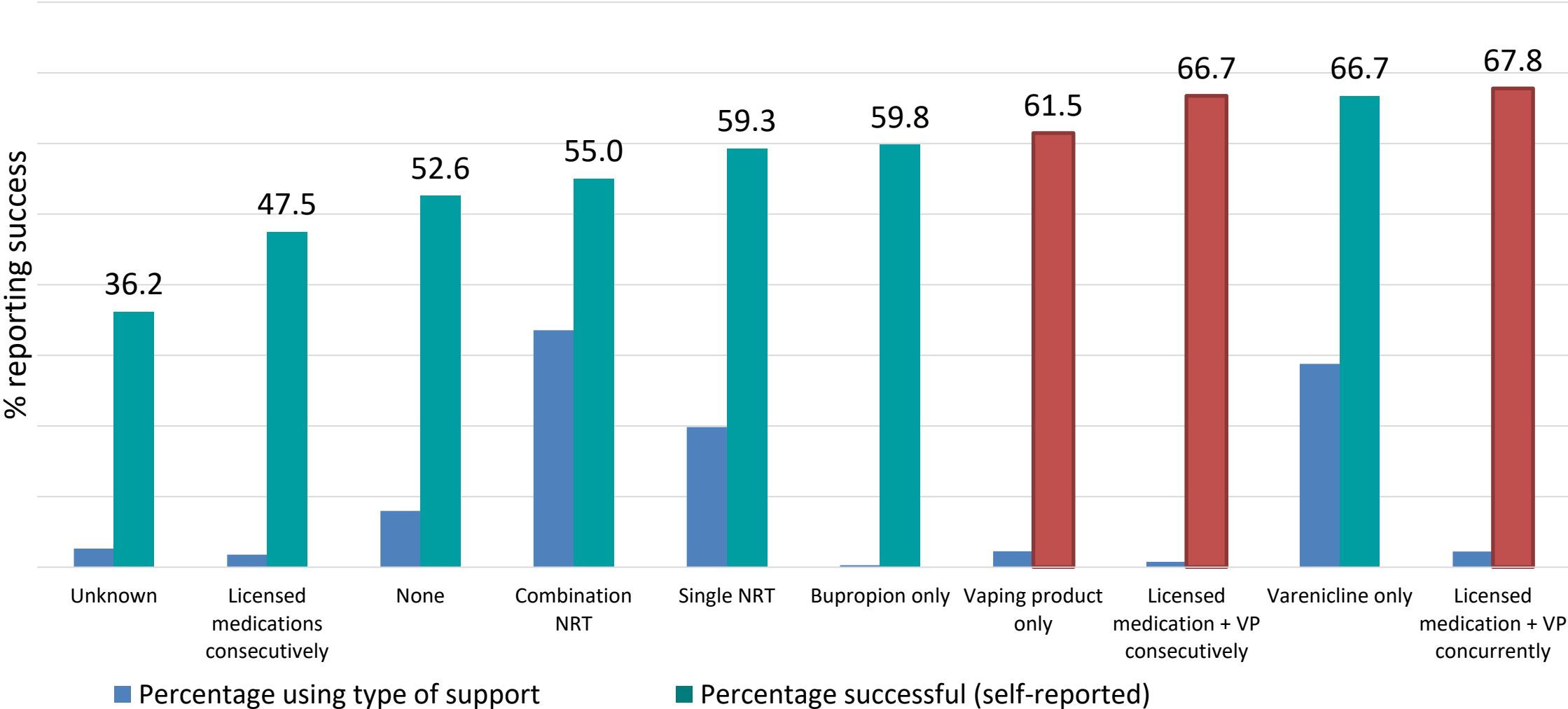
Association of prevalence of electronic cigarette use with smoking cessation and cigarette consumption in England: a time series analysis between 2006 and 2017

E. Beard , R. West, S. Michie, J. Brown

First published: 16 October 2019 | <https://doi.org/10.1111/add.14851>

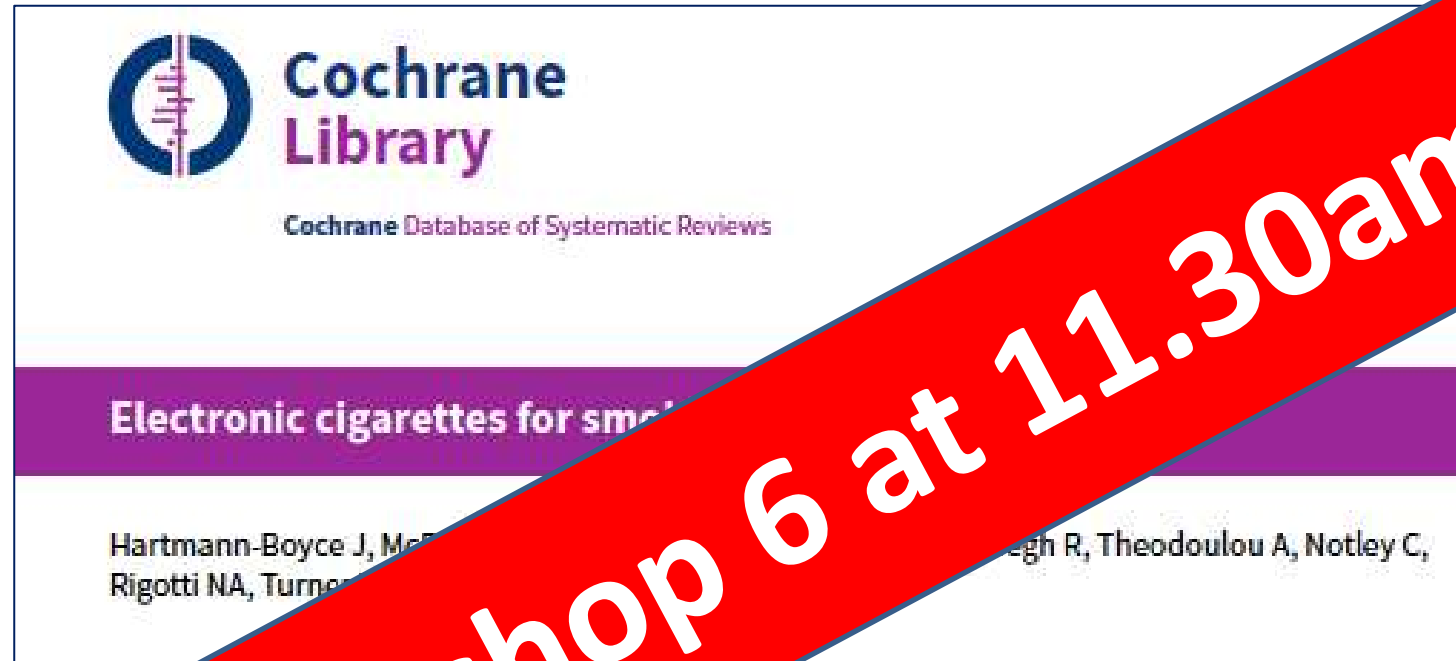
# E-cigarettes in smoking cessation services 2020/21 (NHS Digital, 2022)

N=178,815





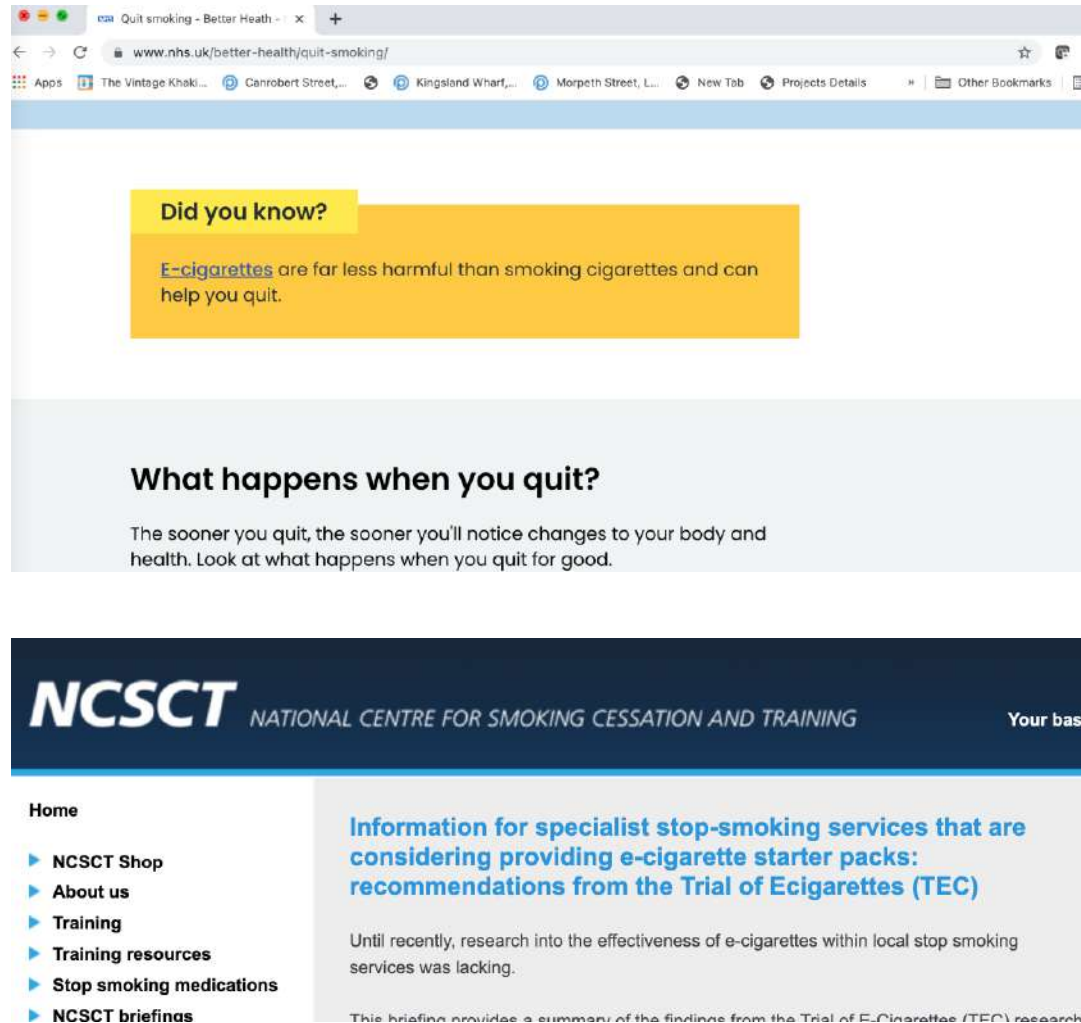
# Cochrane review of RCTs



Hartmann-Boyce et al (2022)

<https://doi.org/10.1002/14651858.CD010216.pub>

# Promoting vaping to smokers

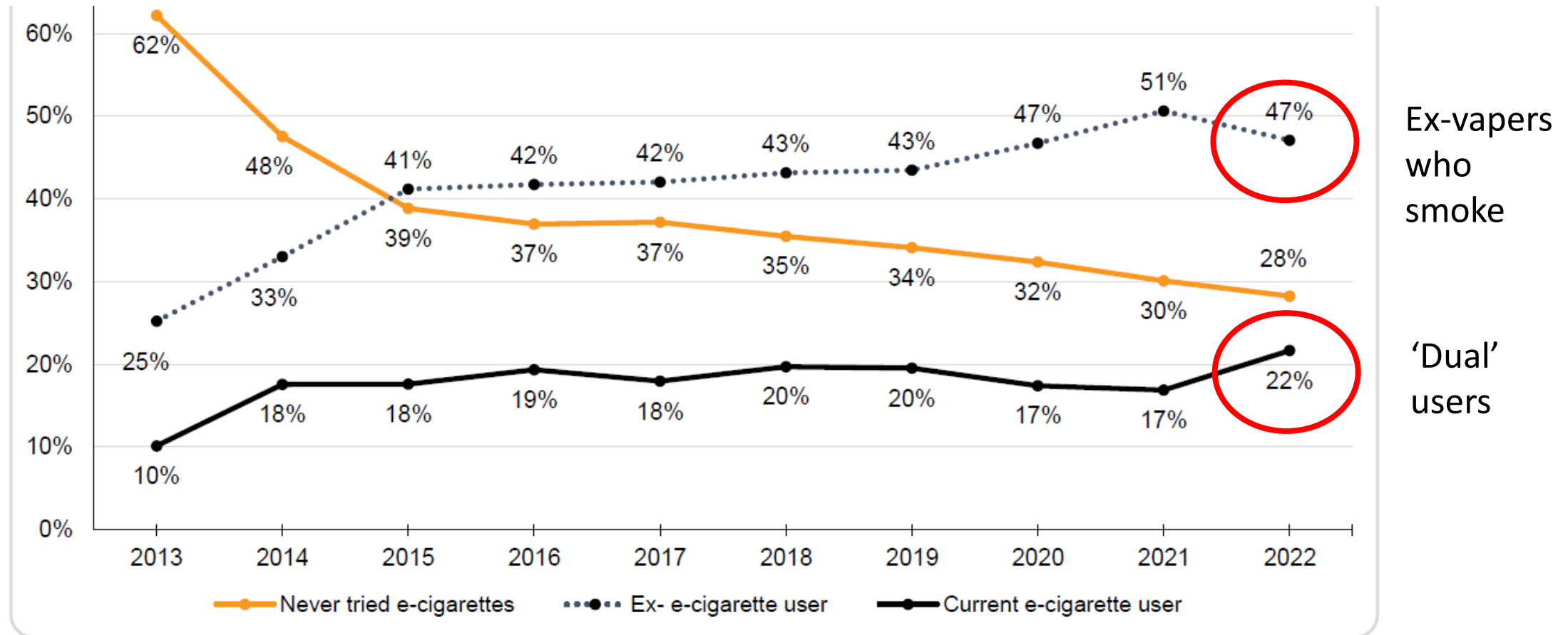


The screenshot shows a web browser window with the URL [www.nhs.uk/better-health/quit-smoking/](http://www.nhs.uk/better-health/quit-smoking/). The page features a yellow box with the text "Did you know?" followed by a statement: "E-cigarettes are far less harmful than smoking cigarettes and can help you quit." Below this, a section titled "What happens when you quit?" states: "The sooner you quit, the sooner you'll notice changes to your body and health. Look at what happens when you quit for good." At the bottom, the NCSCT logo is visible, with the text "NATIONAL CENTRE FOR SMOKING CESSATION AND TRAINING" and "Your base". A sidebar on the left lists navigation links: Home, NCSCT Shop, About us, Training, Training resources, Stop smoking medications, and NCSCT briefings. The main content area also includes a blue header for "Information for specialist stop-smoking services that are considering providing e-cigarette starter packs: recommendations from the Trial of Ecigarettes (TEC)" and a paragraph stating: "Until recently, research into the effectiveness of e-cigarettes within local stop smoking services was lacking. This briefing provides a summary of the findings from the Trial of Ecigarettes (TEC) research."



**SO WHY AREN'T MORE SMOKERS USING E-CIGARETTES TO QUIT?**

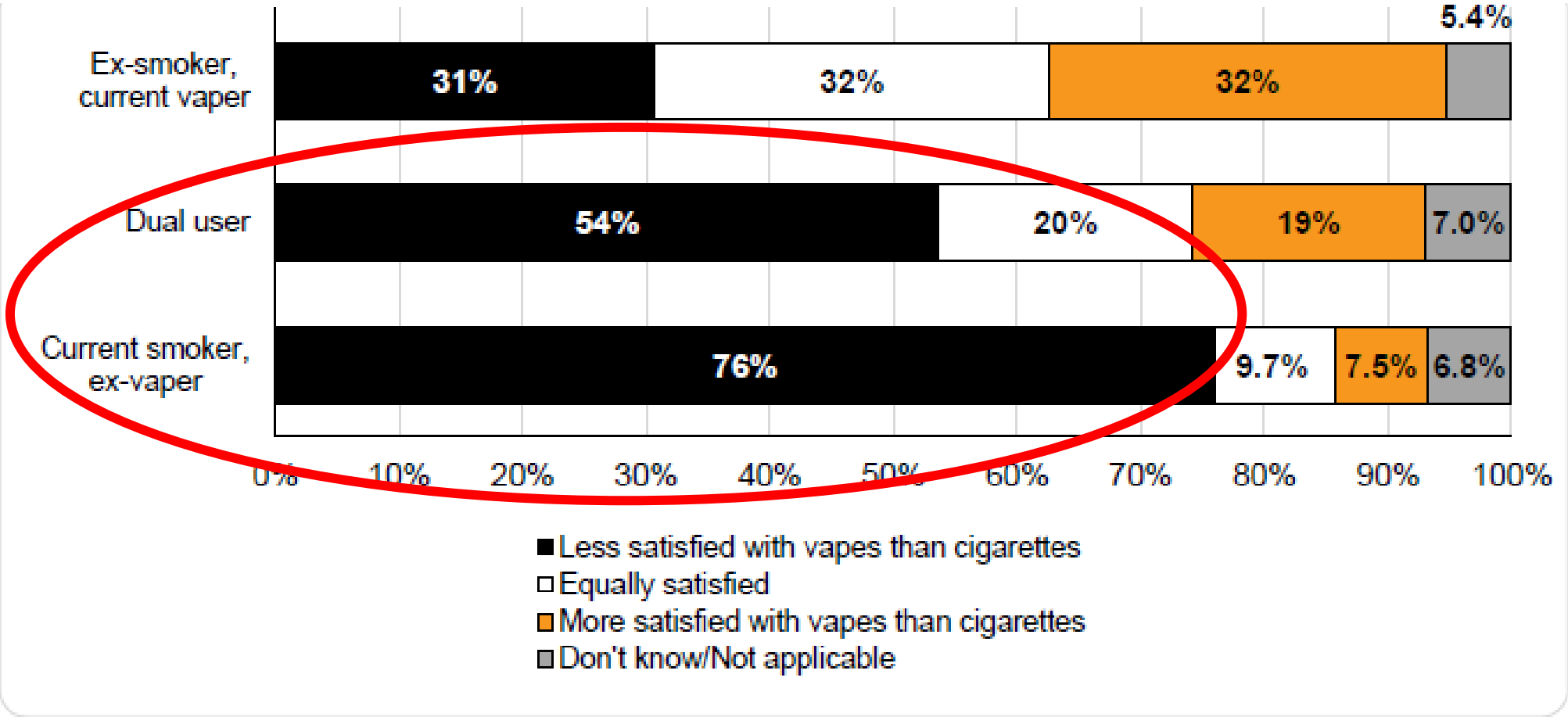
# E-cigarette use among adult cigarette smokers, Great Britain (2013-2022) ASH Surveys (Zeller Qus 3&4)



Unweighted base: GB adult current smokers (2013=1895, 2014=1776, 2015=2037, 2016=1704, 2017=1632, 2018=1633, 2019=1777, 2020=1694, 2021=1512, 2022=1751)

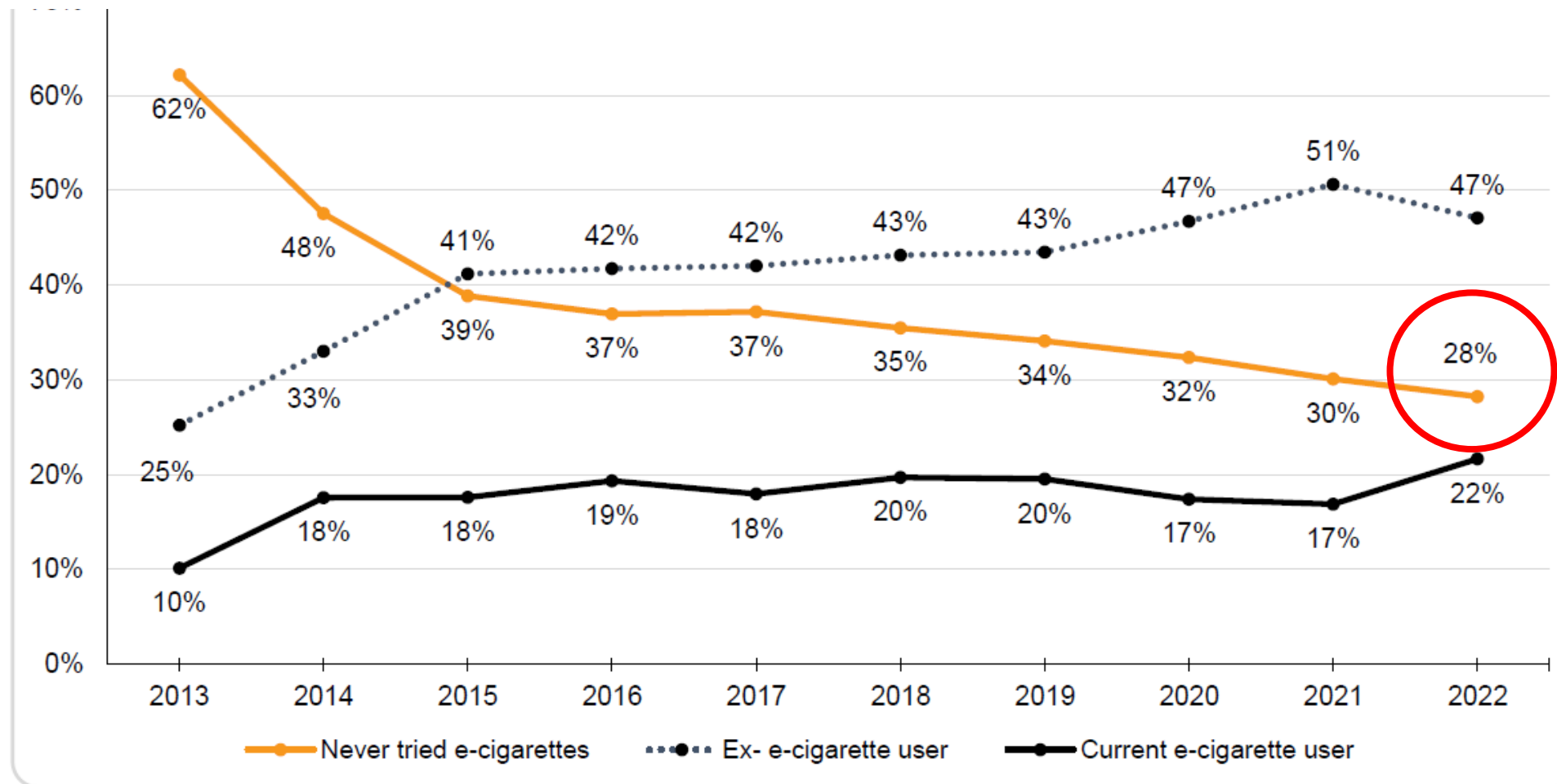
ASH, 2022. Use of e-cigarettes (vapes) among adults in Great Britain (Figure 2)

Satisfaction levels from e-cigarettes compared with smoking in adults, Great Britain 2022, ASH Adult Surveys (Zeller Qus 3&4)



Unweighted base: GB Adults who have ever used e-cigarettes, excluding those that have tried e-cigarettes only once or twice. Current vaper & ex-smoker n= 590; Ex-vapers & current smokers n=442; Current vapers & current smokers n=390.

# E-cigarette use among current adult cigarette smokers – Great Britain (2013-2022) ASH Adult Surveys

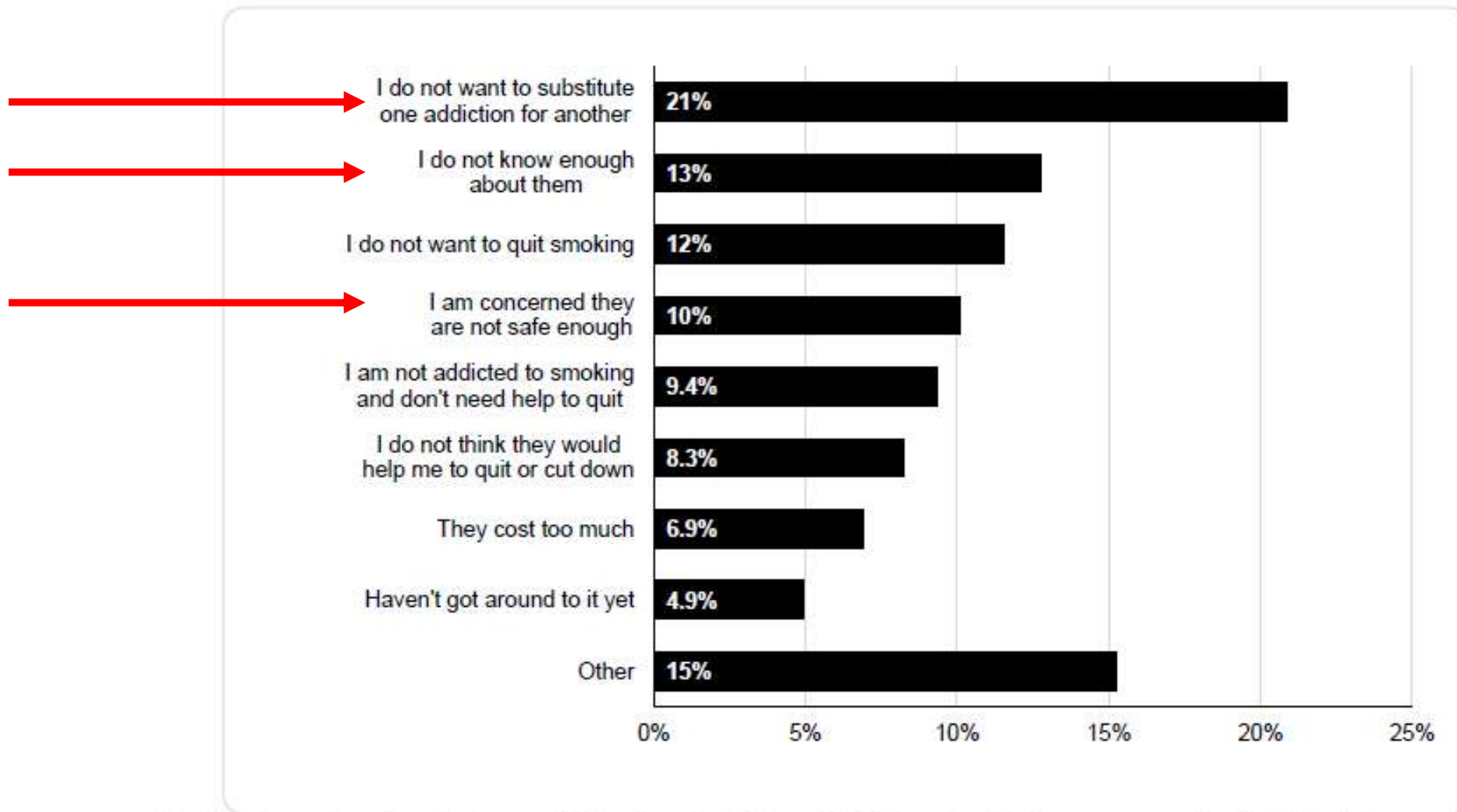


Smokers who have never tried vaping

Unweighted base: GB adult current smokers (2013=1895 2014=1776, 2015=2037, 2016=1704, 2017=1632, 2018=1633, 2019=1777, 2020=1694, 2021=1512, 2022=1751)

ASH, 2022. Use of e-cigarettes (vapes) among adults in Great Britain (FIGURE 2)

Figure 7 - Main reason for not trying an e-cigarette among adult smokers, Great Britain 2022

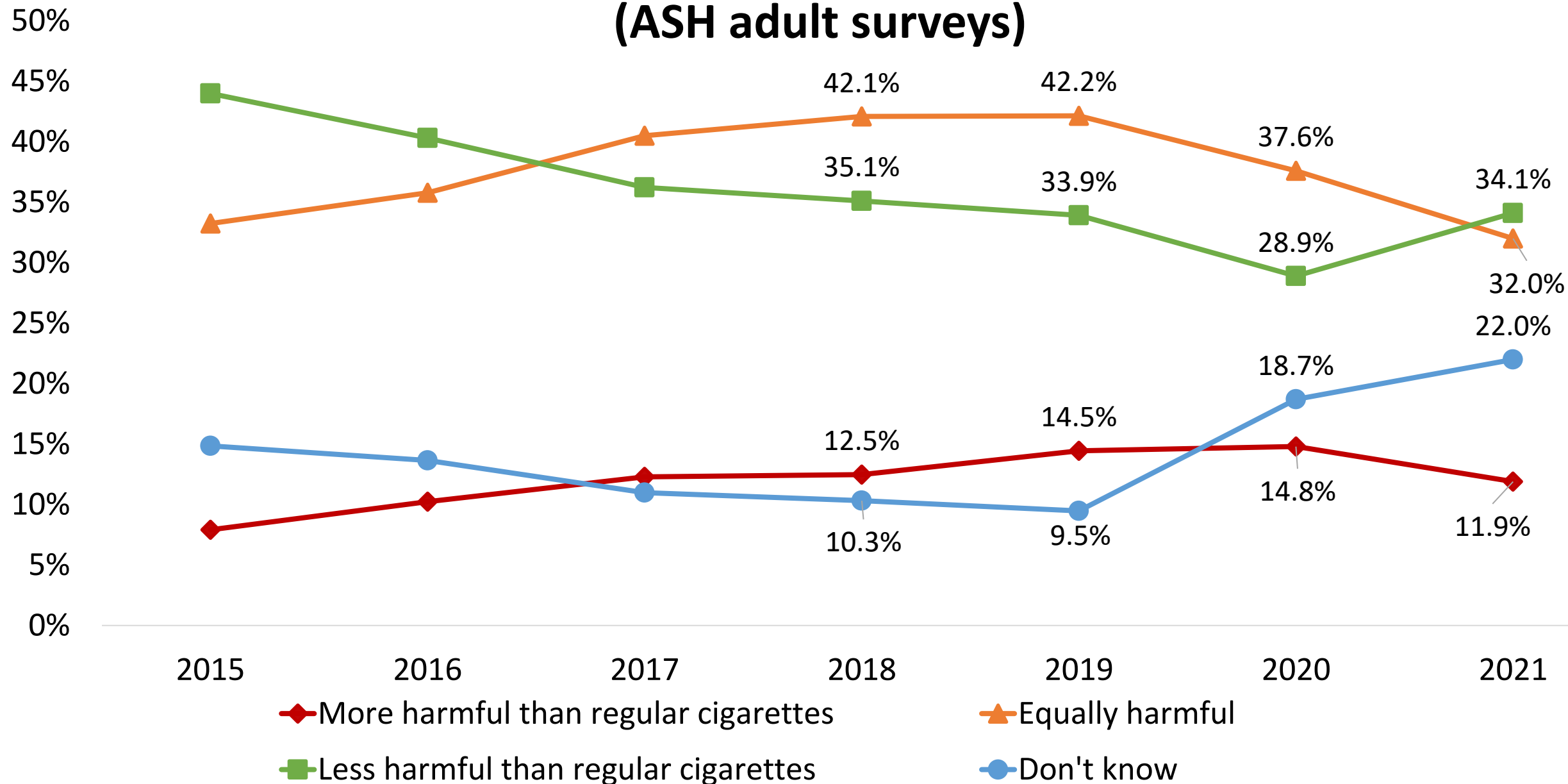


All adult GB current smokers who have not tried e-cigarettes 2022. n=432. Other options to choose are grouped under 'Other'; 'There are too many products to choose from' (3.8%), 'I do not like the way they look' (3.7%), 'I'm using other things to help me quit smoking' (2.7%), 'I would be embarrassed to use them in public' (1.6%), 'They are too difficult to get hold of' (0.3%) and 'Other' (3.2%).

ASH, 2022. Use of e-cigarettes (vapes) among adults in Great Britain (Figure 7)



# Vaping risk perceptions among adult smokers in England (ASH adult surveys)



# Systematic literature review: Vaping risk perceptions & communications

**NIHR** | National Institute for Health Research

**PROSPERO**  
International prospective register of systematic reviews

[Print](#) | [PDF](#)

**E-cigarette risk perceptions and communications: a systematic review**

*Katherine East, Erikas Simonavicius, Debbie Robson, Leonie Brose, Eve Taylor, Lynn Kozlowski, Ann McKeown*

**Citation**  
Katherine East, Erikas Simonavicius, Debbie Robson, Leonie Brose, Eve Taylor, Lynn Kozlowski, Ann McKeown. E-cigarette risk perceptions and communications: a systematic review. PROSPERO. Available from: [https://www.crd.york.ac.uk/prospERO/display\\_record.php?ID=CRD420191111111](https://www.crd.york.ac.uk/prospERO/display_record.php?ID=CRD420191111111)

What interventions have been evaluated for reducing vaping risk perceptions?

To what extent are risk perceptions predictive of any changes in vaping behaviours?

**East et al, poster!**

Records screened

(n = 7,424)

Full-text articles assessed  
(n = 821)

Studies included in  
data synthesis  
(n = 53)

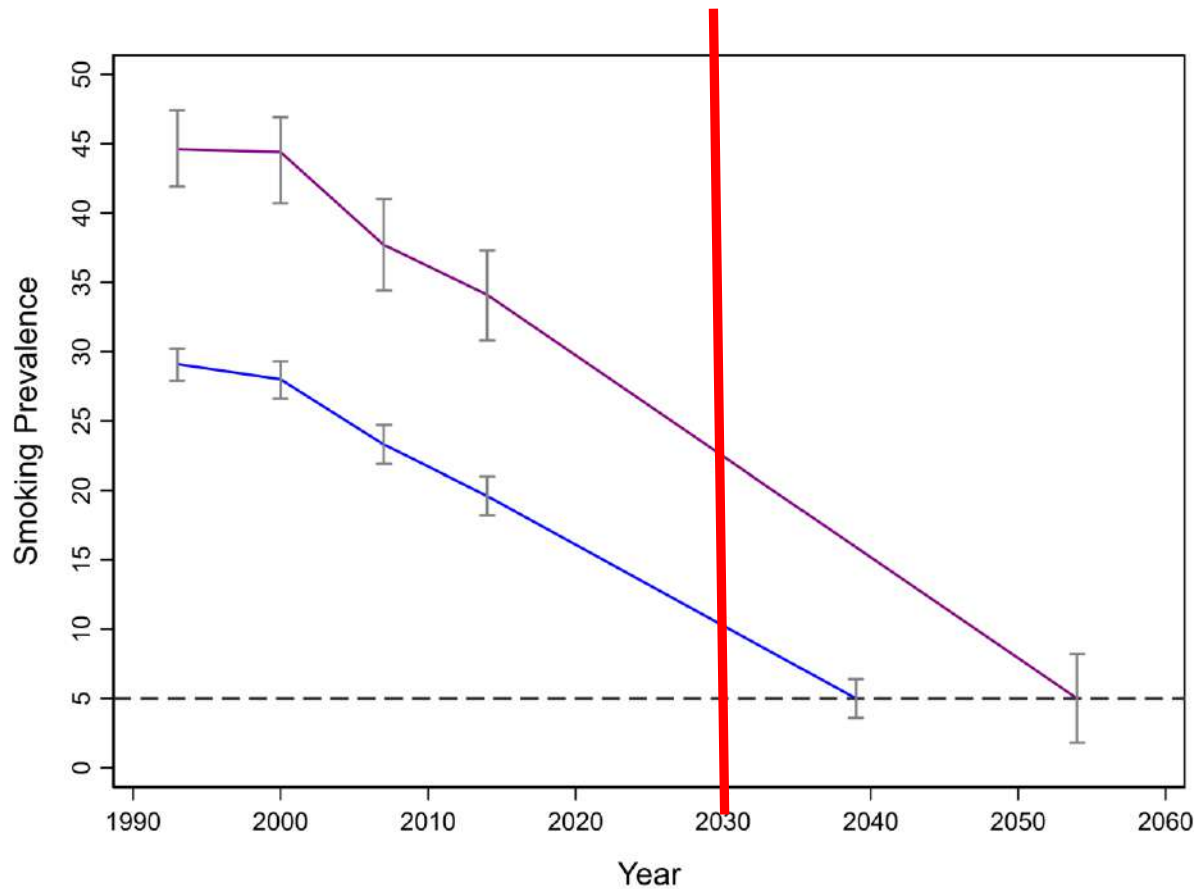
# **SMOKEFREE GOALS & THE VULNERABLE**

Many countries have the ambition to achieve a tobacco/smoking prevalence of 5% or less soon



**What about the vulnerable?**

# Smokefree 2030 in England



- Without a mental health condition
- With a mental health condition

**Assuming no change** - based on mean annual percentage point (i.e. not percentage rate) decrease in smoking prevalence estimated using weighted APMS data from Great Britain overall

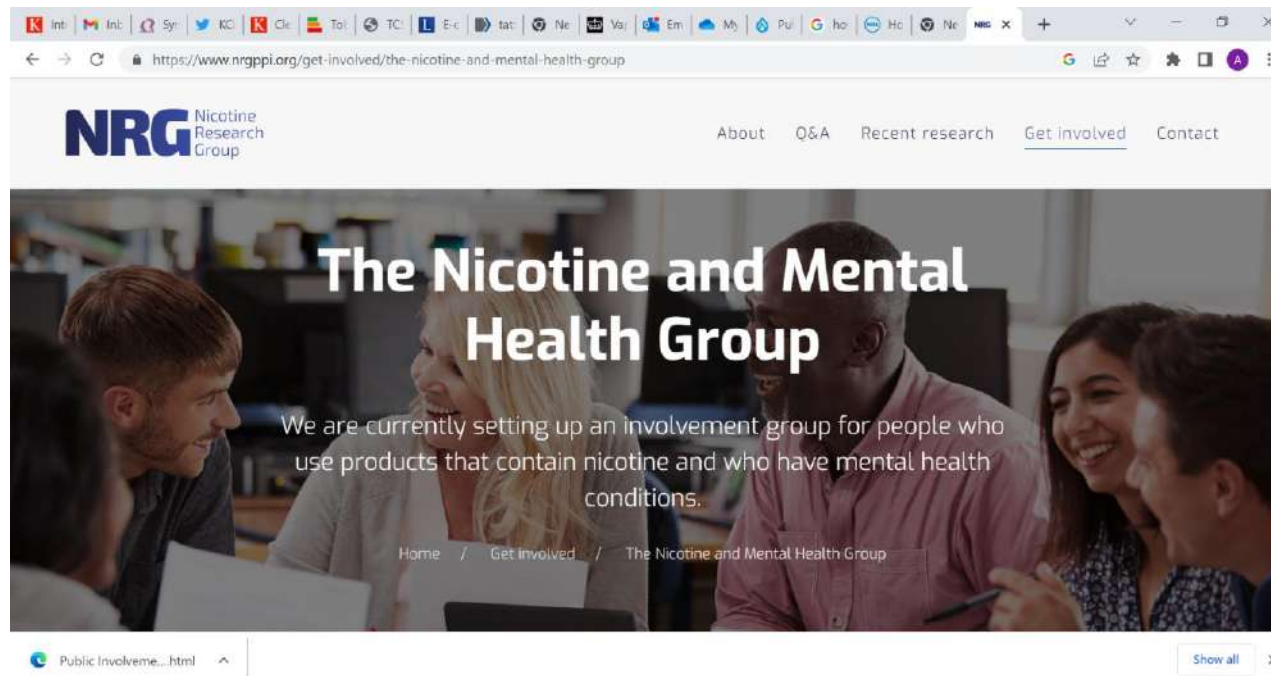
**No mental health condition<sup>1</sup>:** smoking prevalence in this group will reach **5% in 2039** (18 years from 2020; 95% CI: 17.6 to 20.4 years).

**Mental health condition<sup>2</sup>:** smoking prevalence in this group will reach **5% in 2054** (34.3 years from 2020; 95% CI: 31.1 to 37.5 years).

<sup>1</sup>Based on 0.60% percentage-point decrease in smoking prevalence per year for non-MHC group and <sup>2</sup>0.74% percentage-point decrease in smoking prevalence per year for MHC group

# Listening to smokers ....

## ...& other nicotine users..



# New Tobacco Control Plan

Prior Tobacco Control Plan  
2017-2022

## Ambitions:

- The new plan will aim to reduce tobacco consumption for all
- Increase support for those with mental health conditions
- Backing evidence based innovations to support quitting





# What strategies will help the most vulnerable?



- 8 studies, inconclusive evidence
- Suggestion that increased exposure to mental health specific campaigns may be effective
- Further research needed to examine messages that address mental health

- Mass media campaigns
- Plain packaging
- Taxation
- ....

More research on strategies that impact the most vulnerable in society

# E-cigarettes for smoking cessation in people with a mental health condition (2020 report+)

	Caponnetto 2013	Pratt 2014	O'Brien 2014	Valentine 2018	Hickling 2019	Caponnetto* 2021
<b>Diagnosis</b>	Schizophrenia	Schizophrenia or bipolar	Px'd mental health meds	Dual diagnosis	Psychosis	Schizophrenia
<b>Sample size</b>	14	19	86	43	50	40
<b>Study design</b>	Single group, pre post	Single group, pre post	Secondary analysis RCT	Single group, pre post	Single group, pre post	Single group, pre post
<b>Nicotine strength (&amp; device)</b>	7.5mg/ml  (cigalike)	?  (tank)	16mg/ml & omg  (cigalike)	12/ 24/ 27mgs/ml (tank)	45mg/ml  (cigalike_	50mg/ml  (pod)
<b>Intent to quit</b>	No	No	Yes	No	No	No
<b>Quit rate (longest FU)</b>	14% (1yr)	10% (4 wks)	6% (6mo)	7% (4 wks)	7% (6 wks)	40% (3 mo)

No adverse effects on mental health

McNeill et al, 2020, <https://www.gov.uk/government/publications/vaping-in-england-evidence-update-march-2020>

Caponnetto et al, 2021, doi:[10.1093/ntr/ntab005](https://doi.org/10.1093/ntr/ntab005)

# How to meet Smokefree 2030 with focus on the vulnerable?



Office for Health  
Improvement  
& Disparities

Independent report

## **Independent review of Smokefree 2030 policies: terms of reference**

Published May 2022



Javed Khan,  
OBE, review

<https://www.gov.uk/government/publications/independent-review-of-smokefree-2030-policies-terms-of-reference/independent-review-of-smokefree-2030-policies-terms-of-reference#fnref:1>

# Making Smoking Obsolete: Javid Khan, OBE

## The Khan Review: Independent review into smokefree 2030 policies

Four critical recommendations are boxed in red. These are 'must dos' for the government to achieve a smokefree England by 2030, around which all other interventions are based.

### Part 1: Invest Now

**REC 1: Urgently invest £125m per year in interventions to reach smokefree 2030.**

Option 1: Additional funding from within government  
Option 2: A 'polluter pays' industry levy  
Option 3: A corporation tax surcharge

### Part 3: Quit for Good

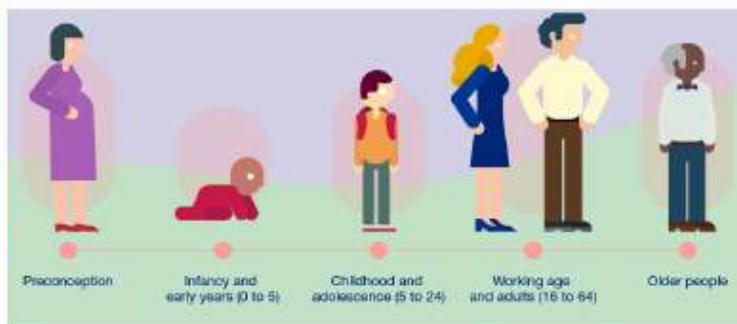
**REC 8: Offer vaping as a substitute for smoking, alongside accurate information on the benefits of switching, including to healthcare professionals.**

**REC 9:** Invest an additional £70 million per year into 'stop smoking services', ringfenced for this purpose.

**REC 10:** Invest £15 million per year in a well-designed national mass media campaign, supported by targeted regional media.

### Part 2: Stop the Start

**REC 2: Raise age of sale of tobacco by one year, every year.**



The image above shows the lifecycle of a smoker. From smoking in pregnancy and the impact on the unborn baby, to old age, where 2/3 lifetime smokers will likely die from smoking. Interventions are needed at all stages of a person's life.

**REC 3:** Substantially raise the cost of tobacco duties (more than 30%) across all tobacco products, immediately. Abolish all duty free entry of tobacco products at our borders.

**REC 4:** Introduce a tobacco licence for retailers to limit where tobacco is available.

**REC 5:** Enhance local illicit tobacco enforcement by dedicating an additional funding of £15 million per year to local trading standards.

**REC 6:** Reduce the appeal of smoking by radically rethinking how cigarette sticks and packets look, closing regulatory gaps and tackling portrayals of smoking in the media.

**REC 7:** Increase smokefree places to de-normalise smoking and protect young people from second-hand smoke.

### Part 4: System Change

**REC 11: The NHS needs to prioritise prevention, with further action to stop people smoking, providing support and treatment across all its services, including primary care**

**REC 12:** Invest £15m per year to support pregnant women to quit smoking in all parts of the country.

**REC 13:** Tackle the issue of smoking and mental health.

**REC 14:** Invest £8m to ensure regional and local prioritisation of stop smoking interventions through ICS leadership.

**REC 15:** Invest £2 million per year in new research and data, including investing £2 million in an innovation fund.

# Making Smoking Obsolete: Recommendation 8

## Vaping

Recommendation 8. Offer vaping as a substitute for smoking, alongside accurate information on the benefits of switching, including to healthcare professionals

The government should accelerate the path to prescribed vapes & provide free Swap to Stop packs in deprived communities, while preventing young people's uptake of vapes by banning child friendly cartoon packaging & descriptions



# What should our main aims be?

(Zeller Qus 1&2)

- To reduce the death & disease caused by tobacco use
- To reduce addiction to nicotine
- To eliminate the tobacco industry



# Tobacco industry & independent e-cigarette manufacturers?

*Nicotine and Tobacco Research*, 2022, 24, 1003–1011  
<https://doi.org/10.1093/ntr/ntab253>  
Advance access publication 9 December 2021  
Original Investigation



## **The Use of Tobacco Industry Vaping Products in the UK and Product Characteristics: A Cross-Sectional Survey**

Elliot J Cornish MSc<sup>1</sup>, Leonie S Brose PhD<sup>1,2,✉</sup>, Ann McNeill PhD<sup>1,2</sup>

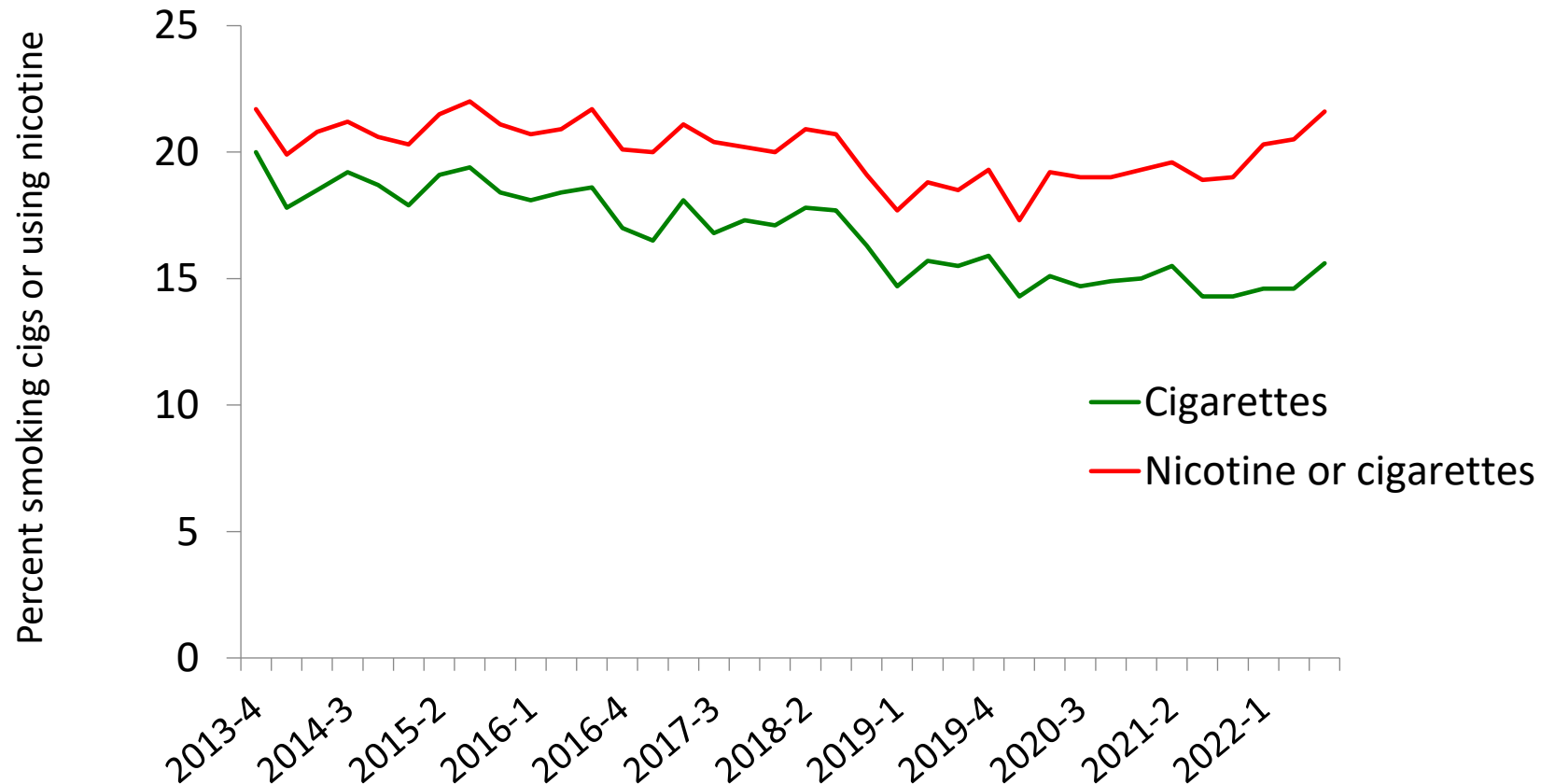
<sup>1</sup>Addictions Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

Analysis of King's internet cohort survey 2019 wave – daily or non-daily vapers who had reported their brand

- 53.4% used tobacco industry products



# Prevalence of nicotine/cigarette use

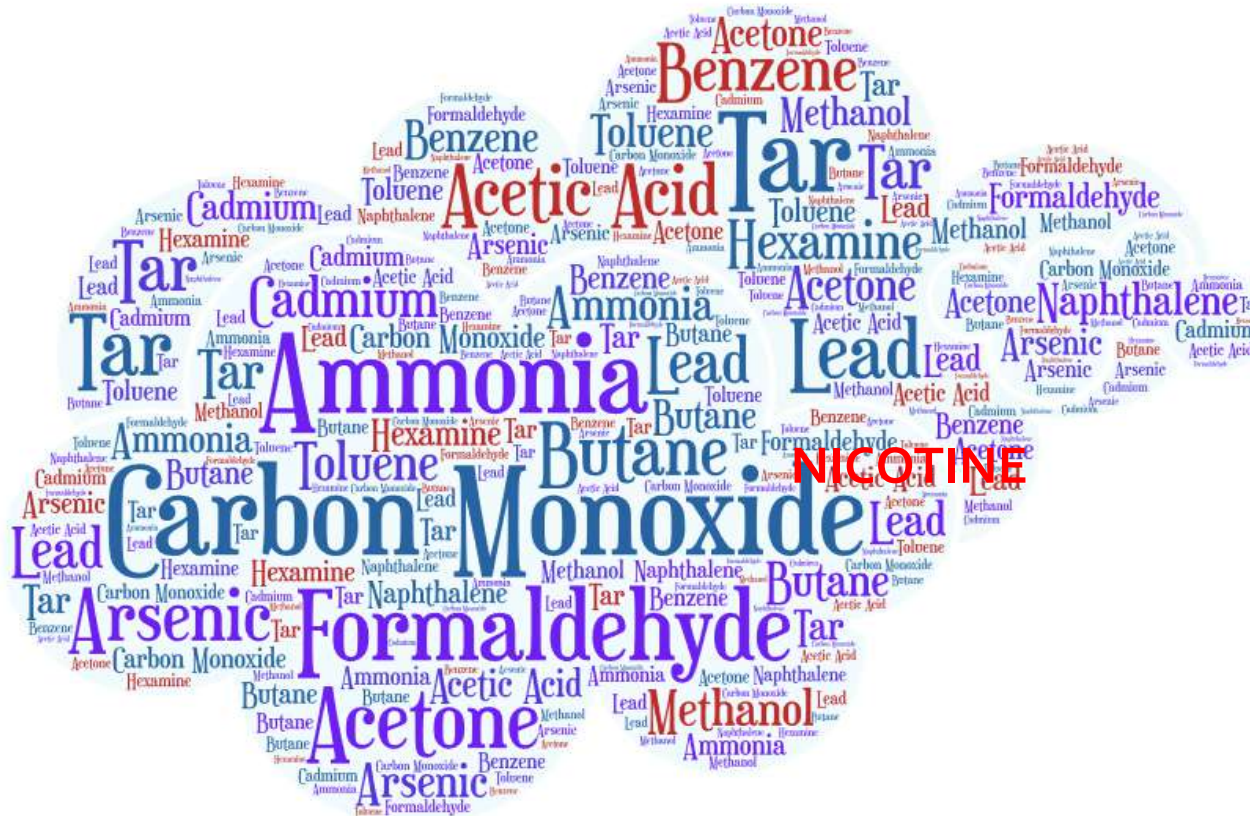


N=179094 adults

# Separate the nicotine from the tobacco smoke



Professor Michael  
Russell,  
1932 - 2009



***"Smokers smoke for the nicotine, but die from the tar" (1979)***

***"It is not so much the efficacy of new nicotine delivery systems as temporary aids to cessation but their potential as long-term alternatives to tobacco that makes the virtual elimination of tobacco a realistic future target" (1991)***

# Summary

- People who smoke are vulnerable, as are youth, but they overlap
- **Smoking declined** in adults & youth since vaping emerged on the market
- **Smoking may be stabilising** – research underway to understand this in light of COVID19/ absence of any recent new tobacco control strategies
- **Vaping prevalence** seen **recent increases in both adult & youth vaping & disposables** likely playing a role, but **may** be helping smoking cessation
- Need to continue monitoring smoking & vaping
- **Smokefree 2030 targets need to include the vulnerable & we should listen to what they think!**
- Research exponentially increasing, but some methodological limitations



@KingsNRG

NRG colleagues here in Paris



<https://ash.org.uk/about/who-we-work-with/mental-health-smoking-partnership>

Thank **you** for listening!

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