



Office for Health  
Improvement  
& Disparities

# ***E-Cigarettes: Friend or Foe?***

Martin Dockrell

Office of Health Improvement & Disparities

# Friend or foe?



“The message is clear, if the choice is between smoking and vaping, choose vaping. If the choice is between vaping and fresh air, choose fresh air”

**Dr Jeanelle DeGruchy,  
Deputy Chief Medical Officer for England**

The evidence review is the eighth in a series of independent reports on vaping originally commissioned by Public Health England and now by the Office for Health Improvement and Disparities in the Department of Health and Social Care. This report was led by academics at King's College London with a group of international collaborators and is the most comprehensive to date. Its main focus is a systematic review of the evidence on the health risks of nicotine vaping

**[Nicotine vaping in England: 2022 evidence update - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/evidence-reviews/nicotine-vaping-in-england-2022-evidence-update)**



# A smokefree generation: Making smoking obsolete

## Stopping the start:

- Increasing tobacco minimum age of sale by 1 year, every year
- Preventing youth vaping with school based education and further regulation consulting on Point of Sale Display, restricted packaging, disposable vapes
- Investing in enforcement

## Starting the stop:

- Doubling budgets for local stop smoking
- National role out of swap to stop
- High impact marketing campaigns



# Creating a smokefree generation & tackling youth vaping

**1. Creating a smokefree generation:** consulting on the smokefree generation policy and its scope.

**2. Tackling youth vaping:** consulting on several options to ensure we take the most appropriate and impactful steps, building on England's analysis of the youth vaping call for evidence.

**3. Enforcement:** consulting on the proposal to introduce new powers for local authorities in England and Wales to issue fixed penalty notices to enforce age of sale legislation of tobacco products and vapes.

- Restricting vape flavours
- Regulating point of sale displays
- Regulating vape packaging and product presentation
- Restricting the supply and sale of disposable vaping products
- Non-nicotine vapes and other nicotine consumer products

This consultation closes at 11:59pm on **6 December 2023**



# Two Vaping objectives

## Maximising opportunities for switching by smokers

- Increase the opportunity for smokers to switch
- Improve the awareness amongst HCPs
- Improve understanding of safety amongst HCPs & public
- Improve smokers perception of the benefits of switching
- Increase the availability of vapes through the medicinal route



## Prevent non-smokers and youth from starting

- Prevent children and young people from starting
- Prevent the sales of vaping products to u18s
- Not encourage nicotine naïve adults to start



# Stopping the start: our new plan to create a smokefree generation

*“The government is committed to having the biggest impact possible in reducing youth vaping. The government is also conscious of the potential impact that new policies may have on adult smokers looking to quit and the associated health benefits, as vaping is substantially less harmful than smoking and can be an effective tool in supporting adult smokers to quit. Ensuring vapes can continue to be made available to current adult smokers is vital to tackle smoking.”*

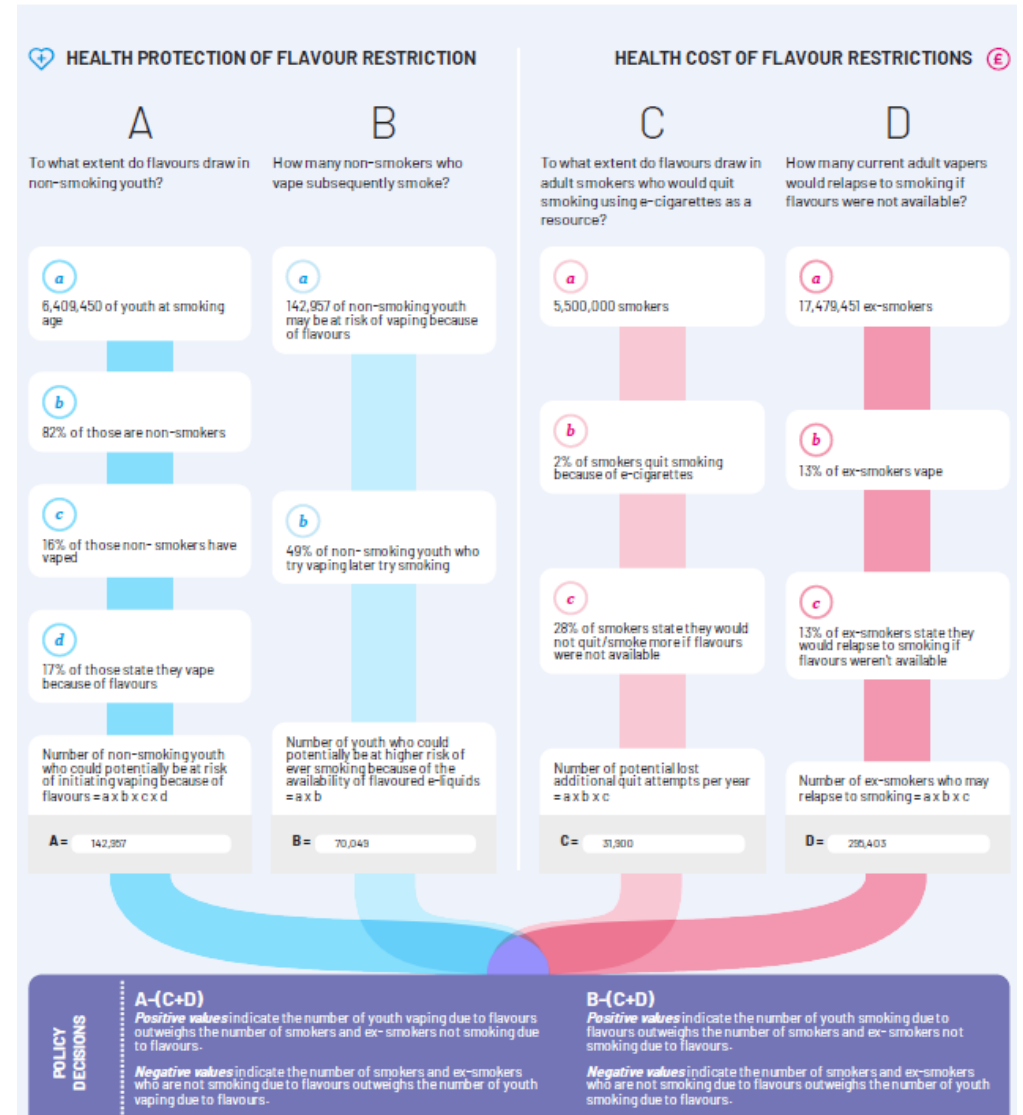


# Priorities in tension but not in conflict

The overall goal is to minimise harm.

- Vapes and smoked tobacco are economic substitutes. When one becomes less attractive, consumption switches to the other.
- Children can be harmed by smoking through direct exposure, secondhand smoke, role models, sick carers and smoking induced poverty.
- Our challenge is to find ways to reduce vaping that don't increase harms from smoking.

## E-LIQUID POLICY DECISION AID



# What price to reduce youth vaping?

*“Our findings linking ENDS flavor restrictions to **an additional 15 cigarettes sold for every 1 less 0.7mL ENDS pod sold** suggest increased cigarette sales could partly or more than fully offset any public health benefit of reducing ENDS use by restricting or prohibiting flavors. Indeed, that trade off equates to **over a pack more cigarettes per pod** for the size of current leading products”*

Friedman, Abigail, et al. "E-cigarette Flavor Restrictions' Effects on Tobacco Product Sales." *Available at SSRN* (2023).

## **E-cigarette Flavor Restrictions' Effects on Tobacco Product Sales**

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**Version:** September 26<sup>th</sup>, 2023

### **Abstract**

Over 375 US localities and 7 states have adopted permanent restrictions on sales of flavored electronic nicotine delivery systems (“ENDS”). These policies’ effects on combustible cigarette use (“smoking”), a more lethal habit, remain unclear. Matching new flavor policy data to retail sales data, we find a tradeoff of 15 additional cigarettes for every 1 less 0.7 mL ENDS pod sold due to ENDS flavor restrictions. Further, cigarette sales increase even among brands disproportionately used by underage youth. Thus, any public health benefits of reducing ENDS use via flavor restrictions may be offset by public health costs from increased cigarette sales.

**Conflicts of Interest:** None. None of the authors have ever accepted funds from the tobacco or vaping industries.

**Funding:** This research is supported by a rapid response project through the Center for the Assessment of Tobacco Regulations, funded by National Institutes of Health (NIH) award number 5U54CA229974-05 from the National Cancer Institute (NCI) and Food and Drug Administration (FDA), and by award number R01DA045016 from the National Institutes on Drug Abuse (NIDA). Funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication. Content is solely the responsibility of the authors and does not necessarily represent the official views



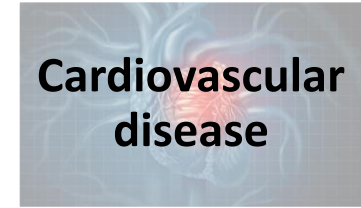
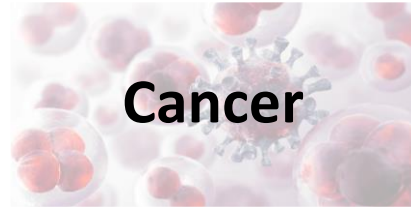


# Nicotine Vaping in England 2022: Topline

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

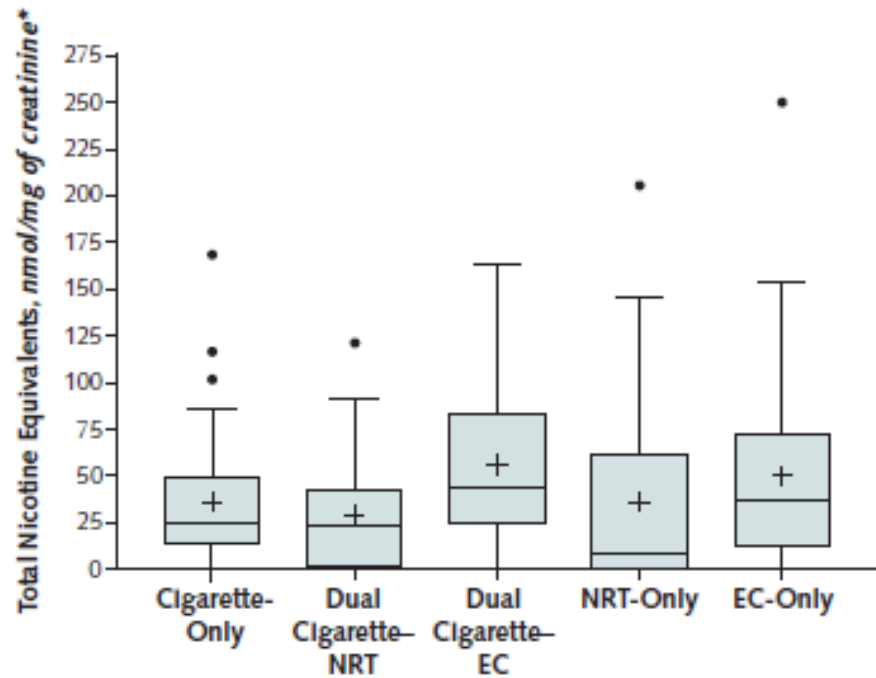
*This does not mean vaping is risk-free, particularly for people who have never smoked*

# Nicotine Vaping in England 2022

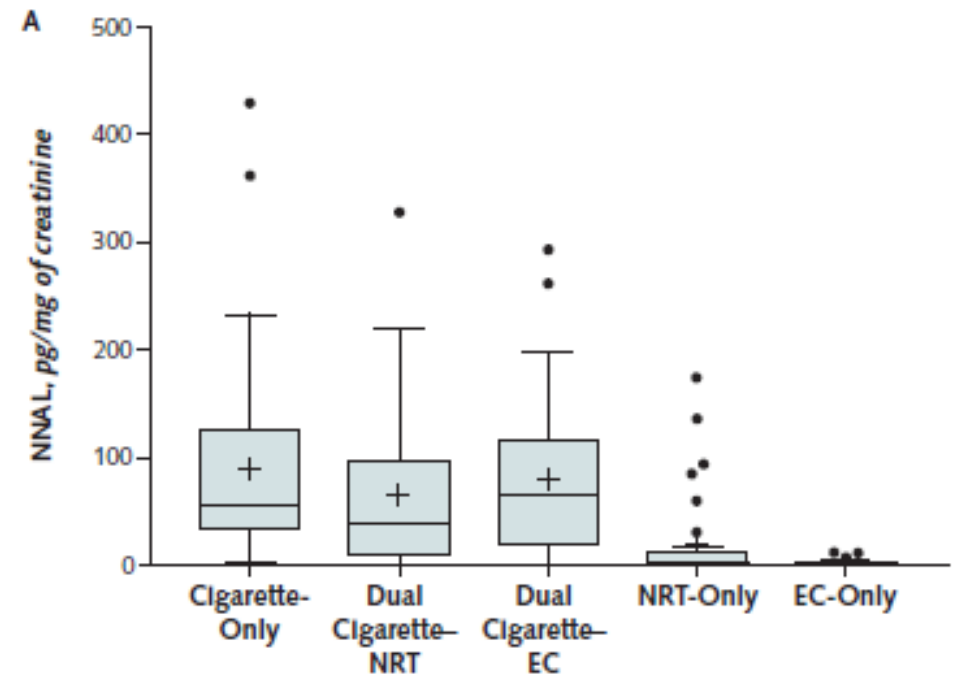


<b>Vaping vs smoking</b>	Exposure to carcinogens is <i>significantly lower</i>	Exposure to respiratory related toxicants is <i>significantly lower</i>	Exposure to CVD-related toxicants is <i>significantly lower</i>
<b>Vaping vs non use</b>	Exposure to carcinogens <i>similar</i> or, in cases of some carcinogens, <i>higher</i>	Exposure to <i>most</i> respiratory related toxicants <i>similar</i>	Exposure to CVD-related toxicants <i>similar</i>

# “A small fraction of the risk”



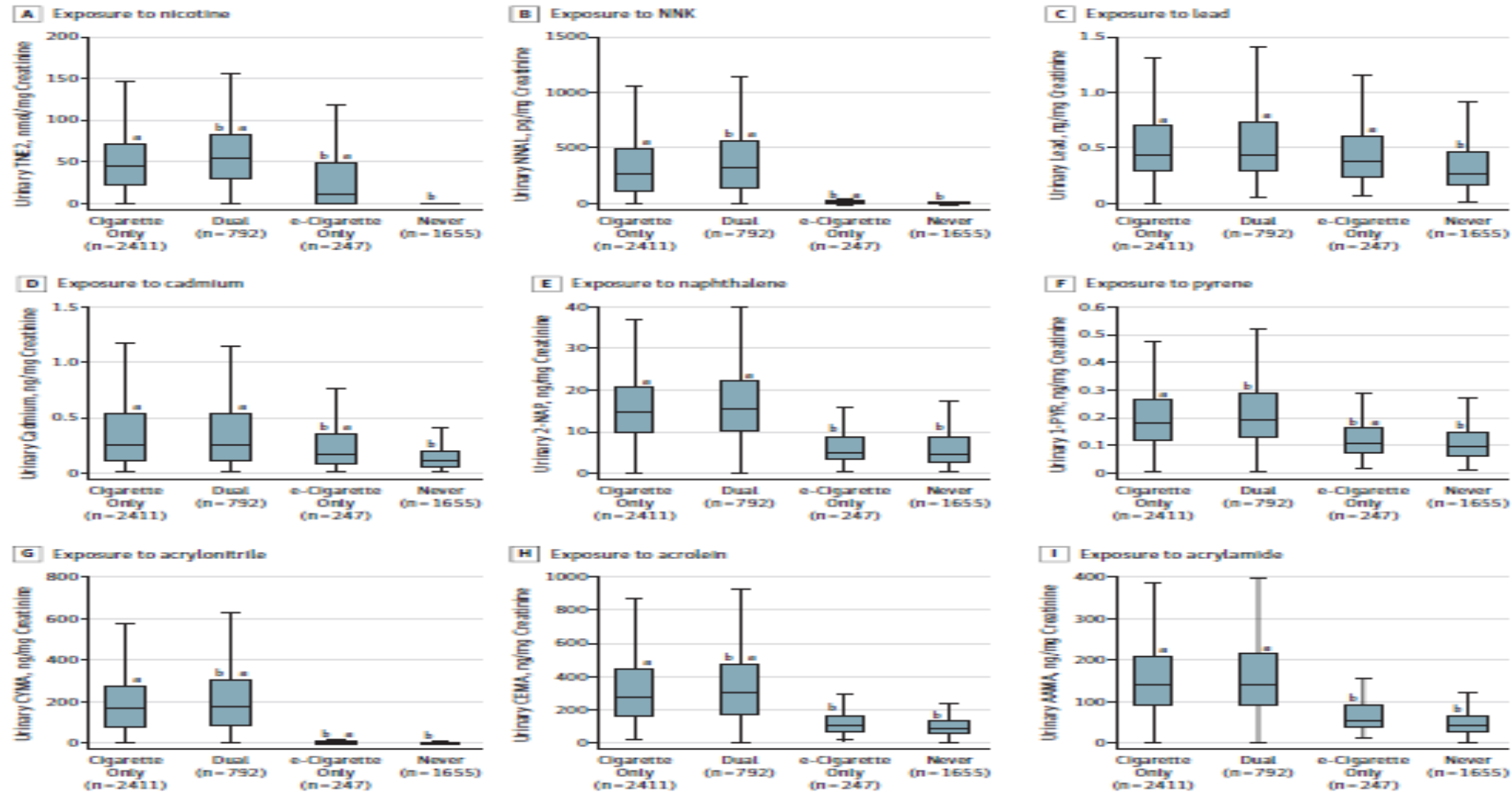
Nicotine equivalence



Toxins and carcinogens



# “A small fraction of the risk”




# Vaping to quit smoking: NICE

## A first line treatment

- Give clear, consistent and up-to-date information about nicotine-containing e-cigarettes to adults who are interested in using them to stop smoking (eg the [NCSCT e-cigarette guide](#) and [Public Health England's information on e-cigarettes and vaping](#))
- Advise adults how to use nicotine-containing e-cigarettes.
- Discuss: how long the person intends to use nicotine-containing e-cigarettes for; using them for long enough to prevent a return to smoking **and** how to stop using them when they are ready to do so.
- Ask adults using nicotine-containing e-cigarettes about any side effects or [safety](#) concerns that they may experience. Report these to the [MHRA Yellow Card scheme](#), and let people know they can report side effects directly.
- Explain to adults who choose to use nicotine-containing e-cigarettes the importance of getting enough nicotine to overcome withdrawal symptoms, and explain how to get enough nicotine.

**NICE** National Institute for Health and Care Excellence

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## Tobacco: preventing uptake, promoting quitting and treating dependence

NICE guideline [NG209] Published: 30 November 2021  
Last updated: 04 August 2022

- Guidance
- [Tools and resources](#)
- [Information for the public](#)
- Evidence
- History
- Overview
- Recommendations on preventing uptake

# Vaping to quit smoking: Cochrane Review



- “There is **high-certainty evidence** that ECs with nicotine increase quit rates compared to NRT and moderate-certainty evidence that they increase quit rates compared to ECs without nicotine. More studies are needed to confirm the effect size.”
- “Confidence intervals were for the most part wide for data on AEs, SAEs and other safety markers, with no difference in AEs between nicotine and non-nicotine ECs nor between nicotine ECs and NRT. Overall incidence of **SAEs was low across all study arms**. We did not detect evidence of serious harm from nicotine EC, but longest follow-up was two years and the number of studies was small.”
- “For every 100 people using nicotine e-cigarettes to stop smoking, 8 to 12 might successfully stop, compared with only 6 of 100 people using NRT”



# Do vapers quit smoking without support?

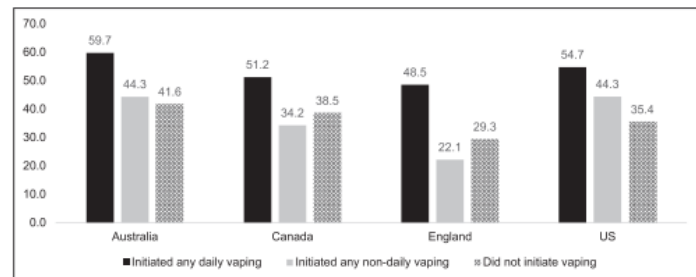


Fig. 2a. Proportion of daily cigarette smokers who attempted to quit smoking, by country and vaping status.

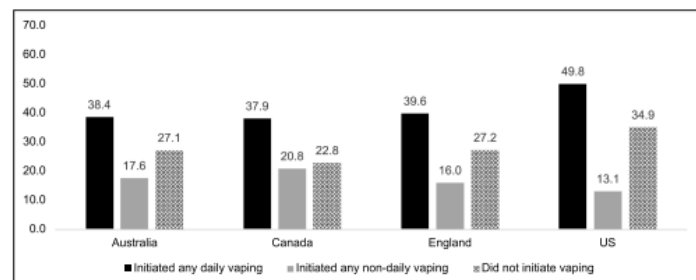


Fig. 2b. Proportion of daily cigarette smokers who quit smoking among those who made a quit attempt, by country and vaping status.

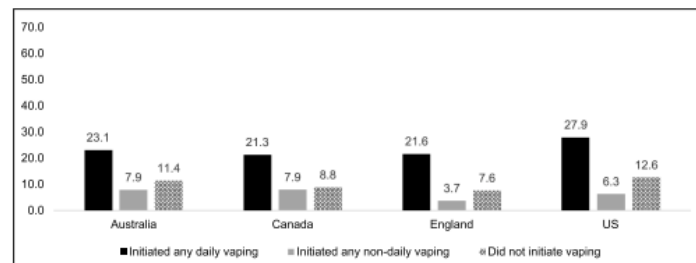


Fig. 2c. Proportion of daily cigarette smokers who quit smoking among all respondents, by country and vaping status.

- Among adults who smoke daily, and are likely highly dependent on nicotine, the initiation of daily NVP use was associated with increased quit attempts and abstinence from smoking.
- Those who continued to vape daily across time, were the most successful at quitting smoking.
- **Complete cigarette substitution may be more likely to be achieved when NVPs are used daily.**



Addictive Behaviors  
Volume 132, September 2022, 107339



## Differences in cigarette smoking quit attempts and cessation between adults who did and did not take up nicotine vaping: Findings from the ITC four country smoking and vaping surveys

Shannon Gravely <sup>a,\*,</sup>, Gang Meng <sup>a</sup>, David Hammond <sup>b</sup>, Andrew Hyland <sup>c</sup>, K. Michael Cummings <sup>d</sup>, Ron Borland <sup>e</sup>, Karin A. Kasza <sup>c</sup>, Hua-Hie Yong <sup>f</sup>, Mary E. Thompson <sup>g</sup>, Anne C.K. Quah <sup>h</sup>, Janine Ouimet <sup>g</sup>, Nadia Martin <sup>g</sup>, Richard J. O'Connor <sup>c</sup>, Katherine A. East <sup>h, i</sup>, Ann McNeill <sup>h, i</sup>, Christian Boudreau <sup>g</sup>, David T. Levy <sup>j</sup>, David T. Smeaton <sup>k</sup>, Geoffrey T. Fong <sup>a, h, i</sup>

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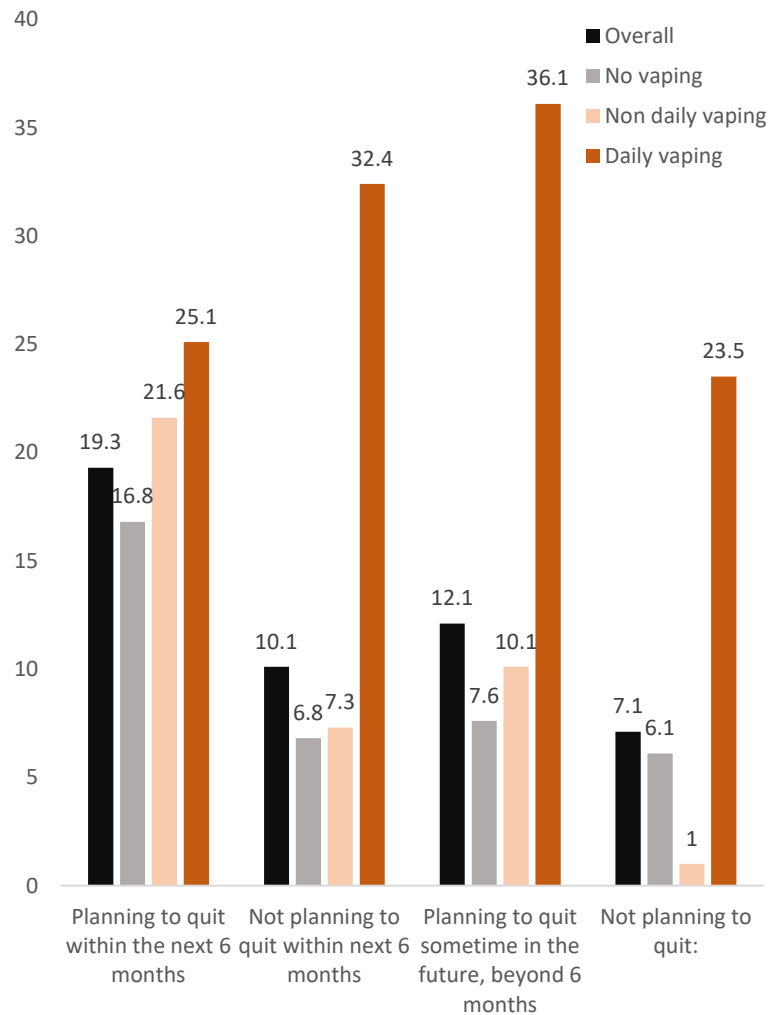
### Highlights

- There is mixed evidence whether nicotine vaping products (NVPs) can help adults quit smoking.
- Some evidence suggests that more frequent vaping is associated with increased abstinence from smoking.
- We found that compared to daily smokers who did not initiate vaping, daily vaping was associated with a greater likelihood of quitting smoking.
- Non-daily vaping was not associated with quit attempts or quit success compared to those who did not initiate vaping.
- These findings demonstrate that complete cigarette substitution may be more likely achieved when daily smokers use NVPs daily.



# Do vapers quit smoking by accident?

Smoking cessation at follow up



- Overall, 12.7% of smokers quit smoking at follow up.
- Among smokers planning to quit, smoking cessation rates were similar between those who did and did not take up daily vaping
- Smokers **not** initially planning to quit within 6 months experienced higher odds of smoking cessation when they took up daily vaping versus no vaping
- **Daily vaping appears to be strongly associated with smoking cessation among smokers with no initial plans to quit smoking.**

Received: 3 March 2022 | Accepted: 6 September 2022  
DOI: 10.1111/add.16050

RESEARCH REPORT

ADDICTION **SSA**

## Associations between nicotine vaping uptake and cigarette smoking cessation vary by smokers' plans to quit: longitudinal findings from the International Tobacco Control Four Country Smoking and Vaping Surveys

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### Abstract

**Background and Aims:** Most population studies that evaluate the relationship between nicotine vaping and cigarette cessation focus on limited segments of the smoker population. We evaluated vaping uptake and smoking cessation considering differences in smokers' plans to quit.

**Design:** Longitudinal International Tobacco Control (ITC) Four Country Smoking and Vaping Surveys were conducted in 2016, 2018 and 2020.

**Setting:** This study was conducted in the United States, Canada, England and Australia. **Participants:** Participants of this study were adult daily cigarette smokers who had not vaped in the past 6 months at baseline and had participated in two or more consecutive waves of the ITC Four Country Smoking and Vaping Surveys ( $n = 2815$ ).

**Measurements:** Plans to quit cigarette smoking was assessed at baseline (within 6 months, beyond 6 months, not planning to quit) and at follow-up (within 6 months vs not within 6 months), cigarette smoking cessation was assessed at follow-up (smoking less than monthly [including complete cessation] vs daily/weekly/monthly smoking) and inter-wave vaping uptake was assessed between baseline and follow-up (none, only non-daily vaping and any daily vaping). Generalized estimating equations were used to evaluate whether inter-wave vaping uptake was associated with smoking cessation at follow-up and with planning to quit at follow-up, each stratified by plans to quit smoking at baseline.

**Findings:** Overall, 12.7% of smokers quit smoking. Smokers not initially planning to quit within 6 months experienced higher odds of smoking cessation when they took up daily vaping (32.4%) versus no vaping (6.8%); adjusted odds ratio [AOR], 8.58; 95% CI, 5.06–14.54). Among smokers planning to quit, smoking cessation rates were similar between those who did and did not take up daily vaping (25.1% vs 16.8%; AOR, 1.91; 95% CI, 0.91–4.00), although we could not account for potential use of cessation aids. Daily vaping uptake was associated with planning to quit smoking at follow-up among those initially not planning to quit (AOR, 6.32; 95% CI, 4.17–9.59).

**Conclusions:** Uptake of nicotine vaping appears to be strongly associated with cigarette smoking cessation among smokers with no initial plans to quit smoking. Excluding



# Creating a smokefree generation & tackling youth vaping

- Restricting vape flavours
- Regulating point of sale displays
- Regulating vape packaging and product presentation
- Restricting the supply and sale of disposable vaping products
- Non-nicotine vapes and other nicotine consumer products

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# Friend or foe?

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If the choice is between vaping and fresh air, choose fresh air”

**Dr Jeanelle DeGruchy,  
Deputy Chief Medical Officer for England**



# Coming soon. The ADPH East of England nicotine vaping position statement.



## POSITION ON NICOTINE VAPING

the single biggest cause of preventable illness and death worldwide (WHO, 2019), with an estimated 7,000 people in the East of England dying each year from smoking (OHID, 2022). Tobacco is also a significant driver of health inequalities (ASH, 2019). Our tobacco control must be to reduce the number of people who smoke a known product.

It is clear that, for smokers, vaping is a much less harmful option, and in the short term, vaping poses a small fraction of the risks of smoking (Gov.uk, 2022). We believe that vaping is an affordable and accessible alternative for smokers who want to reduce their risk of dying from a smoking-related disease.

The Government's plan to create a smokefree generation. This plan critically depends on the important role vapes play in helping adult smokers to stop smoking.

Therefore, we recognise that vaping is not risk-free (Gov.uk, 2022) and therefore should not be presented as an alternative to, or replacement for smoking, not a recreational product appealing to the wider non-smoking population.

Protecting children and marketing vapes to children is utterly unacceptable (Whitty, 2022). Vaping can help people to quit smoking, those who don't smoke should not be encouraged to start. We must protect the social norms for children and young people away from vaping, reduce the number of young people accessing vape products and the amount of non-compliant vapes for sale. We will work closely with our Trading Standards colleagues to enforce compliance with regulations and to take enforcement action when necessary. We will advocate for tighter e-cigarette regulations where needed, ensuring the right balance between protecting young people and supporting smokers to quit.

For adults who now incorrectly believe e-cigarettes are as, or more harmful than smoking (ASH, 2023). Professor Ann McNeill, of King's College London, said: "Youth vaping is obscuring the fact that switching from smoking will be much better for individual's health. We must not be complacent about youth vaping and further research is needed, but so too is work to ensure more adults stop smoking and vaping is the best option of doing that." (ASH, 2023). We therefore support the delivery of evidence-based interventions among stakeholders and the public to widen understanding and to ensure that switching to vaping is a significantly less harmful option to smoke.

## SMOKING IS OUR BIGGEST KILLER AND A KEY CONTRIBUTOR TO AVOIDABLE HEALTH INEQUALITIES

Smoking is our biggest killer and a key contributor to avoidable health inequalities. It causes disability and premature death. It cuts short lives in the East of England. It causes disability and premature death (Gov.uk, 2023).

Nicotine, which is an addictive substance, but nicotine itself has been shown to help people stop smoking. However, tobacco and the thousands of other chemicals, many of which are known to cause serious health conditions such as respiratory and cardiovascular disease, are the leading cause of death for those who are exposed to second-hand smoke.

Smoking is our biggest killer and a key contributor to avoidable health inequalities.

Smoking (ONS, 2022). Whilst this is in line with the national picture, the smoking rates gap remains within the region. For example, the smoking rate in the East of England is 23.9% (ONS, 2022). This results in a significantly negative impact on health and disability. The economic costs of smoking in the East of England are £1.4bn per annum (ASH, 2023).

In the East of England, the smoking rate is 23.7%, increasing to 39% (OHID, 2022). Those with serious mental illness are five times more likely to smoke (Gov.uk, 2023) and smoking is the largest cause of death in the East of England (Ham et al., 2016). Smoking is also the leading cause of poor health in the East of England at the time of delivery. It costs the East of England approximately £1.8bn each year, with almost £205 million of that spent on social care (ASH, 2023).

Smoking cuts short lives in the East of England. It causes disability and premature death (Gov.uk, 2023).