

## Realising the benefits of e-cigarettes for public health requires a pragmatic approach

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Brillon and Lang raise important questions about e-cigarettes and harm reduction. Here, we explain why a pragmatic approach to maximising e-cigarettes' harm reduction potential is important.

### *Banning tobacco*

Immediately banning the sale of combustible tobacco would not immediately stop smoking. Cigarettes are highly addictive and, while a ban would likely encourage some to quit, others will be unwilling or unable to do so. Banning tobacco would criminalise an addiction and, as with other illicit substances, likely drive demand towards the black market.<sup>1</sup> The same tobacco control scientists who judge e-cigarettes likely to improve public health with proportionate regulation overwhelmingly also support greater deployment of bold evidence-based tobacco control measures (e.g., WHO Framework Convention on Tobacco Control). Opinions on the exact approach vary, but we support the comprehensive packages outlined in the UK Khan review and New Zealand's SmokeFree 2025 action plan, which include SmokeFree generation policies – gradually creating a generation it is illegal for retailers to sell to – and proportionate regulation of alternative nicotine sources, including e-cigarettes.

### *Regulating a diverse e-cigarette market*

The e-cigarette market evolves rapidly and encompasses many different products. However, the mechanism of action is the same: aerosolization of e-liquid, not combustion of tobacco as with cigarettes. While we agree the specific ingredients and features of a given e-cigarette determine its unique risk profile, the absence of combustion underscores the large differences in relative risks between tobacco smoking and e-cigarette use, and thus their harm reduction potential. Standards to minimise consumers' toxicant exposure are important but we would not want to see regulation constrain positive product innovation and effectiveness.

### *The evidence for e-cigarettes*

There is high-certainty evidence from RCTs that e-cigarettes are effective for helping smokers quit.<sup>2</sup> Observational data show a positive population-level impact on smoking in several countries (e.g., the UK and New Zealand).<sup>3,4</sup> Countries with high e-cigarette use have some of the lowest youth smoking rates.<sup>5</sup>

### *Gateway hypothesis*

Studies that have concluded the existence of a 'gateway effect' often have methodological flaws and cannot rule out alternative explanations (e.g., common liability).<sup>5</sup>

### *The tobacco industry*

E-cigarettes were neither created, nor exclusively manufactured nor sold, by the tobacco industry. However, the industry's involvement poses a risk to effective tobacco control and e-cigarette

policies in many countries. It is reasonable, therefore, to remain vigilant and sceptical of industry intentions. Continued independent research and policymaking will be vital to minimise e-cigarettes' harms and maximise their effectiveness.

## References

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## **Declaration of interests**

All authors declare no financial links with tobacco companies, e-cigarette manufacturers, or their representatives.

SJ receives salary support from Cancer Research UK and is a board member for the London Smoking Cessation Transformation Programme (a regional tobacco control programme).

LS has received funding for projects from a variety of funders such as Cancer Research UK (CRUK) and Yorkshire Cancer Research. He has received honoraria for talks, an unrestricted research grant and travel expenses to attend meetings and workshops from Pfizer, and has acted as paid reviewer for grant awarding bodies and as a paid consultant for health care companies.

JB has received funding for projects from a variety of funders such as CRUK and NIHR. He has received unrestricted research funding from Pfizer and J&J, who manufacture smoking cessation medications.

AM has received funding for projects from a variety of funders such as CRUK and NIHR. She was a member of the E-Cigarette Expert Working Group that was convened in 2019 by the Medicines and Healthcare products Regulatory Agency (MHRA) to discuss the licensing process for vaping products and has authored the nicotine vaping evidence reviews commissioned by Public Health England/Office for Health Improvement and Disparities.

CB has received honoraria from the University of Malaya and AUT University for examining students and reviewing postgraduate courses; grants from the New Zealand Ministry of Health paid to his institution for research on the illicit trade in tobacco and New Zealand Smoking Cessation Guidelines; grants from the Health Research Council of New Zealand as a co-investigator on project grants for tobacco cessation research; is a subrecipient of a US National Institutes of Health grant from Wake Forest University, USA, for New Zealand-based surveys on low nicotine tobacco policy; is a member of the International Scientific Committee of the RESPIRE Study (University of Edinburgh), the Scientific Assessing Committee of the Cancer Society of New Zealand, and the Public Health Advisory Committee of the Health Research Council of New Zealand; and is the President, Oceania SRNT Chapter and President-Elect SRNT for the Society for Research on Nicotine and Tobacco.

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