



E-CIGARETTES AND OTHER VAPING PRODUCTS IN HEALTHCARE

POSITION STATEMENT - MARCH 2020

Purpose

This document summarises the Pharmaceutical Society of New Zealand (PSNZ) position on the use of e-cigarettes and other vaping products in health care.

1

Background

The morbidity associated with tobacco smoking is now well established. Smoking is one of the leading causes of preventable death and disease in the New Zealand. Around half of all life-long smokers will die prematurely.^[1]

E-cigarette use in New Zealand has risen in popularity over the last couple of years and has been promoted by some agencies as a safer alternative to smoking tobacco. However, e-cigarettes are not without risk. There is also evidence that smoking rates in New Zealand are not overall decreasing due to the introduction of these products, and many people are continuing to smoke whilst using an e-cigarette.^[2]

The Society supports the need for more research and safety data on the long-term risks and benefits. While many of the substances used in e-cigarettes may be considered safe for oral ingestion little is known about the long-term effects of inhalation or how heating can affect the chemicals in the vaping product. There is some evidence that electronic heating of these products can be toxic.^[3-5] Also, chemical analyses of e-cigarette vapours and liquids have confirmed the presence of some of the same toxins and carcinogens as those found in cigarette smoke.^[6]

Role of vaping products in smoking cessation

A recent Cochrane review found “there is evidence from two trials that vaping products can help smokers to stop smoking in the long term compared with placebo. However, the small number of trials, low event rates and wide confidence intervals around the estimates mean that their confidence in the result is rated 'low' by GRADE standards. The lack of difference between the effect of vaping products compared with nicotine patches found in one trial is uncertain for similar reasons. None of the included studies (short- to mid-term, up to two years) detected serious adverse events considered possibly related to vaping use. The most commonly reported adverse effects were irritation of the mouth and throat. The long-term safety of vaping products is unknown”.^[7] A recent New England Journal of Medical review found that “that e-cigarettes were more successful in supporting many people to quit tobacco smoking than nicotine replacement therapy (NRT).” However, among participants with 1-year abstinence, 80% (63 of 79) were using e-cigarettes at 52 weeks in the e-cigarette group and 9% (4 of 44) were using nicotine replacement in the nicotine replacement group.^[8] This suggests that it was easier for people to stop using NRT products than vaping products. People using vaping products also do not break the hand-to-mouth action associated with smoking cigarettes and the speed of delivery of nicotine to the brain with e-cigarettes is closer to the sensation from tobacco smoking which means the addiction to nicotine is harder to break.^[9]

International position

Around 40 countries have banned e-cigarettes. While legislation has been passed to implement change, the rationale for the different positions is not always clear.

Australia has adopted a precautionary approach, acknowledging potential risks and scientific uncertainty.^[10] All e-cigarette products have been banned from Thailand and India.^[11,12]

The USA has moved to ban flavoured e-cigarettes other than those with menthol and tobacco flavourings. The US Food and Drug Administration (FDA) has said that sweet flavours can encourage vaping and



subsequent tobacco use in teenagers, but tobacco and menthol flavours could encourage adults to move away from tobacco smoking.^[13]

Regulation of e-cigarette products for smoking cessation in New Zealand

If e-cigarettes and related products are going to be used for the management of smoking cessation, as indicated by the government, to address the rising health issue, it is essential that they are treated as a full regulated medicine or medical devices. This approach will also ensure e-cigarettes are seen by the media and general public as a tool to deliver a defined medical outcome rather than a product for recreational use.

Role of health professionals in the use of e-cigarette products for smoking cessation

Health professionals should aim for patients to ultimately be free of nicotine addiction by stopping their use of tobacco and e-cigarette products. Quitting tobacco smoking is most successful with ongoing behavioural support. Any e-cigarette product should also be considered an NRT therapy. There should be appropriate e-cigarette cessation advice and a supportive plan to stop the use of any NRT related product. Pharmacists and their teams should be trained and resourced to provide the support required to help people overcome their nicotine addiction and reduce the long-term use of e-cigarette products.

If pharmacists wish to provide advice or supply e-cigarette products under the proposed Smokefree Environments and Regulated Products (Vaping) Amendment Bill they must comply with the Pharmacy Council Code of Ethics. Pharmacists must also have the ability to refuse the provision of e-cigarette products if they do not wish to be involved with the provision of this type nicotine delivery.

Position statement

PSNZ **recommends** supporting people to quit tobacco smoking and thereby reducing the associated morbidity and mortality as a key priority.

PSNZ **encourages** future research to determine the long-term effects of inhalation of e-cigarette constituents to establish their absolute risk.

PSNZ **recommends** that pharmacist led smoking cessation services should be fully resourced to help people overcome their addiction.

PSNZ **recommends** that e-cigarette flavours be restricted to tobacco, menthol and plain to ensure these products are designed for smoking cessation and prevent non-smokers from taking up vaping.

PSNZ **does not support** the use incentives or loyalty schemes which may encourage the ongoing use of e-cigarette products.

References

1. World Health Organisation. *Tobacco*. 2019 Available from: <https://www.who.int/news-room/fact-sheets/detail/tobacco> [cited 21/3/20]
2. Action for Smoke Free 2025. Available from https://www.ash.org.nz/ash_year_10 [cited 30/3/20].
3. Johnson J. *Does vaping without nicotine have any side effects?* Medical News Today. 2019 Available from: <https://www.medicalnewstoday.com/articles/326489.php> [cited 2/3/20]
4. Salamanca J, et al. *E-cigarettes can emit formaldehyde at high levels under conditions that have been reported to be non-averse to users.* *Sci Rep.* 2018;8:7559; Ogunwale M, et al. *ACS Omega* 2017;2:1207-1
5. Olmedo P, et al *Metal Concentrations in e-Cigarette Liquid and Aerosol Samples: The Contribution of Metallic Coils.* *Environmental Health Perspectives* 2018;126:10.1289/EHP2175
6. National Academies of Science Engineering and Medicine. *Public health consequences of e-cigarettes.* 2018 Available from: <https://www.nap.edu/read/24952/chapter/1> [cited 21/3/20]



7. Hartmann-Boyce J, McRobbie H, Bullen C, Begh R, Stead LF, Hajek P. *Electronic cigarettes for smoking cessation*. Cochrane Database of Systematic Reviews 2016 Available from <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub3/full> [cited 21/3/20]
8. Hajek P, Phillips-Waller A, Przulj D, Pesola F, Smith KM, Bisal N, et al. *A randomized trial of e-cigarettes versus nicotine-replacement therapy*. *New England Journal of Medicine* 2019;380:629-637. Available from: <https://www.nejm.org/doi/pdf/10.1056/NEJMoa1808779?articleTools=true> [cited 21/3/20]
9. Dawkins L. Why is it so hard to quit smoking?. *The British Psychological Society* 2013;26: 332-335. Available from <https://thepsychologist.bps.org.uk/volume-26/edition-5/why-it-so-hard-quit-smoking> [cited 30/3/20]
10. Australian Government, Department of Health. *Policy and regulatory approach to electronic cigarettes (e-cigarettes) in Australia*. 2019 Available from: <https://www.health.gov.au/sites/default/files/documents/2019/12/policy-and-regulatory-approach-to-electronic-cigarettes-e-cigarettes-in-australia-principles-that-underpin-the-current-policy-and-regulatory-approach-to-electronic-cigarettes-e-cigarettes-in-australia.pdf> [cited 21/3/20]
11. Royal Thai Embassy. London. *Electronic cigarettes are illegal in Thailand*. 2017 Available from: <http://www.thaiembassy.org/london/en/services/7747/86207-Prohibition-of-e-cigarettes.htm> [cited 21/3/20]
12. Shri Harsh Vardhan, Minister of Health and Family Welfare, Government of India. *The prohibition of electronic cigarettes (production, manufacture, import, export, transport, sale, distribution, storage and advertisement) Bill, 2019*. 2019 Available from: https://prsindia.org/sites/default/files/bill_files/Bill%20Text%20Prohibition%20of%20Electronic%20Cigarettes.pdf [cited 21/3/20]
13. Hardcastle K, Hughes K, Joanne Worsley J, Bennett A, Ireland R, Sweeney S. *"Most people I know have got one": Young people's perceptions and experiences of electronic cigarettes*. 2014 Available from: http://allcatsrgrey.org.uk/wp/download/public_health/smoking_cessation/Ecig-focus-groups-final-report.pdf [cited 21/3/20]