

5 November 2020



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Committee Secretary
Senate Select Committee on Tobacco Harm Reduction
Department of the Senate
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Dear Dr Hodder

Re: SENATE SELECT COMMITTEE ON TOBACCO HARM REDUCTION

As the voice of stroke in Australia, Stroke Foundation welcomes the opportunity to provide a submission to the Senate Select Committee on Tobacco Harm Reduction.

This year, 27,428 Australians will experience stroke for the first time, and there are more than 445,000 survivors of stroke living in our community¹ - many with an ongoing disability. Unless action is taken, it is estimated by 2050, Australians will experience an additional 23,000 new strokes annually, and there will be an additional 374,000 survivors of stroke living in the community.¹ Yet research indicates 80 percent of strokes can be prevented.²

People who smoke are twice as likely to have a stroke compared with those who have never smoked.³⁻⁶ The more an individual smokes the greater their risk of stroke.⁴ Importantly, an individual's risk of stroke decreases after they quit smoking and stopping smoking has been shown to have both immediate and long-term health benefits. Two to five years after quitting, there is a large drop in an individual's risk of stroke⁷, and after 15 years their risk of stroke is similar to that of a person who has never smoked.⁷ Therefore, Stroke Foundation is strongly supportive of measures to reduce the prevalence of smoking in the Australian community.

In 2018, the National Heart Foundation and Stroke Foundation were commissioned by the Australian Government to develop the National Strategic Action Plan for Heart Disease and Stroke.⁸ A key action of the Action Plan is focused on strengthening existing work to reduce smoking in the community. The Action Plan outlines a number of approaches that should be employed to achieve this action, including the development and funding of a dedicated National Cessation Strategy within the National Tobacco Strategy.

Nicotine vaping products, including e-cigarettes, which are the focus of this Inquiry, have been marketed as smoking cessation aids. These products have been associated with a range of potential health harms, including nicotine addiction and smoking initiation in children and young people, poisoning from e-cigarette liquids, exposure of users and bystanders to e-cigarette aerosol containing harmful and potentially harmful substances, and lung disease.⁹⁻¹⁴ Stroke Foundation does not currently support the use of e-cigarettes.¹⁵ Stroke Foundation endorses the position of the NHMRC, namely, other methods of smoking

cessation have better evidence of safety and efficacy, and health authorities and policy makers should regulate e-cigarettes in such a way that potential harm to users and bystanders is minimised, and vulnerable groups (in particular young non-smokers) are protected.

Please see our responses to the Terms of Reference below.

The treatment of nicotine vaping products in developed countries similar to Australia (such as the United Kingdom (UK), New Zealand (NZ), the European Union (EU) and United States (US)), including but not limited to legislative and regulatory frameworks.

The current legislative and regulatory frameworks utilised by the UK, EU, and NZ, to address nicotine vaping products, reflect a different approach to these products compared to that of the US. In the UK and NZ in particular, nicotine-containing e-cigarettes are viewed as a useful tool for harm reduction, enabling users of traditional combustible cigarettes to switch to vaping. Importantly, the sale of nicotine-containing e-cigarettes to minors is banned in all of these jurisdictions (in the case of the US this applies to people under 21 years).¹⁶

In the UK and the EU, a regulatory framework addressing vaping products was introduced in 2016.¹⁷ Specifically, regulations governing the sale, marketing, and distribution of e-cigarettes and other vaping products in the EU and UK, are detailed in Article 20 of the Tobacco Products Directive (TPD). The TPD prohibits many forms of advertising and promotion of e-cigarettes in the EU.¹⁷ Manufacturers of vaping devices are required to provide information on all ingredients contained in the e-liquid on the product packaging, and a list of possible side effects, and the risk of addiction and toxicity must be provided to consumers on information inserts. Under the TPD, the highest concentration of nicotine allowed is 20 milligrams per milliliter of e-liquid.¹⁷

In New Zealand, nicotine-containing e-cigarettes were prohibited for sale until 2018, and could only be obtained lawfully through personal importation via online sales.¹⁸ The availability and marketing of these products increased rapidly following a Court judgement in March 2018, although they remained largely unregulated.¹⁸ To address this, in August 2020, the New Zealand Parliament passed the Smokefree Environments and Regulated Products (Vaping) Amendment Bill, which will come into effect in November 2020.¹⁹ The objective of this legislation is to strike a balance between helping smokers quit by offering regulated vaping as an alternative, while discouraging children and young people from using these products. Key features of this bill include the prohibition of advertising for all vaping products and vaping in legislated smokefree areas, tailored packaging requirements for vaping products, and the introduction of a safety system which would allow the Ministry of Health to recall products, suspend them and issue warnings.¹⁹

In the US, Food and Drug Administration (FDA) extended its regulation over tobacco products to e-cigarettes and vaping products in August 2016.²⁰ One of the notable differences in the regulation of e-cigarettes and other vaping products in the US, compared to countries in the EU, the UK and NZ, is with regard to advertising and promotion. E-cigarette manufacturers are able to advertise their products widely, in retail stores, on television, radio, and the internet, as well as in print media. This lack of regulation with regard to advertising and promotion has been identified as one of the reasons for the significant uptake of e-cigarettes among younger Americans. While there is no requirement for uniform product labelling in the US, as is required in the UK, EU and NZ, many e-cigarette

manufacturers do provide such information with their products. Unlike the UK and EU, some e-cigarettes available in the US deliver up to 59 milligrams of nicotine per milliliter of e-liquid.²⁰

The established evidence on the effectiveness of e-cigarettes as a smoking cessation treatment.

Smokers have been using e-cigarettes as a means to quit cigarette smoking, and reduce the associated health risks, since they first came onto the market in 2006.²¹ Importantly however, health professionals and governments have been hesitant to encourage the use of these devices as smoking cessation aids, concerned about a lack of evidence of safety and efficacy.²¹

In October 2020, the Cochrane Library's Tobacco Addiction Group published its third update of the evidence regarding the use of e-cigarettes for smoking cessation.²¹ This systematic review analysed 50 studies, including 26 randomised controlled trials, which included a total of 12,430 participants. Importantly however, only four studies were considered at low risk of bias, and formed the basis for the report's main comparisons.

The study reported that there is moderate-certainty evidence that e-cigarettes with nicotine increase quit rates compared to e-cigarettes without nicotine and compared to nicotine replacement therapy.²¹ Evidence comparing nicotine e-cigarettes with usual care/no treatment also suggests benefit, but is less certain. The overall incidence of serious adverse events was low across all treatment groups. No clear evidence of harm from nicotine e-cigarettes was detected; however, the longest follow-up period was only two years. The adverse events reported most often with nicotine e-cigarettes were throat or mouth irritation, headache, cough, and nausea, which lessened over time as people continued using the devices.²¹

The authors concluded that more reliable studies are needed to confirm the degree of effect of nicotine-containing e-cigarettes, particularly the effects of newer types of e-cigarettes that have better nicotine delivery.²¹

The established evidence on the uptake of e-cigarettes amongst non-smokers and the potential gateway effect onto traditional tobacco products

Many remain concerned that e-cigarettes may act as a gateway to smoking traditional combustible cigarettes among children and young people, which could lead to a reversal in the decline in smoking rates that has occurred over recent decades. This hypothesis is known as the 'gateway hypothesis'. It has also been suggested that the association between vaping and later smoking may be due to common genetic or environmental factors, which increase the likelihood of an individual vaping and smoking.²²

A recent systematic review and meta-analysis has examined whether e-cigarette use, compared with non-use, in young non-smokers is associated with subsequent cigarette use.²³ A total of 17 studies were included in the meta-analysis. Self-reported non-smokers who have used e-cigarettes were shown to have four-and-a-half-fold higher odds of subsequently reporting being smokers than those who have not. This strong positive association between e-cigarette use among non-smokers and subsequent smoking, was consistent with the findings of the other key systematic review and meta-analysis that has addressed this question, published in 2017.²⁴

A number of limitations of the available evidence were noted, including the reliance on self-report measures of smoking history without biochemical verification, and the lack of negative controls, which would provide stronger evidence for whether the association may be causal.²³ In addition, many of the studies did not consider the nicotine content of e-liquids used by non-smokers, making it difficult to draw conclusions about whether nicotine is the mechanism driving this association.

The authors concluded that while the association between e-cigarette use among non-smokers and later smoking appears strong, this study cannot conclusively demonstrate that this is due to a gateway effect, rather than shared common causes of both e-cigarette use and smoking.²³

Evidence of the impact of legalising nicotine vaping products on youth smoking and vaping rates and measures that Australia could adopt to minimise youth smoking and vaping.

As mentioned earlier, the sale of nicotine-containing e-cigarettes is legal in both the UK and US; however, they cannot be sold to minors. In the US, current e-cigarette use in 2018 was 20.8 percent in high school students (14-18 years), and 4.9 percent in middle school students (11-13 years).²⁵ In the UK, current e-cigarette use during the same period was 3.4 percent in young people aged 11-18 years.²⁶ In comparison, in Australia, where the sale of nicotine-containing e-cigarettes is banned, the National Drug Household Strategy Survey reported that in 2019, 1.8 percent of Australian adolescents (14 to 17 years) were current users of e-cigarettes.²⁷

As mentioned earlier, studies suggest that e-cigarette use in adolescents and young adults is associated with taking up smoking combustible tobacco products.^{23, 24} In both the US and UK however, since the introduction of e-cigarettes, the rates of cigarette smoking in younger people have continued to decline.^{26, 28, 29} Ongoing monitoring and surveillance is needed to determine whether this changes over time.

In Australia, despite the tight regulation of e-cigarettes, young Australians have been exposed to large numbers of social media sites promoting vaping, and have been able to purchase nicotine-containing e-cigarettes through poorly policed online stores. This is an area the Australian Government will need to address in order to minimise youth vaping rates. While the *Tobacco Advertising Prohibition Act 1992* does include bans on internet advertising that originates in Australia, limiting the exposure of young Australians to online advertising from other countries is challenging.

In order to minimise youth smoking, it is critical the Australian Government continues with its current, highly successful, approach to tobacco control. This approach, a suite of public health policy initiatives including health promotion, increased taxation on tobacco products, and tobacco advertising and plain packaging legislation, has had a significant impact on the prevalence of smoking over the last three decades. Specifically, the daily tobacco smoking rate for people aged 14 years and over has fallen steadily from 24 percent in 1991 to 11 percent in 2019.²⁷

One opportunity for Australian Government investment is a revived National Tobacco Campaign. Research has shown that population awareness of tobacco-related harms in Australia has declined in recent years³⁰, highlighting the need for a hard-hitting mass media campaign. This could include targeted messaging for younger Australians, including on the

potential harms of e-cigarettes, delivered through digital media channels, including social media platforms such as Facebook and Instagram, and video-sharing services such as YouTube.

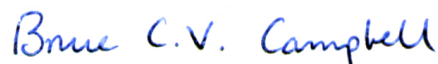
In Australia, a combination of Federal and state and territory regulations govern the sale, use in public spaces, display, advertising and promotion of nicotine vaping products. Stroke Foundation supports regulations which protect both the health of the Australian community from potential harm (particularly children and young people), and the significant gains that have been made in reducing smoking rates and exposure to tobacco smoke as a result of the Australian Government's effective tobacco control policy initiatives.

Thank you for the opportunity to provide a submission to the Inquiry.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Sharon McGowan', with a stylized, wavy line extending to the right.

Sharon McGowan
Chief Executive Officer
Stroke Foundation

A handwritten signature in blue ink that reads 'Bruce C.V. Campbell'.

Professor Bruce Campbell
Chair, Clinical Council
Stroke Foundation

About Stroke Foundation

Stroke Foundation is a national charity that partners with the community to prevent stroke, save lives and enhance recovery. We do this through raising awareness, facilitating research and supporting stroke survivors.

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