



Senate Select Committee on Tobacco Harm Reduction

Submission by Asthma Australia
November 2020

ABOUT ASTHMA AUSTRALIA

Asthma Australia is a for-purpose, consumer organisation which has been improving the lives of people with asthma since 1962. Asthma affects one in nine Australians or 2.7 million people. Asthma is an inflammatory condition of the airways, restricting airflow and can be fatal. There is no cure, but most people with asthma can experience good control.

Our purpose is to help people breathe better so they can live freely.

We deliver evidence-based prevention and health strategies to more than half a million people each year.

INTRODUCTION

Australia is a world leader in tobacco control, having pioneered reforms such as plain packaging, warning labels and advertising restrictions. As a result of these efforts, Australia's smoking prevalence is at an all-time low. This enviable position must not only be maintained but improved on. Relaxing e-cigarette regulation could have a disastrous effect on smoking prevalence as evidence shows e-cigarette use can have a gateway effect to cigarette smoking.

Reducing the prevalence of smoking is particularly important for people with asthma. Both tobacco use and environmental tobacco smoke exposure are associated with the development of asthma and worsening of asthma symptoms.ⁱ People with asthma are more likely to be current daily smokers than people without asthma (17% compared with 13%).ⁱⁱ Asthma Australia received 110 referrals from QUIT over the past year to our telephone health service for people with asthma. Our asthma educators regularly refer callers to QUIT. Overall, smoking rates are higher among people living in more remote areas, people living in areas of lower socioeconomic status, and Indigenous



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Australians, which are all factors that increase their vulnerability to asthma outcomes with or without smoking.ⁱⁱⁱ

Asthma Australia is therefore deeply concerned that e-cigarettes can be a gateway to cigarette smoking, with people who use e-cigarettes more likely to take up cigarette smoking than people who don't use e-cigarettes.^{iv} Increasing access to e-cigarettes could reverse Australia's hard-won progress on tobacco prevalence.

We are also concerned that e-cigarettes will have a 'renormalisation effect',^{vi} undoing the marginalisation of smoking that resulted from decades of tobacco control measures.

Although there is a relative lack of evidence about the health impacts of e-cigarettes,^{vii} the available study evidence is highly concerning, with serious adverse events occurring acutely and in the medium term.

Asthma Australia also notes the lack of reliable evidence to show e-cigarettes are an effective smoking cessation aid for existing smokers. Their use may distract people from proven cessation interventions.

Finally, there are safety concerns about e-cigarettes, primarily around projectile and thermal injuries caused by exploding e-cigarettes.^{viii}

Against these health concerns, we understand there is pressure from the e-cigarette industry – including tobacco companies that own e-cigarette brands – to relax regulation of e-cigarettes.

The precautionary principle requires the Australian Government to restrict or strongly regulate access to e-cigarettes in the absence of proof they are safe. Asthma Australia therefore recommends maintaining strong controls on access to e-cigarettes. We urge the Committee to take a health-informed approach to this issue and resist pressure from industry lobby groups. Tobacco harm will not be minimised by expanding access to products that at best have no impact on smoking cessation and at worst damage health and increase cigarette smoking prevalence.

RESPONSE TO TERMS OF REFERENCE

a. the treatment of nicotine vaping products (electronic cigarettes and smokeless tobacco) in developed countries similar to Australia (such as the United Kingdom, New Zealand, the European Union and United States), including but not limited to legislative and regulatory frameworks

Australia is a world leader on tobacco control. Over the course of many decades, interventions such as warning labels, prohibiting cigarette advertising, increasing tobacco excise, bans on smoking in workplaces and public places, public health education campaigns and plain packaging have resulted in Australia having one of the lowest rates of daily smoking.^{ix} This is the result of governments making health a priority.

In Australia, use, sale and purchase of nicotine for e-cigarettes is illegal. However, under the Personal Importation Scheme, an individual may import a 3-month supply of nicotine with a prescription from a doctor to help them quit smoking, if no other TGA-approved product can help.



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Asthma Australia notes that e-cigarettes are sometimes touted as a smoking cessation product. However, unlike a nicotine-containing patch, gum or lozenge, they are commonly used as a consumer good without the goal of smoking cessation. Recent research by the Australian National University found e-cigarette use is becoming common in countries where they are available as a consumer good. The research found e-cigarettes are particularly popular among young people: “with recent data indicating 10-20% of US high school children report recent use of e-cigarettes”.^x

In contrast, just over 1 in 10 Australians had ever used e-cigarettes with 2% of those people reporting current use, defined as daily, weekly or monthly.^{xi} This makes Australia an attractive target for e-cigarette brands seeking to expand in new markets.

The precautionary principle requires restricting access to e-cigarettes in Australia. Many health organisations and authorities are concerned about the health impacts of e-cigarettes. For example, the Australian Asthma Handbook recognises that “Concerns have been raised about the potential adverse effects on airway health”.^{xii} There are four areas of observed adverse outcomes:

1. Acute severe lung disease: thousands of people have been admitted to hospital because of E-cigarette / Vaping-Induced Acute Lung Injury (EVALI). This serious issue has been the subject of robust research, for example, papers in the New England Journal of Medicine.^{xiii}
2. Increased medium term risk of respiratory infection.^{xiv}
3. Worsened objective measurements and asthma control in users.^{xv}
4. Increased risk of asthma attacks due to second-hand vapour inhalation.^{xvi}

The Thoracic Society of Australia and New Zealand recognises the difficulty in making conclusions about the relative health impacts of e-cigarettes and smoking in its Position Paper on E-Cigarettes:^{xvii}

Drawing conclusions about absolute exposure levels and associated risk based on comparisons between e-cigarettes and combustible tobacco use is not possible. There are thousands of e-liquid solution variants and a range of devices with different settings. Exposure to certain toxins in e-cigarettes has been demonstrated to be less than that experienced with conventional cigarette use, whilst for others exposure is greater.

The Australian Government Department of Health’s webpage on e-cigarettes states that e-cigarettes are not safe and goes on to say:^{xviii}

Hazardous substances have been found in e-cigarette liquids and in the aerosol produced by e-cigarettes, including formaldehyde, acetaldehyde and acrolein, which are known to cause cancer. Some chemicals in e-cigarette aerosols can also cause DNA damage.

Asthma Australia recommends the Committee consider the regulation of e-cigarettes from a health-focused perspective which recognises valid concerns about the health impacts of these products.

b. the impact nicotine vaping products have had on smoking rates in these countries, and the aggregate population health impacts of these changes in nicotine consumption

Asthma Australia notes a recent report by the Australian National University which reviewed international evidence around tobacco smoking uptake by e-cigarette users. Researchers analysed



three systematic reviews and 25 primary research studies and concluded users of e-cigarettes are more likely to take up tobacco smoking than people who didn't use e-cigarettes:^{xi}

A meta-analysis of data from these studies showed that never smokers who have used e-cigarettes were, on average, around three times as likely as those who have not used e-cigarettes to try smoking conventional cigarettes and transition to regular tobacco smoking.

The research also found there was an increase in smoking among former smokers who used e-cigarettes, finding they were twice as likely to resume smoking compared with former smokers who didn't use e-cigarettes.

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

In Australia, smoking cessation products must be approved by the Therapeutic Goods Administration (TGA) in order to be sold for the purpose of helping people quit smoking. The TGA has not approved any e-cigarette products as a smoking cessation aid.^x

The Australian Asthma Handbook provides the following recommendations for health professionals: "Do not encourage the use of electronic cigarettes, even for the purpose of smoking cessation."^{xi}

Asthma Australia notes the Thoracic Society of Australia and New Zealand states that while most people quit smoking unassisted, "proven and well-regulated products" are needed by many smokers.^{xii} These include nicotine-replacement aids such as patches, sprays, gums and lozenges.

Health and research authorities in Australia point to the lack of evidence to support the effectiveness of e-cigarettes as a smoking cessation aid:

- The National Health and Medical Research Council states, "There is currently insufficient evidence to conclude whether e-cigarettes can assist smokers to quit."^{xiii}
- The Australia Medical Association states, "The AMA believes that there is currently no compelling evidence that e-cigarettes are successful in helping people to stop smoking, and they should remain subject to strong regulation in Australia."^{xiv}
- The Commonwealth Scientific and Industrial Research Organisation states, "There is limited evidence comparing the effectiveness of e-cigarettes for smoking cessation with other smoking cessation methods."^{xv}

Asthma Australia refers the Committee to a recent summary report from a review of health impacts of e-cigarettes by the Australian National University's National Centre for Epidemiology and Population Health. The research was funded by the Australian Government Department of Health.^{xvi} The report concluded there is insufficient evidence that nicotine-containing e-cigarettes are an effective smoking cessation treatment.^{xvii}

Currently, there is insufficient evidence that nicotine-delivering e-cigarettes are a more effective smoking cessation aid than no intervention, non-nicotine e-cigarettes, or standard nicotine-replacement therapy. Similar conclusions have been reached by major recent national and international reports reviewing this evidence.

The report further found:

- Australia is at an all-time low in terms of the proportion of people who are daily smokers and never smokers.



- Use of e-cigarettes by former smokers is associated with resumption of tobacco smoking: “The limited available evidence indicates that former smokers who had used e-cigarettes were around twice as likely to relapse and resume current smoking as those who had not used e-cigarettes.”
- The widespread dual-use pattern of e-cigarette consumption is incompatible with smoking cessation, with 43% of daily e-cigarette users also smoking tobacco. Any ‘dual users’ are far more likely to revert to just smoking over time than quit.^{xxviii}
- The quality of evidence derived from randomised controlled trials into the efficacy of e-cigarettes as a smoking cessation tool was rated as **low and uncertain**, being small trials and methodological issues indicating bias in the majority of studies.

The Australian National University authors concluded more reliable and large-scale trials are needed to establish the effectiveness of e-cigarettes as a smoking cessation tool.

Finally, the WHO has also concluded that dual use of e-cigarettes and cigarettes is a common outcome in smokers attempting to quit and states duration of smoking is more important than intensity of smoking when it comes to health harms.^{xxix} This means it is more harmful to smoke fewer cigarettes daily over a longer period of time than to smoke more cigarettes daily over a shorter period before quitting. The former, more harmful outcome is more likely with e-cigarette use given the dual use pattern.

Asthma Australia recommends against recognising e-cigarettes as a smoking cessation treatment in the absence of reliable evidence they are effective in helping smokers quit, and in recognition of evidence that e-cigarette use can lead to cigarette smoking among non-smokers or result in dual use rather by existing smokers.

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

Asthma Australia is concerned by evidence demonstrating e-cigarettes are a gateway to smoking traditional tobacco products. We refer to the literature review by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), funded by the Australian Commonwealth Department of Industry, Innovation and Science, which stated, “The evidence for a strong positive relationship between use of e-cigarettes and later cigarette smoking amongst youth continues to accumulate.”^{xxx} After reviewing the available evidence, CSIRO concluded:

[E]-cigarette use, particularly e-cigarettes with nicotine, is likely to be causative for later cigarette smoking in adolescents and young adults. Given the known adverse health effects of cigarette smoking, the ‘gateway’ path to initiation of cigarette use has substantial relevance.

The Australian National University’s recent research into e-cigarettes considered tobacco smoking uptake by e-cigarette users. Researchers analysed three systematic reviews and 25 primary research studies and concluded e-cigarettes had a gateway effect on tobacco smoking, meaning users of e-cigarettes are more likely to take up tobacco smoking.^{xxxi}

A meta-analysis of data from these studies showed that never smokers who have used e-cigarettes were, on average, around three times as likely as those who have not used e-cigarettes to try smoking conventional cigarettes and transition to regular tobacco smoking.



The same research also found former smokers who used e-cigarettes were “around twice as likely to relapse and resume current smoking as those who had not used e-cigarettes”.

Asthma Australia is deeply concerned that e-cigarette use can encourage uptake of smoking tobacco products. E-cigarette proponents claim these products are a less harmful alternative to tobacco smoking, however, this does not mean they are without harm. Further, the evidence shows they increase tobacco smoking. Asthma Australia asks the Committee to recognise that relaxing regulation of e-cigarettes could reverse Australia’s progress on reducing smoking rates, and to support a strong regulatory approach to e-cigarette access.

e. 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.

The World Health Organisation has raised concerns over data pointing to a rapid increase in e-cigarette experimentation among young people:^{xxxii}

The limited existing survey data from a handful of countries show that experimentation with ENDS [electronic nicotine delivery systems] is increasing rapidly among adolescents and that in itself is of great concern even if most of the young ENDS users also smoke.

Research by the Australian National University found e-cigarettes are particularly popular among young people in countries where they are available as a consumer good, referring to “recent data indicating 10-20% of US high school children report recent use of e-cigarettes”.^{xxxiii}

Asthma Australia again points to CSIRO’s recognition of accumulating evidence that e-cigarette use among youth is positively associated with later cigarette smoking: “the evidence is consistent in suggesting that use of e-cigarettes by non-smoking youth predicts future smoking”.^{xxxiv}

We are particularly concerned that among young people, e-cigarette use is higher those with asthma than those who do not have asthma.^{xxxv}

In light of evidence that e-cigarettes are particularly popular among young people and that e-cigarette use by young people is associated with later cigarettes smoking, the Australian Government has an obligation to maintain a strong regulatory approach to e-cigarette access.

f. access to e-cigarette products under Australia’s current regulatory frameworks

Asthma Australia notes and endorses the position of the Lung Foundation of Australia around regulation of e-cigarette access. In particular, we support their views that all nicotine products for use as smoking cessation aids should be submitted to the TGA to review their safety and efficacy before they can be prescribed to Australians and all novel nicotine products and flavoured e-cigarettes should be prohibited by import bans and enforced accordingly.

g. tobacco industry involvement in the selling and marketing of e-cigarettes



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Australian research has shown tobacco was responsible for the deaths of 2 in 3 smokers.^{xxxvi} Yet tobacco companies have a long and well-documented history of misleading their customers and opposing tobacco control attempts by legislators. Asthma Australia is alarmed that these same companies are investing in e-cigarettes and continuing their efforts to influence public policy.^{xxxvii}

Despite the concerted efforts of tobacco companies, successive Australian governments have instituted reforms which have dramatically reduced smoking prevalence. These low rates of cigarette smoking may have the perverse effect of making Australia a more attractive target for e-cigarette brands owned by tobacco companies – an opportunity to regenerate sales and create new generations of customers.

Asthma Australia asks the Committee to prioritise health in considering e-cigarette regulation and to maintain strong controls on access. The Committee must respect evidence from independent experts over claims from vested interests with a history of profiting from harmful products.

ⁱ Australian Institute of Health and Welfare. 2019. Asthma, associated comorbidities and risk factors. Cat. no. ACM 41. Canberra: Australian Institute of Health and Welfare.

ⁱⁱ Ibid.

ⁱⁱⁱ Australian Institute of Health and Welfare. 2018. Australia's health 2018. Australia's health series no. 16. AUS 221.

^{iv} Byrne S, Brindal E, Williams G, Anastasiou KM, Tonkin A, Battams S and Riley MD. 2018. E-cigarettes, smoking and health. A Literature Review Update. CSIRO, Australia.

^v Banks E, Beckwith K, Joshy G. 2020. Summary report on use of e-cigarettes and impact on tobacco smoking uptake and cessation, relevant to the Australian context. Commissioned Report for the Australian Government Department of Health. Available from: <http://hdl.handle.net/1885/211618>.

^{vi} World Health Organisation. 2014. Electronic nicotine delivery systems Report by WHO. FCTC/COP/6/10 Rev.1 1 September 2014. Available from: https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf

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^{ix} Australian Institute of Health and Welfare. 2020. Alcohol, tobacco & other drugs in Australia, web report, Canberra.

^x Banks E, Beckwith K, Joshy G. 2020. Summary report on use of e-cigarettes and impact on tobacco smoking uptake and cessation, relevant to the Australian context. Commissioned Report for the Australian Government Department of Health. Available from: <http://hdl.handle.net/1885/211618>.

^{xi} Ibid.

^{xii} National Asthma Council Australia. 2019. Australian Asthma Handbook, Version 2.0. Available from: <http://www.astmahandbook.org.au/>

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