







# Vaping: An inquiry into reducing rates of e-cigarette use in Queensland

Report No. 38, 57th Parliament Health and Environment Committee August 2023

#### **Health and Environment Committee**

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#### **Acknowledgements**

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All web address references are current at the time of publishing.

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#### Chair's foreword

This report presents a summary of the Health and Environment Committee's inquiry into reducing rates of e-cigarette use in Queensland.

With terms of reference agreed by the House, the committee's task was to consider the prevalence of e-cigarette use in Queensland, particularly among young people; the risks of vaping harmful chemicals; waste management and the environmental impacts of e-cigarette products; and an analysis of other inquiries, legislative frameworks, policies and preventative activities relating to e-cigarettes in other jurisdictions. The committee was also tasked with discovering the approaches being taken in Queensland schools to discourage young people from using e-cigarettes, and identifying opportunities to increase the effectiveness of preventive activities and improve the accessibility and effectiveness of services and programs.

Following extensive community consultation there is no doubt that vaping is having a very concerning health impact on young people in Queensland communities. A concerted joint effort between the Commonwealth and state is required to shut down the illegal selling of vapes that are impacting our young people, who perhaps cannot see the ongoing health risks as this trend continues.

As Chair, I echo the view of Queensland's Chief Health Officer, Dr John Gerrard – now is the time to act – if not we will face a generation of nicotine-addicted adults in the years to come. We have an absolute responsibility to address this issue now.

On behalf of the committee, I thank those individuals and organisations who made written submissions to the inquiry and participated in hearings. We are grateful to the Chief Health Officer, Queensland Health, Queensland Health Forensic and Scientific Services, the Department of Education, the Department of Environment and Science, and the agencies in other states who provided information to the committee. I wish to thank our Parliamentary Service staff and the Queensland Parliamentary Library.

I also express my personal thanks to those Members of Parliament who sought out and passed on to the committee the concerns of their local community, being the Members for Greenslopes, Nanango, Pumicestone, and Cooper, the Member for Mansfield (and Mansfield Youth Advisory Council) and the Member for Bulimba (and the Bulimba Electorate Youth Advisory Panel).

I commend this report to the House.

Aaron Harper MP

Chair

#### Recommendations

Recommendation 1 46

The committee recommends that the Queensland Government investigate establishing a joint task force involving Queensland and Commonwealth agencies with the primary objective of ending the illegal retail supply of e-cigarettes, including online, especially to people under the age of 18.

Recommendation 2 46

The committee recommends that the Queensland Government fund on-going research and data collection to obtain evidence of e-cigarette use in Queensland, to support the development of targeted preventive activities, programs, and support services.

Recommendation 3 46

The committee recommends that the Queensland Government fund on-going research, undertaken in partnership with Aboriginal and Torres Strait Islander communities, into e-cigarette use by Queensland's Aboriginal and Torres Strait Islander peoples.

Recommendation 4 46

The committee recommends that the Queensland Government cooperate with the Australian Government and all state and territory governments, in a national health campaign to inform the public of the facts about the potential risks of using e-cigarettes.

Recommendation 5 46

The committee recommends that the Department of Education assess the adequacy of the current vaping education resources for schools and supplement them where required to ensure that Queensland's schools have access to a package of high-quality, evidence-informed, age-appropriate teaching resources, as well as access to professional training to assist in delivering the program effectively.

Recommendation 6 46

The committee recommends that the Department of Education and Queensland Health prepare guidelines for all Queensland schools on interventions, such as interactive online courses, that can be used as an educative alternative for students found vaping or with vaping products, rather than pursuing punitive outcomes such as suspension.

Recommendation 7 47

The committee recommends that the Department of Education and Queensland Health prepare guidelines for all Queensland schools for identifying and supporting students who are nicotine dependent, including the use of support services and referrals to help students to quit vaping.

Recommendation 8 59

The committee recommends that the Queensland Government support the implementation of measures, as proposed by the Australian Government, to:

- stop the importation of non-prescription e-cigarettes
- increase the minimum quality standards for e-cigarettes including by restricting flavours, colours, and other ingredients
- require pharmaceutical-like packaging
- · reduce allowed nicotine concentrations and volumes
- ban all single use, disposable e-cigarettes

- end the sale of e-cigarettes in retail settings, such as convenience stores and other retailers
- make it easier to get a prescription for legitimate therapeutic use of e-cigarettes.

#### Recommendation 9

The committee recommends that Queensland Health assess the availability and capacity of services to support people to quit e-cigarettes and consider additional resourcing for these services, as required, so that vaping support is available in a variety of contexts and through a range of providers.

#### Recommendation 10 59

The committee recommends that Queensland Health collaborate with health departments in other Australian jurisdictions and Quit Victoria to facilitate the development of a specialised service to provide tailored support to young people who want to stop vaping.

#### Recommendation 11 60

The committee recommends that the Queensland Government consider extending the capacity of the *Quitline* service in Queensland, including to provide for engagement of additional counsellors with youth experience.

#### Recommendation 12 60

The committee recommends that the Queensland Government consider a program to supply Nicotine Replacement Therapy at reduced cost to people who want to quit tobacco products or e-cigarettes.

#### Recommendation 13 60

The committee recommends that the Queensland Government assess workforce requirements and assign necessary resources to support compliance monitoring and enforcement activities relating to e-cigarettes under the *Tobacco and Other Smoking Products Act 1998* and the *Medicines and Poisons Act 2019*.

#### Recommendation 14 67

The committee recommends that the Queensland Government investigate:

- the feasibility of introducing a return and recycling scheme for vaping products
- the introduction of product design requirements that would facilitate recycling and/or safe disposal of e-cigarettes and their batteries.

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#### **Executive Summary**

In March 2023 the Legislative Assembly agreed to a motion that the Health and Environment Committee (committee) inquire into and report on reducing rates of e-cigarette use in Queensland. The committee was given terms of reference to consider:

- the prevalence of e-cigarette use, particularly among young people
- the risks of vaping harmful chemicals
- approaches being taken in Queensland schools and other settings to discourage young people from using e-cigarettes
- opportunities to increase awareness of the harmful effects of e-cigarette use and the effectiveness of preventive activities
- opportunities to improve the accessibility and effectiveness of services and programs
- waste management and environmental impacts of e-cigarette products
- inquiries, legislative frameworks, policies and preventive activities relating to e-cigarettes in other jurisdictions.

The committee received 78 submissions to its inquiry.

From the data available, the committee found that e-cigarette use is increasing at an alarming rate in Queensland, particularly among young adults. The data indicates that e-cigarette use is increasing among school-aged children, Aboriginal and Torres Strait Islander peoples, and is more likely among people experiencing mental illness. A significant proportion of people in Queensland use both tobacco products and e-cigarettes.

There is strong evidence that e-cigarettes pose serious risks to the health of individuals, often exposing them to nicotine and a range of harmful chemicals, heavy metals, pesticides and carcinogenic substances. The committee heard that e-cigarettes are already having a negative impact on the community and the health system.

While there is anecdotal evidence that some people find e-cigarettes helpful as a smoking cessation tool, the committee noted the uncertain state of evidence regarding both the efficacy of e-cigarettes for smoking cessation, and the level of harm associated with e-cigarettes relative to tobacco products. The availability of e-cigarettes containing high levels of nicotine, despite many claiming to be 'nicotine free', magnifies the health risks associated with e-cigarettes and reduces their potential value as a smoking cessation tool.

The committee found that the increase in vaping by young people has become a challenging situation in schools. The committee noted that approaches taken in Queensland schools have varied and have been limited by a variety of factors and circumstances. Schools, students and parents highlighted the need for an organised, whole of community approach to increasing awareness about e-cigarettes, as well as more vaping specific teaching resources, and specific approaches for students in schools to manage addiction and support quitting.

The committee considers that a high profile national public health campaign will be an important step in informing the broader community, better reaching young adults, and encouraging families to have conversations about vaping with their children. The Australian Government's recent commitment to funding national public heath campaigns and cessation support services to tackle smoking and vaping will assist in this regard.

The committee considers that there is a window of opportunity at this time to have an impact on reducing e-cigarette use and minimising the health consequences for individuals, especially young people, and the community. The committee supports the plan announced by the Australian Government in May 2023 to reduce e-cigarette use by introducing stronger regulation and enforcement, including banning disposable e-cigarettes, prohibiting the sale of e-cigarettes in retail stores, and imposing new controls on importation, contents and packaging for prescription only

e-cigarettes. The committee considers there is community support for these measures and agrees with the broadly held view among stakeholders who engaged with the inquiry that a ban on all disposable e-cigarettes is necessary.

While acknowledging the objections of adult e-cigarette users about losing access to products they choose to use, the committee considers the dangers of toxic chemicals and high nicotine content in illegal products, particularly disposable devices, are significant, particularly as the long term effects of e-cigarettes on health are not known at this stage.

The committee also acknowledged that there is a risk that e-cigarettes will continue to be produced and sold on a black market. The committee considers that a coordinated national public awareness campaign and preventive activities will be important to changing the community's understanding about the health issues and laws related to vaping.

Submitters to the inquiry called for greater enforcement of existing laws regulating e-cigarettes, especially the illegal sale of e-cigarettes to people under 18 years of age. Submitters emphasised that the focus must be on the retailers supplying illegal vaping products to minors, rather than on punishing the e-cigarette users. The committee encourages the Queensland Government to assign resources where necessary to support compliance monitoring and enforcement activities.

The committee found that support services specifically equipped to help people who are nicotine dependent to manage withdrawal and quit vaping, in places and via modes that reach e-cigarette users, is essential, and will be particularly important during the transition away from purchasing potentially illegal products at retail stores.

The committee noted that government may need to take steps to reduce the environmental impact of e-cigarettes, even with the implementation of the proposed ban on disposable e-cigarettes, and found that examining the feasibility of introducing a recycling scheme for vaping products, and the introduction of product design requirements for recycling and safe disposal of e-cigarettes would be worthwhile.

The committee made 14 recommendations.

'This is the time to do something. In five or 10 years time—once it is well and truly established—it is too late. ...We cannot ban cigarettes now...but we have the opportunity to take an aggressive control of this right now. This timing is perfect.'

Dr John Gerrard, Chief Health Officer, Queensland

#### 1 Introduction

#### 1.1 Inquiry terms of reference

On 14 March 2023 the Legislative Assembly agreed to a motion that the Health and Environment Committee (committee) inquire into and report on reducing rates of e-cigarette use in Queensland, with the following terms of reference:

That the Health and Environment Committee (the committee) inquire into and report to the Legislative Assembly by 31 August 2023 on reducing rates of e-cigarette use in Queensland.

*In undertaking the inquiry, the committee will consider:* 

- 1. The current status in Queensland relating to the:
  - a. prevalence of e-cigarette use, particularly amongst children and young people;
  - b. risks of vaping harmful chemicals, including nicotine, to individuals, communities, and the health system; and
  - c. approaches being taken in Queensland schools and other settings relevant to children and young people to discourage uptake and use of e-cigarettes.

#### 2. Opportunities to increase:

- a. awareness of the harmful effects of e-cigarette use (with and without nicotine) to an individual's health, and the effectiveness of preventative activities; and
- b. accessibility and effectiveness of services and programs to prevent uptake and continuing use of e-cigarettes.
- 3. Consideration of waste management and environmental impacts of e-cigarette products.
- 4. A jurisdictional analysis of other e-cigarette use inquiries, legislative frameworks, policies and preventative activities (including their effectiveness in reducing e-cigarette use).

#### 1.2 Inquiry process

The committee invited stakeholders and subscribers to make written submissions to the inquiry. The committee received 78 submissions (see Appendix A for a list of submitters).

Four public hearings were held in Townsville, Southport and Brisbane. The committee received public briefings from Queensland's Chief Health Officer, Dr John Gerrard, Queensland Health, the Department of Education (DoE), and the Department of Environment and Science. Appendix B lists the witnesses who appeared at the committee's public hearings and briefings.

The committee requested and was provided information relevant to the inquiry terms of reference by Queensland Health, DoE, and the Department of Environment and Science. Information about public health campaigns in New South Wales (NSW), Victoria, and Western Australia (WA) was provided by those jurisdictions, and by Quit Victoria. The committee also requested and obtained results from analysis of the chemical composition of a small sample of e-liquids available in Queensland at the time of the inquiry.

#### 1.3 Report

This report presents a summary of the committee's consideration of the terms of reference of the inquiry and discusses key issues raised during the committee's investigation. We have not attempted to fully present the considerable amount of research, work on policy development, and commentary about the use of e-cigarettes that has occurred in recent years.

#### 1.4 E-cigarettes

E-cigarettes are 'battery-operated devices that heat liquid containing chemicals (called 'e-liquid') to produce an aerosol that users inhale'. E-cigarette devices are typically comprised of a mouthpiece, a pre-filled or refillable liquid tank or cartridge, a battery, sensors, and a coil heating element. <sup>2</sup>

The design of e-cigarettes has evolved from devices that resembled conventional cigarettes, to rechargeable and refillable devices (vape pens, tanks or mods) which allow the user to control the dose and other aspects of use, to disposable or modular products designed for single use or containing a replaceable pod cartridge (pods, pod mods, disposables)<sup>3</sup> (see Figure 1 below). The latest generation devices often look like highlighter pens, USB drives or cosmetic items.

Using an e-cigarette is usually called 'vaping'. E-liquids are also known as 'e-juices' or 'vape juices'.

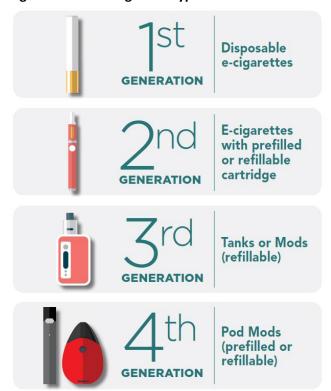


Figure 1: Main e-cigarette types

Source: US Department of Health and Human Services, Centers for Disease Control and Prevention, E-cigarette, or vaping, products visual dictionary in National Centre for Epidemiology and Population Health, 2022.4

National Health and Medical Research Council, 2022 CEO Statement on Electronic Cigarettes, February 2022.

Available at: https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement.

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Banks E, et al, *Electronic cigarettes and health outcomes: systematic review of global evidence*, Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, The Australian National University, April 2022, p 11.

#### 1.4.1 E-cigarette laws in Australia

Since 1 October 2021, in all states and territories in Australia:

- e-cigarettes and vaping products that contain nicotine are illegal, unless obtained on prescription from a pharmacist,<sup>5</sup> or from an overseas vendor via the Therapeutic Goods Administration (TGA) Personal Importation Scheme, Authorised Prescriber Scheme, or Special Access Scheme B<sup>6</sup>
- it is illegal for a retailer other than a pharmacy, such as a tobacconist, 'vape' shop, or convenience store, to sell e-cigarettes and vaping products that contain nicotine, even if the purchaser has a prescription
- it is legal for adults to buy and use e-cigarettes and vaping products that do not contain nicotine
- e-cigarettes cannot be sold or supplied to people under 18, regardless of nicotine content.<sup>7</sup>

More details about legislative frameworks applying to e-cigarettes are provided in section 8 of this report.

### 2 Prevalence of e-cigarette use in Queensland, particularly among children and young people

#### 2.1 Key findings

Surveys show that the rate of e-cigarette use by adults in Queensland is growing rapidly, especially among young adults. In 2022, 14.5% of Queensland's young adults (18–29 years) currently vaped on a regular or intermittent basis.<sup>8</sup>

- Up-to-date data on vaping among school-aged children in Queensland is limited, but evidence suggests that vaping is becoming more common in this group. In 2017, 15.6% of Queensland's secondary school students (children aged 12–17 years) had tried vaping at some point. While this figure is now likely to be higher, evidence indicates that most children do not vape.
- There is limited data about e-cigarette use among Aboriginal and Torres Strait Islander peoples. It appears that younger Aboriginal and Torres Strait Islander people, and those living in urban centres, are more likely to use e-cigarettes.
- Emerging evidence suggests that e-cigarette use is more prevalent among certain vulnerable groups, including people experiencing problems with mental health, and those who use illicit drugs.

Nicotine vaping products are listed in Schedule 4 (Prescription only medicines) of the national Poisons Standard, which is referenced by relevant state and territory laws: Medicines and Poisons Act 2019, Poisons and Therapeutic Goods Act 1966 (NSW), Drugs, Poisons and Controlled Substances Act 1981 (Vic), Controlled Substances Act 1984 (SA), Poisons Act 1964 (WA), Poisons Act 1971 (Tas), Medicines Poisons and Therapeutics Goods Act 2012 (NT), Medicines, Poisons and Therapeutic Goods Act 2008 (ACT).

Australian Government, Therapeutic Goods Administration, *Potential reforms to the regulation of nicotine vaping products Consultation paper*, https://consultations.tga.gov.au/medicines-regulation-division/proposed-reforms-to-the-regulation-of-nicotine-vap/user\_uploads/tga-consultation-paper---nicotine-vaping-products---nov-22-1.pdf, p 6.

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Queensland Health, 'Electronic cigarettes' in The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government, Brisbane 2023, https://www.choreport.health.qld.gov.au/ourlifestyle/electronic-cigarettes.

#### 2.2 Main sources of data



When analysing the prevalence of e-cigarette use, it is important to be clear about what 'use' means. Surveys measure whether a person 'uses' e-cigarettes in a variety of ways. Typically, surveys distinguish between:

- 'ever users', people who have used an e-cigarette at least once in their lifetime
- 'current users', people who are currently using e-cigarettes on either a regular or intermittent basis.

There are 3 main sources of data on the prevalence of e-cigarette use in Queensland:

- the Queensland Preventive Health Survey (QPHS)<sup>10</sup>
   Conducted annually by Queensland Health, this telephone survey collects data on the health and wellbeing of Queensland adults and children. Each year 12,500 adults and the parents of 2,500 children aged between 5 and 17 years participate.
- the Australian Secondary School Alcohol and Drugs Survey (ASSAD)<sup>11</sup>
   Funded primarily by the Australian Government, this survey of 12–17 year old students measures teenage substance use in Australia. It is normally conducted triennially, with approximately 20,000 students surveyed in each 'wave'. The most recent waves were in 2017 and 2022. The results from 2022 will be published in 2024.
- the National Drug Strategy Household Survey (NDSHS)<sup>12</sup>
   Conducted every 2 to 3 years by the Australian Institute of Health and Welfare, this survey collects information on alcohol and tobacco consumption, as well as illicit drug use, among the general population in Australia. It also surveys people's attitudes and perceptions relating to tobacco, alcohol and other drug use.

#### 2.3 E-cigarette use is increasing among Queensland adults, especially young adults

QPHS data, illustrated in Figures 2 and 3, show a significant increase in e-cigarette use in Queensland between 2018 and 2022. Notably, the proportion of adults who have ever used e-cigarettes increased much faster than the proportion of adults who currently use e-cigarettes. This is consistent with recent national surveys, which have reported similarly high rates of e-cigarette use among young adults.<sup>13</sup>

Figure 2: Increase in the proportion of Queenslanders who have 'ever vaped', 2018 - 2022

The proportion of Queenslanders who have tried e-cigarettes increased significantly between 2018 and 2022.



Chart: Health and Environment Committee; Source: Queensland Health, Queensland Preventive Health Survey.

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Queensland Health, *Preventive Health Surveys*, see https://www.health.qld.gov.au/research-reports/population-health/preventive-health-surveys/about.

Australian Government, Department of Health and Aged Care, Australian secondary school students alcohol and drug survey, see https://www.health.gov.au/resources/collections/australian-secondary-school-students-alcohol-and-drug-survey.

Australian Institute of Health and Welfare, *National Drug Strategy Household Survey 2019*. Available at: https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/contents/summary.

Pettigrew, S, Miller, M, Santos, JA, Raj, TS, Brown, K, Jones, A, 'E-cigarette attitudes and use in a sample of Australians aged 15-30 years', *Australian and New Zealand Journal of Public Health*, 2023, 47(2), doi: 10.1016/j.anzjph.2023.100035.

Figure 3: Increase in the proportion of Queenslanders who 'currently vape', 2018 - 2022

The proportion of Queenslanders who currently use e-cigarettes also increased between 2018 and 2022.

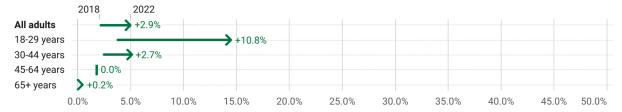


Chart: Health and Environment Committee; Source: Queensland Health, Queensland Preventive Health Survey.

#### In 2022:

- almost 1 in 5 adults in Queensland (19.7%) had tried e-cigarettes in their lifetime
- 5.0% of Queensland adults were currently vaping (this included any regular or intermittent use of e-cigarettes in the previous 12 months)
- 1.9% of Queensland adults vaped on a daily basis (for comparison, 10.4% of Queensland adults smoked on a daily basis)<sup>14</sup>
- e-cigarette use was most common among men, young people, and current smokers.

As illustrated in Figures 2 and 3, between 2018 and 2022 the proportion of Queensland adults who currently vaped increased from 2.1% to 5.0%, while the proportion who had ever vaped increased from 12.6% to 19.7%.

These increases were larger among young adults. The proportion of people aged 18–29 years who had ever used e-cigarettes almost doubled between 2018 and 2022, increasing from 23.5% to 45.3%, while the current e-cigarette use in that cohort increased to 14.5%. This suggests a significant increase from 2018, when the proportion of current use in that group was approximately 3.7% (however this figure should be interpreted with caution due to a large margin of error on that particular data point). <sup>16</sup>

In contrast, the prevalence of vaping appears to have remained relatively stable among older Queenslanders. In 2022, 1.8% of Queenslanders aged between 45 and 64 reported current use of e-cigarettes, the same proportion as in 2018. Similarly, in 2022, 10.7% of people in this age group reported having ever used an e-cigarette, only a slight increase from 2018, when this figure was 9.2%. <sup>17</sup>

#### 2.4 Many smokers in Queensland also use e-cigarettes

A significant proportion of people who use e-cigarettes are 'dual users'. This means they currently use both e-cigarettes and conventional smoking products.

#### In 2022, in Queensland:

12.2% of adults who were daily smokers also currently used e-cigarettes

Queensland Health. 'Smoking' in *The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government*. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/smoking.

Queensland Health. 'Electronic cigarettes' in *The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government*. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

Queensland Health. 'Electronic cigarettes' in *The health of Queenslanders. Report of the Chief Health Officer Queensland.* Queensland Government. Brisbane 2023, Figure 3c, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

Queensland Health. 'Electronic cigarettes' in *The health of Queenslanders*. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2023, Figure 3c, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

- 27.6% of adults who were current smokers (but smoked less than daily) also currently used e-cigarettes
- 5.1% of ex-smokers currently used e-cigarettes.<sup>18</sup>

#### 2.5 E-cigarette use in Queensland is similar to other states and territories

The prevalence of vaping in Queensland is broadly similar to other Australian jurisdictions. Data from the 2019 NDSHS shows that:

- the current vaping prevalence for adults in Queensland was similar to national results (2.9% in Queensland compared to 2.5% nationally)
- although the prevalence of vaping in each state and territory was similar, Queensland had the second highest rate of vaping in the country.<sup>19</sup>

#### 2.6 E-cigarette use by children in Queensland is increasing

Surveys show that the prevalence of e-cigarette use is increasing among Queensland children. However, the extent of this increase is difficult to estimate accurately because available data from the most reliable survey (ASSAD) is now several years out of date.

Data from the ASSAD shows that in 2017:

- most Queensland high school students (children aged 12–17 years) had never tried an e-cigarette
- 15.6% of Queensland high school students had tried vaping at some point (in comparison, 23.0% had tried smoking tobacco products)
- of those high school students who had ever tried an e-cigarette, 6.9% had vaped in the past month (compared to 10.1% who had smoked tobacco in the last 4 weeks)
- boys and older children were the most likely to have tried vaping
- the prevalence of vaping in the last month was similar between boys and girls, and across regions. 20

Data on current rates of e-cigarette use by children in Queensland is limited because the results of the 2022 round of the ASSAD have not yet been published. However, other surveys suggest that the rate of e-cigarette use among Queensland children has increased since 2017. For example, in 2020, a survey of Year 12 students at independent schools in South East Queensland reported that 72% of those students had never vaped, while around 12% had vaped within the last month.<sup>21</sup>

Surveys from other states also indicate that more children are taking up vaping. For example, in 2022, a survey conducted by South Australia's Commissioner for Children and Young People found that two-thirds of 13–19 year-olds had tried vaping, with almost a quarter describing themselves as regular

Queensland Health. 'Electronic cigarettes' in *The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government*. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

Queensland Health. 'Electronic cigarettes' in *The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government*. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

Queensland Health, 'Electronic cigarettes' in The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes; Queensland Health. 'Smoking' in The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/smoking.

Leung, J, 'E-cigarettes and vaping: what we know so far', *Contact Magazine*, The University of Queensland, 3 August 2022, https://stories.uq.edu.au/contact-magazine/2022/ecigarettes-vaping-what-we-know-so-far/index.html.

vapers.<sup>22</sup> Similarly, a survey of 721 young people aged 14–17 years was conducted in NSW in September 2021. It found that approximately one-third (32%) of those surveyed had tried e-cigarettes, with 15% reporting that they had used e-cigarettes within the last month.<sup>23</sup>

It would be reasonable to expect e-cigarette use among children in Queensland to follow a similar trend as in other states. Indeed, Queensland Health advised the committee that, 'it is expected that recent results from NSW are more indicative of current Queensland prevalence amongst children aged 12–17 years [than ASSAD data from 2017]'.<sup>24</sup>

Anecdotal evidence provided by submitters also supports this expectation. For example:

- several school students who made submissions to the committee reported that e-cigarette use has become more common in their schools<sup>25</sup>
- the Queensland Secondary Principals' Association and the Queensland Catholic Education Commission both stated that their members have observed an increase in vaping in schools.<sup>26</sup>

In addition, a recent survey of 200 school staff across Australia, of which 48 were in Queensland, found that many staff perceived an increase in e-cigarette use at their schools.<sup>27</sup>

#### 2.7 Data on e-cigarette use by Aboriginal and Torres Strait Islander peoples is limited

To date, relatively few studies have collected data on the prevalence of e-cigarette use among Aboriginal and Torres Strait Islander peoples. Queensland Health highlighted this issue to the committee, noting that it makes it difficult to determine 'whether the e-cigarette use is significantly higher among First Nations people, as it is for tobacco smoking'.<sup>28</sup>

Available evidence suggests certain groups of Aboriginal and Torres Strait Islander peoples are much more likely to have tried, or currently use, e-cigarettes. In 2018/19, the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), a long-running survey conducted by the Australian Bureau of Statistics, introduced a question on e-cigarette use. Analysing that data, researchers found that 8.1% of Aboriginal and Torres Strait Islander adults had ever used e-cigarettes. However, a much lower proportion (1.3%) of respondents stated that they currently used e-cigarettes on a daily or weekly basis.<sup>29</sup>

The same analysis found that younger Aboriginal and Torres Strait Islander adults were significantly more likely to have tried e-cigarettes than their older counterparts. While 13.6% of those aged between 18 and 24 reported having ever used e-cigarettes, only 4.2% of those aged 45 and over did

South Australian Commissioner for Children and Young People, *Vaping Survey: Key Findings*, Project Report No. 33, July 2022, https://www.ccyp.com.au/wp-content/uploads/2022/07/Screen-Vaping-Survey-Key-Findings-Report.pdf.

Watts, C, Egger, S, Dessaix, A, Brooks, A, Jenkinson, E, Grogan, P, Freeman, B, 'Vaping product access and use among 14–17-year-olds in New South Wales: a cross-sectional study', Australian and New Zealand Journal of Public Health, 2022, 46(6), pp 814-820, Table 2, https://doi.org/10.1111/1753-6405.13316.

<sup>&</sup>lt;sup>24</sup> Queensland Health, correspondence, 25 May 2023, p 3.

Submissions 1, 25 and 78.

<sup>&</sup>lt;sup>26</sup> Submissions 30 and 34.

Pettigrew, S, Miller, M; Kannan, A, Raj, TS, Jun, M, Jones, A, 'School staff perceptions of the nature and consequences of students' use of e-cigarettes', *Australian and New Zealand Journal of Public Health*, 2022, 46(5), pp 676-681, https://doi.org/10.1111/1753-6405.13281.

<sup>&</sup>lt;sup>28</sup> Queensland Health, correspondence, 25 May 2023, p 2.

Thurber, K, Walker, J, Maddox, R, Marmor, A, Heris, C, Banks, E, Lovett, R, *A review of evidence on the prevalence of and trends in cigarette and e-cigarette use by Aboriginal and Torres Strait Islander youth and adults*, Aboriginal and Torres Strait Islander Health Program, National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, 2020, p 19, https://openresearch-

repository.anu.edu.au/bitstream/1885/210569/1/Aboriginal%20cigarette%20ecigarette%20prevalence%2 0trends\_2020.pdf.

so. Similarly, a higher proportion of young Aboriginal and Torres Strait Islander adults reported current use of e-cigarettes (2.0%) compared to those aged over 45 (0.6%), though in this case the difference between age groups was not statistically significant.<sup>30</sup>

Data from the 2018/19 NATSISS also indicated that Aboriginal and Torres Strait Islander peoples were far more likely to report using e-cigarettes if they lived in major cities or regional areas. Only 2.6% of those living in remote or very remote areas had ever used an e-cigarette, possibly because they are harder to access in these locations.<sup>31</sup>

The 2017 ASSAD survey captured responses from 18,199 students aged 12–17 years, of whom 1,097 identified as Aboriginal and Torres Strait Islander people. According to that survey, Aboriginal and Torres Strait Islander students were significantly more likely to have tried e-cigarettes than other students: 21.6% of Aboriginal and Torres Strait Islander students reported having ever used e-cigarettes, compared to 14.0% of all students. This difference between Aboriginal and Torres Strait Islander students and their peers was consistent across age groups and between genders. The strait Islander students and their peers was consistent across age groups and between genders.

The data from the ASSAD is likely to underestimate the prevalence of e-cigarette use among schoolaged Aboriginal and Torres Strait Islander peoples. This is because the sample it uses:

- is restricted to children who are attending schools, who are less likely to use e-cigarettes than children not attending school
- does not fully capture young people living in remote areas, or attending very small schools.<sup>34</sup>

#### 2.8 E-cigarette use appears to be higher among certain vulnerable groups

Scientific evidence suggests that e-cigarette use is more prevalent among certain vulnerable groups, particularly people with mental health conditions.

Although research is still emerging, studies published to date have found that people are more likely to use e-cigarettes if they:

Thurber, K, et al, A review of evidence on the prevalence of and trends in cigarette and e-cigarette use by Aboriginal and Torres Strait Islander youth and adults, Aboriginal and Torres Strait Islander Health Program, National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, 2020, p 19, https://openresearch-repository.anu.edu.au/bitstream/1885/210569/1/Aboriginal%20cigarette%20ecigarette%20prevalence%2 Otrends 2020.pdf.

Thurber, K, et al, *A review of evidence on the prevalence of and trends in cigarette and e-cigarette use by Aboriginal and Torres Strait Islander youth and adults*, Aboriginal and Torres Strait Islander Health Program, National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, 2020, p 19, https://openresearch-repository.anu.edu.au/bitstream/1885/210569/1/Aboriginal%20cigarette%20ecigarette%20prevalence%2 Otrends 2020.pdf.

Heris, C, Scully, M, Chamberlain, C, White, V, 'E-cigarette use and the relationship to smoking among Aboriginal and Torres Strait Islander and non-Indigenous Australian Secondary Students, 2017', *Australian and New Zealand Journal of Public Health*, 2022, 46(6), pp 807-813, 809, https://doi.org/10.1111/1753-6405.13299.

Heris, C, et al, 'E-cigarette use and the relationship to smoking among Aboriginal and Torres Strait Islander and non-Indigenous Australian Secondary Students, 2017', *Australian and New Zealand Journal of Public Health*, 2022, 46(6), pp 807-813, 809, https://doi.org/10.1111/1753-6405.13299.

Thurber, K, et al, A review of evidence on the prevalence of and trends in cigarette and e-cigarette use by Aboriginal and Torres Strait Islander youth and adults, Aboriginal and Torres Strait Islander Health Program, National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, 2020, p 23, https://openresearch-repository.anu.edu.au/bitstream/1885/210569/1/Aboriginal%20cigarette%20ecigarette%20prevalence%2 Otrends 2020.pdf.

- suffer from mental disorders such as depression, anxiety, or ADHD<sup>35</sup>
- have been exposed to childhood trauma or had adverse childhood experiences.<sup>36</sup>

Scientific studies have also found that e-cigarette use is more common among people who use illicit drugs.<sup>37</sup>

In their submission, Orygen, a research and advocacy organisation focussed on youth mental health, advised the committee that recent unpublished research conducted by Orygen shows that:

Young Queenslanders (14-25 years) who reported having vaped were twice as likely to also report having a mental health diagnosis, and three out of ten reported high or very high psychological distress in the past four weeks.<sup>38</sup>

#### **Committee comment**

The committee acknowledges that 'current use' of e-cigarettes has not increased at the same rate as 'ever use' of e-cigarettes, and that trying an e-cigarette once may not necessarily lead a person to vape regularly. Despite that, the committee considers that e-cigarette use is increasing at an alarming rate in Queensland.

Between 2018 and 2022, the proportion of adult Queenslanders who 'currently used' e-cigarettes increased from 2.1% to 5.0%. In other words, the rate of current vaping more than doubled in just 4 years. If this rate of increase continues, it may only take a few more years before e-cigarette use is more prevalent than smoking.

The survey data available to the committee also indicates that the prevalence of e-cigarette use in Queensland is increasing at a concerning rate among young adults. Significantly more young adults now vape compared to 2018: in 2022, 14.5% of young adults reported that they currently use e-cigarettes.

The committee is particularly concerned about the increasing use of e-cigarettes by the most vulnerable members of our community. While evidence in this area is still emerging, the data available indicates that e-cigarette use is increasing among school-aged children and Aboriginal and Torres Strait Islander peoples, and is more likely among people experiencing mental illness.

## 3 Risks of vaping harmful chemicals, including nicotine, to individuals, communities, and the health system

#### 3.1 Key findings

• There is strong scientific evidence that vaping harms the health of individuals in the short-term by exposing them to nicotine and other hazardous chemicals. However, the long-term health

See for example, Wamamili, B, Wallace-Bell, M, Richardson, A, Grace, RC, Coope, P, 'Associations of history of mental illness with smoking and vaping among university students aged 18-24 years in New Zealand: Results of a 2018 national cross-sectional survey', *Addictive Behaviors*, 2021, 112(January), 106635, https://doi.org/10.1016/j.addbeh.2020.106635; Benyo, SE, Bruinsma, TJ, Drda, E, Brady-Olympia, J, Hicks, SD, Boehmer, S, Olympia, RP, 'Risk factors and medical symptoms associated with electronic vapor product use among adolescents and young adults', *Clinical Paediatrics*, 2021, 60(6-7), pp 279–8, https://doi.org/10.1177/00099228211009681.

Shin, SH, 'Preventing e-cigarette use among high-risk adolescents: A trauma-informed prevention approach', *Addictive Behaviors*, 2021; 115(April), 106795, https://doi.org/10.1016/j.addbeh.2020.106795; Williams, L, Clements-Nolle, K, Lensch, T, Yang, W, 'Exposure to adverse childhood experiences and early initiation of electronic vapor product use among middle school students in Nevada', *Addictive Behaviors Reports*, 2020, 11(June), 100266, https://doi.org/10.1016/j.abrep.2020.100266.

Sutherland, R, 'Tobacco and e-cigarette use amongst illicit drug users in Australia', *Drug and Alcohol Dependence*, 2016, 159(1), pp 35-41, https://doi.org/10.1016/j.drugalcdep.2015.10.035.

<sup>38</sup> Submission 51, p 3.

effects of vaping, including the extent to which it contributes to cancer, cardiovascular disease, and respiratory conditions other than lung injury, remain unclear.

- Not all e-cigarettes contain nicotine. However, testing suggests many, perhaps most, e-cigarettes do contain this substance. This includes many products that are labelled or sold as 'nicotine free'.
- Some evidence suggests that young people may be at greater risk of harm from e-cigarettes.
   This is because they may be more vulnerable to the effects of nicotine, and because they are more likely to use flavoured e-cigarettes, which contain a larger number of hazardous chemicals.
- Several well-regarded studies have concluded that vaping increases the risk that a person will take up smoking conventional tobacco products. However, a small number of experts question the extent of this increased risk.
- There is growing evidence that vaping can harm communities via exposure to second-hand vapour, and by increasing the risk of poisonings linked to e-cigarettes.
- Vaping already imposes a burden on Queensland's health system, including by contributing to
  emergency department presentations, hospital admissions, calls to the poisons hotline, and
  requests for support to quit. This burden is likely to grow if the prevalence of vaping continues
  to rise or leads more people to take up smoking conventional cigarettes.
- The efficacy of e-cigarettes as a smoking cessation tool is uncertain, and it is difficult to assess the level of harm associated with them compared to tobacco products. As a result, most medical professionals recommend a cautious approach to the use of e-cigarettes for smoking cessation.

#### 3.2 Main sources of evidence

This section draws heavily on the submission from the Australian National University (ANU),<sup>39</sup> which summarises their recent systematic review of global contemporary evidence of the health effects of e-cigarette use.<sup>40</sup> The ANU's systematic review is widely regarded as an authoritative source on the health effects of e-cigarettes; many stakeholders cited it in their submissions to the committee.<sup>41</sup>

This section also draws on data provided by Queensland Health regarding the impact of vaping on the state's health system.

#### 3.3 Risks to individuals

E-cigarettes pose a health risk to individuals in 3 main ways:

- through exposure to nicotine, which is highly addictive
- through exposure to other harmful chemicals, including those used to flavour e-cigarettes
- by increasing the risk that individuals will take up smoking.

Current evidence suggests that the use of e-cigarettes increases the risk of a variety of adverse health outcomes. The strength of this evidence varies in relation to different outcomes, as summarised in Table 1. While Table 1 focusses on evidence relating to the effects of e-cigarettes containing nicotine, not all of the health impacts it lists are directly due to nicotine: many are likely to be caused, or contributed to, by other hazardous chemicals found in e-cigarettes.

Submission 74.

Banks, E, et al, *Electronic cigarettes and health outcomes: systematic review of global evidence*, Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, The Australian National University, April 2022; and Banks, E, Yazidjoglou, A, Brown, S, Nguyen, M, Martin, M, Beckwith, K, Daluwatta, A, Campbell, S, Joshy, G, 'Electronic cigarettes and health outcomes: umbrella and systematic review of the global evidence', *Medical Journal of Australia*, 2023, 218(6), pp 267-275, https://doi.org/10.5694/mja2.51890.

<sup>&</sup>lt;sup>41</sup> Including submissions 2, 16, 22, 47, 49, 50, 53, 56, 62, 65, 68, 75, and 77.

Table 1: Strength of evidence linking nicotine e-cigarettes to adverse health outcomes

Adverse health outcome	Strength of current evidence
Toxicity through inhalation, including seizures and loss of consciousness	Conclusive
Increased risk of smoking initiation	Conclusive
Nicotine addiction	Conclusive to substantial
Headaches, cough, throat irritation, dizziness, and nausea	Moderate
Among smokers, shortly after use: increased heart rate, systolic blood pressure, diastolic blood pressure, and arterial stiffness	Moderate
Among non-smokers: acute reductions in lung function and other respiratory measures	Limited
Major health conditions including cancer, cardiovascular disease, respiratory disease, reproductive conditions, and mental illness	Insufficient

Source: Australian National University, submission 74, p 8.

At this time, there is limited evidence about the long-term health effects of e-cigarette use. As a result, its potential contribution to major health conditions such as cancer, cardiovascular disease, respiratory disease, reproductive conditions, and mental illness remains unclear. As public health experts from ANU concluded after their review of available evidence, 'the direct impact of e-cigarettes on clinical disease outcomes are largely unknown'. 42

Similarly, the Chief Health Officer advised the committee:

Research regarding the long-term health effects of vaping is in its infancy. However, from the studies that have been undertaken, the evidence suggests that e-cigarettes may cause significant harm. 43

#### 3.3.1 Exposure to nicotine



E-cigarettes pose a health risk to individuals because they expose them to nicotine. Nicotine harms physical and mental health in a variety of ways. At present, individuals who use e-cigarettes are highly likely to be exposed to these harms even if using e-cigarettes that claim to be nicotine free. This is because many, perhaps most, of these products do in fact contain nicotine, sometimes in large amounts.

#### 3.3.1.1 <u>Nicotine has negative impacts on physical and mental health</u>

According to public health experts from ANU, there is 'conclusive to substantial' evidence that e-cigarettes containing nicotine cause addiction. <sup>44</sup> Their review concluded that nicotine is associated with a range of adverse health outcomes, including:

- acute nicotine toxicity, the symptoms of which can include nausea, vomiting, seizures, and respiratory depression (which can be fatal)
- for babies exposed to nicotine in utero: foetal growth restriction, preterm delivery and stillbirth; an increased risk of sudden infant death syndrome; cognitive, attentional and auditory processing deficits; disruptive behaviours; and smoking initiation later in life
- mental health problems, including memory impairment, anxiety disorders, depression, and disruptive disorders, which may persist long-term and which appear more likely to occur when people are exposed to nicotine during adolescence

Banks, E, et al, 'Electronic cigarettes and health outcomes: umbrella and systematic review of the global evidence', *Medical Journal of Australia*, 2023, 218(6), pp 267-275, 270-272, https://doi.org/10.5694/mja2.51890.

<sup>&</sup>lt;sup>43</sup> Public briefing transcript, Brisbane, 3 May 2023, p 16.

Submission 74, p 8.

an increased risk of abuse of, and addiction to, other substances.<sup>45</sup>

#### 3.3.1.2 The nicotine concentration of e-cigarettes varies widely

E-cigarettes contain nicotine in one of 2 forms:

- free-base nicotine, sometimes described as a purer form of nicotine, is the compound first used in e-cigarettes
- nicotine salts are the form of nicotine found in tobacco plants, and are increasingly popular among e-cigarette users.

The distinction between these 2 forms of nicotine is significant, because e-cigarettes that contain nicotine salts typically contain a higher concentration of nicotine than products containing free-base nicotine. Inhaling high concentrations of free-base nicotine causes a harsh, burning sensation in the throat; nicotine salts allow products to offer a high concentration without this effect.<sup>46</sup>

The amount of nicotine in e-cigarettes varies widely, and depends both on the concentration of nicotine and the volume of liquid it contains. A 'typical' e-cigarette might contain 40 to 50mg of nicotine in total, but some products now contain much more.<sup>47</sup> Research conducted in the United States (US) suggests that the average nicotine concentration in e-cigarettes is increasing, with particularly large increases occurring for disposable and flavoured e-cigarettes<sup>48</sup> – products known to be more appealing to young people.



At present, e-cigarettes that contain nicotine can only be sold legally on a prescription. Under the relevant TGA standard, e-cigarettes should not contain nicotine in concentrations higher than 100mg/mL. This is a relatively high limit, but is likely to change, as in May 2023 the Australian Government announced that it plans to reduce permitted nicotine concentrations and volumes.

It is difficult to compare the amount of nicotine delivered by e-cigarettes to tobacco products. This is because the amount of nicotine in both types of products varies widely, and because the way in which they are used affects how much nicotine a person inhales. <sup>49</sup> While some e-cigarettes contain nicotine equivalent to one or 2 packs of cigarettes, <sup>50</sup> some newer products contain much more. <sup>51</sup>

Research shows that a significant number of young people do not know the nicotine strength of the product they use. A 2022 survey of 636 current users found that a quarter of adolescents and young adults who used nicotine e-cigarettes did not know the strength of the e-liquid they used.<sup>52</sup>

Morgan, J, Kelso, D, Nicotine Vaping Product Analysis: Evidence from the University of Wollongong, Therapeutic Goods Administration, 17 September 2021, https://www.tga.gov.au/resources/publication/publications/nicotine-vaping-product-analysis-evidence-university-wollongong.

<sup>&</sup>lt;sup>45</sup> Australian National University, submission 74, p 7.

NSW Health, *Vaping Evidence Summary*, June 2023, https://www.health.nsw.gov.au/tobacco/Pages/vaping-evidence-summary.aspx.

Wang, X, Ghimire, R, Shrestha, SS, Borowiecki, M, Emery, S, Trivers, KF, 'Trends in Nicotine Strength in Electronic Cigarettes Sold in the United States by Flavor, Product Type, and Manufacturer, 2017–2022', Nicotine & Tobacco Research, 2023, 25(7), pp 1355–1360, https://doi.org/10.1093/ntr/ntad033.

Prochaska, JJ, Vogel, EA, Benowitz, N, 'Nicotine delivery and cigarette equivalents from vaping a JUULpod', Tobacco Control, 2022, 31(e1), e88-e93, http://dx.doi.org/10.1136/tobaccocontrol-2020-056367.

Prochaska, JJ, Vogel, EA, Benowitz, N, 'Nicotine delivery and cigarette equivalents from vaping a JUULpod', *Tobacco Control*, 2022, 31(e1), e88-e93, http://dx.doi.org/10.1136/tobaccocontrol-2020-056367.

NSW Health, *Vaping Evidence Summary*, June 2023, https://www.health.nsw.gov.au/tobacco/Pages/vaping-evidence-summary.aspx.

Jongenelis, MI, 'E-cigarette product preferences of Australian adolescent and adult users: a 2022 study', BMC Public Health, 2023, 23(22), https://doi.org/10.1186/s12889-023-15142-8.

#### 3.3.1.3 <u>Most e-cigarettes contain nicotine</u>

Not all e-cigarettes contain nicotine. However, testing suggests many, perhaps most, do. This includes many e-cigarettes that are labelled or sold as 'nicotine free'. As the Chief Health Officer advised the committee:

It is doubtful whether any vaping products would be readily available through retailers without the presence of illegal nicotine. It is not clear to me that this is a business model that would function. Therefore, the whole process depends on the illegal presence of nicotine in these vaping products.<sup>53</sup>

The committee heard evidence that more than 80% of e-cigarettes seized by the Gold Coast Public Health Unit contained nicotine. <sup>54</sup> Similarly, as of May 2023, the TGA had tested 314 vaping products and found that 264, or 84%, contained nicotine. In most cases, the nicotine content of these products was not labelled, or their labels were not in the format required by the relevant TGA standard. <sup>55</sup>



Queensland Health tested 17 e-liquids contained in vaping products available in Queensland at the time of the inquiry, on behalf of the committee. The analysis found that every one of the e-cigarettes contained some nicotine. This was despite the fact that none of the e-cigarettes tested were obtained on prescription, meaning that none should have contained any nicotine. The amount of nicotine found in the samples varied from trace levels to concentrations just less than half the permitted maximum. <sup>56</sup>

In another Australian study, researchers tested 10 e-cigarettes that claimed to be free of nicotine, finding that 6 of the e-cigarettes did contain nicotine. Three of them contained nicotine at concentrations comparable to low-dose nicotine products (1.3, 1.4 and 2.9 mg/mL), while 3 contained nicotine at lower concentrations.<sup>57</sup>

#### 3.3.2 Exposure to other harmful chemicals

E-cigarettes expose individuals to a range of harmful chemicals other than nicotine. This means they create health risks for individuals even if they exclusively use e-cigarettes that do not contain nicotine. These health risks are difficult to quantify because e-cigarettes contain so many different chemicals and because the design and content of e-cigarettes vary in ways that affect what users inhale.

As the Chief Health Officer advised the committee:

Whilst standard e-liquids typically contain water, nicotine, propylene glycol and glycerine, an Australian review of e-liquid emissions identified an astonishing 243 unique chemical compounds, 38 of which were listed as poisons. Further, 27 chemical reaction products were identified in their study, including carbonyls such as acetaldehyde, acetone, acrolein and formaldehyde, all of which have been associated with adverse health outcomes in humans.<sup>58</sup>

E-cigarettes often contain heavy metals, pesticides, substances known to be carcinogenic, and chemicals that are already prohibited ingredients under relevant product standards. Several studies, including one analysis undertaken by Queensland Health on behalf of the committee, found that the

Public briefing transcript, Brisbane, 3 May 2023, p 17.

Ms Anne Cowdry, Acting Director, Public and Environmental Health, Gold Coast Public Health Unit, public hearing transcript, Southport, 13 April 2023, p 3.

Winnall, WR, Greenhalgh, EM, Bayly, M, Scollo, MM, 'Chemicals in e-liquids and e-cigarette aerosols', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues,* Melbourne, Cancer Council Victoria, 2023, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-5-chemicals-in-e-liquids-and-e-cigarette-aerosols.

Queensland Health, correspondence, 23 May 2023: Report: Assessment of e-liquid composition, p 2.

<sup>&</sup>lt;sup>57</sup> Chivers, E, Janka, M, Franklin, P, Mullins, B, Larcombe, A, 'Nicotine and other potentially harmful compounds in "nicotine-free" e-cigarette liquids in Australia', *Medical Journal of Australia*, 2019, 210(3), pp 127-8, https://doi.org/10.5694/mja2.12059.

Public briefing transcript, Brisbane, 3 May 2023, p 16.

liquids in e-cigarettes tested contained hazardous chemicals such as formaldehyde, acetaldehyde and acrolein, which are known to cause cancer.<sup>59</sup>

Scientific studies also have emphasised the very large number of chemicals (200+) found in e-liquids, most of which are flavourings. <sup>60</sup> The large number of chemicals found in e-cigarettes, together with variations in the design of different products, makes it difficult to measure their health impact and compare it to tobacco products. As the CEO of the National Health and Medical Research Council (NHMRC) explained in a statement in 2022:

Recent reports have found over 200 unique chemicals used in e-liquids. However, the composition of e-liquids is constantly changing and the chemicals in e-liquids may vary. Chemical exposure from e-cigarette devices is linked to power output of the device and the temperature of the heated coil. Chemical exposure is also influenced by dose (quantity of chemicals), duration of use and how users inhale the e-cigarette aerosol (known as vaping style). The variation in the types, quantity and concentrations of the chemicals used in e-liquids and the variation in e-cigarette device type/settings can result in the formation of new chemicals or substances (such as volatile compounds) that are inhaled by the user. [references omitted]<sup>61</sup>

As noted by the NHMRC in their submission, their CEO's 2022 statement 'is based on the best available scientific evidence that has been critically appraised according to best practice methods'.<sup>62</sup>

Research has linked the inhalation of some of the specific chemicals present in e-cigarettes to adverse health outcomes, particularly lung damage. For example, medical experts have linked diacetyl (a chemical known as a diketone) which is used as a flavouring, to the phenomenon known as 'popcorn lung' <sup>63</sup> as well as the condition now labelled E-cigarette or Vaping Associated Lung Injury (EVALI). <sup>64</sup> EVALI is an umbrella term used to capture several forms of lung damage. Available evidence links EVALI most strongly to vitamin E acetate, though links to other chemicals in e-cigarettes have not been ruled out. <sup>65</sup>

Research also suggests that e-cigarettes are damaging to oral health. In their submission, the Australian Dental Association Queensland Branch highlighted emerging evidence that e-cigarettes contribute to oral health problems including oral infections, gum disease, cavities, and potentially oral cancers. <sup>66</sup>

Landman, ST, Dhaliwal, I, Mackenzie, CA, Martinu, T, Steel, A, Bosma, KJ, 'Life-threatening bronchiolitis related to electronic cigarette use in a Canadian youth', *Canadian Medical Association Journal*, 2019, 191(48), E1321-E1331; https://doi.org/10.1503/cmaj.191402.

Australian National University, submission 74, p 8; Queensland Health, correspondence, 23 May 2023: *Report: Assessment of e-liquid composition.* 

National Industrial Chemicals Notification and Assessment Scheme, *Non-nicotine liquids for e-cigarette devices in Australia: chemistry and health concerns,* Department of Health, Canberra, 2019, pp 22-23.

National Health and Medical Research Council, 2022 CEO Statement on Electronic Cigarettes, 2022, https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement.

Submission 21, p 2.

<sup>&</sup>lt;sup>64</sup> Chan BS, Kiss, A, McIntosh, N, Sheppeard V, Dawson, AH, 'E-cigarette or vaping product use-associated lung injury in an adolescent', *Medical Journal of Australia*, 2021, 215(7), 313-314.e1, doi: 10.5694/mja2.51244.

<sup>65</sup> American Lung Association, E-cigarette or Vaping Use-Associated Lung Injury (EVALI) https://www.lung.org/lung-health-diseases/lung-disease-lookup/evali.

Submission 22, p 4. See also: Mokeem, SA, Abduljabbar, T, Al-Kheraif, AA, Alasqah, MN, Michelogiannakis, D, Samaranayake, LP, Javed, F, 'Oral *Candida* carriage among cigarette- and waterpipe-smokers, and electronic cigarette users', *Oral Diseases*, 2019, 25(1), pp 319–326, https://doi.org/10.1111/odi.12902; Pushalkar, S, et al, 'Electronic Cigarette Aerosol Modulates the Oral Microbiome and Increases Risk of Infection', *iScience*, 2020, 23(3), 100884, https://doi.org/10.1016/j.isci.2020.100884; Irusa, KF, et al, 'A comparison of the caries risk between patients who use vapes or electronic cigarettes and those who do not: A cross-sectional study', *The Journal of the American Dental Association*, 2022, 153(12), pp 1179-1183, https://doi.org/10.1016/j.adaj.2022.09.013.

The chemicals contained in e-cigarettes can also pose risks to individuals when they are exposed to them in other ways. For example, some of these chemicals can cause poisoning when ingested, or skin irritation if a person comes into contact with them accidentally (e.g. because an e-cigarette has leaked).<sup>67</sup> As discussed in section 3.4, data provided by Queensland Health indicates that e-cigarettes have been linked to a number of poisoning incidents in Queensland to date.

#### 3.3.3 Possible gateway to smoking tobacco products

The Chief Health Officer told the committee that his 'primary concern' is the potential for e-cigarettes to act as a gateway to tobacco products, especially among young people.<sup>68</sup> He explained the basis of his concern:

Nicotine is one of the most addictive substances known, and there is substantial evidence that e-cigarettes are capable of causing dependency in non-smokers and that they increase smoking uptake around threefold.  $^{69}$ 

Regarding the link between e-cigarette use and smoking initiation, the systematic review of global evidence conducted by researchers at ANU concluded:

...there is substantial and consistent evidence from observational studies that never smokers who have used e-cigarettes are more likely than those who have not used e-cigarettes to try smoking conventional cigarettes and to transition to becoming regular tobacco smokers. <sup>70</sup>

This statement is supported by a recent systematic review and meta-analysis of scientific research that found strong and consistent evidence that non-smokers who use e-cigarettes are more likely to start smoking conventional cigarettes and become current smokers. That review found that non-smokers who use e-cigarettes are on average around 3 times more likely to become current regular smokers (of conventional cigarettes) than those who do not use e-cigarettes.<sup>71</sup> There is also some evidence that former smokers who use e-cigarettes are more likely to return to smoking tobacco products, though this evidence is less certain.<sup>72</sup>

A small number of experts dispute the extent to which e-cigarettes increase the risk that a person will take up smoking tobacco products.<sup>73</sup>

#### 3.3.4 Risks to children and adolescents

Evidence suggests that children and adolescents may be more vulnerable to the harms associated with e-cigarette use. This is due to 3 main factors:

- the vulnerability of children and adolescents to nicotine
- the popularity of flavoured e-cigarettes among younger people
- the risk of life-long harm if children go on to take up smoking.

Some evidence suggests that children and adolescents are more vulnerable to the effects of nicotine, which increases the risk that they will become addicted to it. The Chief Health Officer advised the committee:

<sup>&</sup>lt;sup>67</sup> Queensland Health, correspondence, 25 May 2023, p 4.

Public briefing transcript, Brisbane, 3 May 2023, p 16.

<sup>&</sup>lt;sup>69</sup> Public briefing transcript, Brisbane, 3 May 2023, p 17.

Australian National University, submission 74, p 9.

Baenziger, ON, Ford, L, Yazidjoglou, A, Joshy, G, Banks, E, 'E-cigarette use and combustible tobacco cigarette smoking uptake among non-smokers, including relapse in former smokers: Umbrella review, systematic review and meta-analysis', *BMJ Open*, 2021, 11(3), e045603, https://doi.org/10.1136/bmjopen-2020-045603.

National Health and Medical Research Council, 2022 CEO Statement on Electronic Cigarettes, 2022, https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement.

<sup>&</sup>lt;sup>73</sup> For example, see submission 20; Public hearing transcript, Brisbane, 30 May 2023, pp 12-18.

There is evidence that suggests that nicotine can negatively affect adolescent brain development. Across species, including humans, adolescence is a key period of rapid growth of brain circuits that regulate social, emotional and motivational processes, as well as decision-making. The prefrontal cortex which is involved in high-level regulatory control of complex behaviours, such as planning, impulse control and working memory, continues normal development into young adulthood. That means that adolescents are more susceptible to initiating substance use and the development of dependence. <sup>74</sup>

In their submission, experts from ANU explained, 'there is an age dependent susceptibility to nicotine, with greater susceptibility at younger ages, in which exposure at a young age increases the likelihood of nicotine use later in life'. This statement was based on evidence published by the US Surgeon General, who has also attributed a variety of serious and potentially long-term mental health conditions (including anxiety disorders, depression and disruptive disorders) to nicotine exposure during adolescence.

Flavoured e-cigarettes are more popular with younger people. Research shows that flavours encourage young people to start using e-cigarettes, and that young people tend to prefer fruit-flavoured e-cigarettes. This preference for flavoured products may place children and adolescents at greater risk because flavoured e-cigarettes tend to contain more hazardous chemicals, including some that have been linked to lung damage. It is also concerning given recent research (see section 3.3.1.2 above) which found that the average nicotine concentration of disposable and flavoured e-cigarettes is increasing faster than other products.

As discussed in section 3.3.3, a variety of studies have found evidence that people who use e-cigarettes are more likely to take up smoking tobacco products. This risk is particularly acute for children and adolescents, since taking up smoking at a young age may expose them to harm across an extended period – possibly many decades.

E-cigarettes may also place children, especially infants, at a greater risk of poisoning. This issue is discussed in more detail in the next section.

#### 3.4 Risks to communities

E-cigarettes may pose a risk to the community in a variety of ways. This includes by increasing the risk of poisoning (via ingesting vaping liquids) and exposing members of the community to second-hand vapour.

At a public briefing, officers from Queensland Health elaborated on how the increased risk of poisoning is affecting the community in Queensland. They advised the committee that:

• between 2017 and 2022, the Poisons Information Centre received 356 calls about suspected poisonings involving exposure to e-cigarettes<sup>81</sup>

US Department of Health and Human Services, E-cigarette use among youth and young adults: A report of the Surgeon General, Centers for Disease Control and Prevention, Atlanta, 2016.

Public briefing transcript, Brisbane, 3 May 2023, p 17.

<sup>&</sup>lt;sup>75</sup> Submission 74, p 7.

US Department of Health Human Services, *The health consequences of smoking—50 years of progress: a report of the Surgeon General*, Centers for Disease Control and Prevention, Atlanta, 2014.

Zare, S, Nemati, M, Zheng, Y, 'A systematic review of consumer preference for e-cigarette attributes: flavor, nicotine strength, and type' *PLoS One*, 2018 3(1)3, 2018, e0194145, https://doi.org/10.1371/journal.pone.0194145.

National Industrial Chemicals Notification and Assessment Scheme, *Non-nicotine liquids for e-cigarette devices in Australia: chemistry and health concerns,* Department of Health, Canberra, 2019, pp 22-23.

Wang, X, et al, 'Trends in Nicotine Strength in Electronic Cigarettes Sold in the United States by Flavor, Product Type, and Manufacturer, 2017–2022', *Nicotine & Tobacco Research*, 2023, 25(7), pp 1355–1360, https://doi.org/10.1093/ntr/ntad033.

Public hearing transcript, Brisbane, 3 May 2023, p 18.

• over half of these calls involved people under the age of 19, with a high proportion of calls relating to infants, i.e. children under the age of 4.

Although research on the risks associated with second-hand vapour from e-cigarettes is relatively limited, some studies suggest that it is likely to be harmful to health. For example:

- there is evidence that non-smokers exposed to second-hand e-cigarette vapour absorb nicotine from it at levels similar to that of people vaping<sup>82</sup>
- one study found that e-cigarettes increase the number of fine particles in the air when used indoors. Prior research shows that inhaling such particles can contribute to heart and lung disease<sup>83</sup>
- young adults who are exposed to second-hand e-cigarette vapour are more likely to report respiratory symptoms such as bronchitis and shortness of breath, especially if they do not smoke or vape themselves.<sup>84</sup>

#### 3.5 Risks to the health system

There is relatively limited information available about the risk that vaping poses to Queensland's health system. This is largely because vaping has only recently emerged as a significant public health concern. However, the limited data that is available demonstrates that vaping already imposes a burden on the state's health system.

At a public briefing, officers from Queensland Health advised the committee that:

- the number of calls to the Poisons Information Centre about suspected poisonings involving e-cigarettes is increasing, with twice as many calls received in 2022 compared to 2021
- there has been an increase in the number of people presenting to hospital emergency departments with problems relating to e-cigarettes. Data from the Queensland Injury Surveillance Unit (which covers about 25% of the state's emergency departments) shows that there were only 4 presentations relating to e-cigarettes in the period from 2014 to 2020, but 55 presentations in the period from 2021 to 2023, most of which related to poisoning
- there are anecdotal reports from clinicians, including clinicians at the Queensland Children's Hospital, that an increasing number of people are presenting with mental health conditions, (including anxiety, agitation, low mood, and difficulty with concentration) that appear to be linked to the use of e-cigarettes.<sup>85</sup>

Queensland Health also advised that its preliminary data on patient admissions indicates that across public and private acute hospitals in the state, the number of episodes of care linked to vaping-related disorders has increased over the last 4 years. There were:

- 20 episodes of care related to vaping-related disorders in the period from July 2022 to March 2023
- 42 episodes of care related to vaping-related disorders in 2021-22
- 8 episodes of care related to vaping-related disorders in 2020-21

Ballbè, M, Martínez-Sánchez, JM, Sureda, X, Fu, M, Pérez-Ortuño, R, Pascual, JA, Saltó, E, Fernández, E, 'Cigarettes vs. e-cigarettes: Passive exposure at home measured by means of airborne marker and biomarkers', *Environmental Research*, 2014, 135, pp 76-80, https://doi.org/10.1016/j.envres.2014.09.005.

Shearston, JA, Eazor, J, Lee, L, Vilcassim, MJR, Reed, TA, Ort, D, Weitzman, M, Gordon, T, 'Effects of electronic cigarettes and hookah (waterpipe) use on home air quality', *Tobacco Control*, 2023, 32(1), pp 36-41, doi: 10.1136/tobaccocontrol-2020-056437.

Islam, T, Braymiller J, Eckel, SP, Liu, F, Tackett, AP, Rebuli, ME, Barrington-Trimis, J, McConnell, R, 'Secondhand nicotine vaping at home and respiratory symptoms in young adults', *Thorax*, 2022, 77, pp 663-668, http://dx.doi.org/10.1136/thoraxjnl-2021-217041.

Public hearing transcript, Brisbane, 3 May 2023, p 18.

4 episodes of care related to vaping-related disorders in 2019-20.86

Vaping may impose a much greater impact on the health system in the longer term. This is because evidence (discussed in 3.3.3 above) indicates that people who use e-cigarettes are more likely to take up smoking conventional cigarettes, and smoking-related disease imposes a significant burden on Queensland's health system.

A National Drug Research Institute report released in 2019, cited by the Chief Health Officer, estimated that the total cost of smoking in Australia was \$137 billion in 2015–16, which translates to \$27.4 billion in Queensland, based on the state's share of the Australian population. <sup>87</sup> The national figure included \$6.8 billion in health care costs (translating to \$1.36 billion in Queensland), and 1.7 million hospital admissions to treat smoking-related conditions (translating to 340,000 hospital admissions in Queensland). <sup>88</sup>

These estimates illustrate that if using e-cigarettes leads more Queenslanders to take up smoking conventional cigarettes, the costs imposed on the state's health care system are likely to be substantial.

The long-term effects of e-cigarette use are largely unknown at present (see section 3.3 above) but may also have significant impacts on the health system in the future.

#### 3.6 Potential of e-cigarettes as a smoking cessation tool

The potential of e-cigarettes as a smoking cessation tool is a controversial topic, with 2 issues being central to the debate:

- whether e-cigarettes are safer than tobacco products
- whether e-cigarettes actually help people to quit.

Given uncertainty around both these issues, many medical professionals currently recommend a cautious approach to the use of e-cigarettes as a smoking cessation tool – as discussed in more detail below.

#### 3.6.1 Level of harm relative to smoking is contested



The health risks associated with e-cigarettes are very difficult to measure accurately due to the variety and complexity of these products. This makes it hard to compare them to conventional tobacco products. In addition, the long-term health impacts of e-cigarettes are currently largely unknown. Thus, while there is clear evidence that smoking tobacco products causes substantial harm, claims that e-cigarettes offer a safer alternative remain highly contested.

E-cigarettes avoid some of the harms associated with smoking tobacco products, but this does not necessarily mean they are safe. As the CEO of the NHMRC stated in 2022:

Chemical exposure from e-cigarette aerosol varies in comparison to tobacco cigarettes. For example, e-liquids or aerosols may also contain potentially harmful chemicals or substances (e.g. volatile compounds, heavy metals, flavourings) which are not present in smoke from tobacco cigarettes. [footnotes omitted] 89

<sup>36</sup> Queensland Health, correspondence, 11 May 2023.

Queensland Health, 'Smoking' in *The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government*. Brisbane, 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/smoking.

National Drug Research Institute, *Identifying the Social Costs of Tobacco Use to Australia in 2015/2016*, Curtin University, 2019, https://ndri.curtin.edu.au/ndri/media/documents/publications/T273.pdf.

National Health and Medical Research Council, 2022 CEO Statement on Electronic Cigarettes, 2022, https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement.

The difficultly in measuring the harms associated with e-cigarettes, which are a new and varied product that can contain hundreds of chemicals, means that attempts to compare them to conventional products have been highly controversial. A 2015 report<sup>90</sup> commissioned by Public Health England that sought to do so was heavily criticised by several leading experts.<sup>91</sup>

Experts also warn that claims that e-cigarettes are safer than tobacco products must be approached with caution, even given the high level of harm associated with smoking conventional products. For example, public health experts from ANU have warned that:

- comparing e-cigarettes to tobacco products is only relevant for people who already smoke
- some short-term risks associated with e-cigarettes, such as poisoning and lung damage, are likely to be more harmful than the short-term risks associated with tobacco products, based on current evidence
- the long-term health impacts of e-cigarettes which are arguably the most important remain uncertain, making it impossible to credibly establish whether they are safer than tobacco products or not.<sup>92</sup>

#### 3.6.2 Efficacy of e-cigarettes as a smoking cessation tool remains unproven



There is significant uncertainty regarding the efficacy of e-cigarettes as a smoking cessation tool, including their efficacy relative to other forms of intervention (such as behavioural counselling) or registered therapeutic goods that deliver Nicotine Replacement Therapy (NRT) and are known to be safe.

Anecdotally, some former smokers report that e-cigarettes have helped them to quit. Several submitters and witnesses told the committee they had successfully used e-cigarettes to stop smoking. Many of these people expressed the view that their overall health had improved as a result.<sup>93</sup>

However, the ANU's systematic review of research on the health impacts of e-cigarettes concluded that there is limited and insufficient clinical evidence about how effective e-cigarettes are as a smoking cessation tool. In particular, that review notes that:

- trials demonstrating that e-cigarettes can be effective for smoking cessation were limited to
  products with freebase nicotine concentrations of less than 20mg/mL. There is currently no
  evidence that nicotine salt products (which are becoming more popular and often have higher
  nicotine concentrations) are effective for smoking cessation
- there is insufficient evidence about the effectiveness of e-cigarettes compared to behavioural counselling and/or NRTs

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McNeill, A, et al, *E-cigarettes: an evidence update. A report commissioned by Public Health England,* 2015, Public Health England, London,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/733 022/Ecigarettes\_an\_evidence\_update\_A\_report\_commissioned\_by\_Public\_Health\_England\_FINAL.pdf.

Polosa, R, 'E-cigarettes: Public Health England's evidence-based confusion', *The Lancet*, 29 August 2015, 386, p 829, https://doi.org/10.1016/S0140-6736(15)00042-2; Mckee, M, Capewell, S, 'Evidence about Electronic Cigarettes: Foundation Built on Rock or Sand?', *British Medical Journal*, 2015, 351, h4863, https://doi.org/10.1136/bmj.h4863.

Banks, E, et al, *Electronic cigarettes and health outcomes: systematic review of global evidence*, Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, The Australian National University, April 2022, p 276.

Submissions 3, 5, 24, 28, 32 and 72; Public hearing transcript, Townsville, 12 April 2023, pp 12, 18, 26.

• it is unclear whether people who use e-cigarettes to quit smoking continue to be exposed to nicotine for longer than people who use NRTs (e.g. because they continue to use e-cigarettes, or become dual users, for an extended period). 94

As noted above, the ANU review is highly regarded by most experts and was cited by many submitters to the inquiry. <sup>95</sup> However, a small number of experts disagree with its conclusions. <sup>96</sup>

#### 3.6.3 Most medical professionals recommend a cautious approach to use for smoking cessation

In light of concerns about the health risks associated with e-cigarettes, many organisations representing medical professionals remain cautious about recommending them as smoking cessation tool. For example, the Australian Medical Association Queensland (AMA Queensland) submitted:

...the prescription of vaping and other smoking products should be a last resort smoking cessation tool, prescribed only by a patient's regular doctor who has a strong understanding of their patient's health and history. Indeed, many AMA Queensland members advise they do not prescribe vapes given the limited evidence to support their safety and effectiveness and ready-availability of clinically-proven and safe alternatives.<sup>97</sup>

Similarly, the Royal Australian College of General Practitioners (RACGP) recommends that GPs take a cautious approach to the use of e-cigarettes as a smoking cessation tool due to evidence linking them to lung damage and disease. 98

This approach is consistent with the findings of the ANU's systematic review of the health impacts of e-cigarettes, which concluded:

There is limited evidence of efficacy of freebase nicotine e-cigarettes as an aid to smoking cessation in the clinical setting. Given the extreme harms of smoking, e-cigarettes may be beneficial in some smokers who use them to quit smoking completely and promptly, bearing in mind uncertainties about their long-term effects. 99

A small number of medical experts argue for greater use of e-cigarettes as a smoking cessation tool, stressing the significant harms associated with tobacco products. 100

#### **Committee comment**

It is clear from the evidence considered by the committee that e-cigarettes pose serious risks to the physical and mental health of individuals. These risks are particularly serious for children, adolescents, Aboriginal and Torres Strait Islander peoples, and vulnerable members of our community. There is evidence that e-cigarettes are already having a negative impact on the community and the health system, including by contributing to incidents of poisoning and presentations at emergency departments.

The committee acknowledges the existence of anecdotal evidence that some people find e-cigarettes helpful as a smoking cessation tool. However, the committee also notes the uncertain state of evidence regarding both the efficacy of e-cigarettes as a smoking cessation tool and the level of harm associated with e-cigarettes, relative to tobacco products.

Banks, E, et al, Electronic cigarettes and health outcomes: systematic review of global evidence, Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, The Australian National University, April 2022, pp 271-272.

<sup>95</sup> Including submissions 2, 16, 22, 47, 49, 50, 53, 56, 62, 65, 68, 75, and 77.

<sup>&</sup>lt;sup>96</sup> See for example submission 20; Public hearing transcript, Brisbane, 30 May 2023, pp 12-18.

<sup>&</sup>lt;sup>97</sup> Submission 55, p 2.

<sup>&</sup>lt;sup>98</sup> Submission 37, p 5.

Banks, E, et al, *Electronic cigarettes and health outcomes: systematic review of global evidence*, Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, The Australian National University, April 2022, p 279.

See for example submission 20; Public hearing transcript, Brisbane, 30 May 2023, pp 12-18.

It appears that some e-cigarettes contain very high levels of nicotine, with many products that claim to be 'nicotine free' containing nicotine despite those claims. The committee is concerned that this magnifies the health risks associated with e-cigarettes and reduces their potential value as a smoking cessation tool.

# 4 Current approaches being taken in Queensland schools and other settings relevant to children and young people to discourage uptake and use of e-cigarettes

#### 4.1 Key findings

- Using e-cigarettes is banned at all Queensland state and non-state schools, and for 5 metres beyond their boundaries.
- Schools have a role in increasing awareness and educating young people in Queensland about the risks of e-cigarette use.
- Principals report a range of approaches being taken in Queensland schools to discourage e-cigarette use, although measures have not been employed consistently across schools.
- Schools and students report that a range of issues have limited the effectiveness of approaches
  to date, including limited community understanding about the risks and laws related to vaping,
  insufficient vaping-specific materials and resources for use in schools, and difficulty accessing
  external providers and resources, particularly in regional and remote areas.
- DoE's Alcohol and Other Drugs education program for students in Years 7 to 12 is currently being revised to include education about e-cigarettes.
- The Queensland Government recently announced that the *Blurred Minds Academy*, an alcohol, drug and vaping education program, will be available to all Queensland state, Catholic and Independent secondary schools from Term 4, 2023.
- Aboriginal and Torres Strait Islander-specific information and resources, and local and regional approaches led by Aboriginal and Torres Strait Islander communities, are needed for programs for Aboriginal and Torres Strait Islander young people to be effective.

#### 4.2 E-cigarettes and Queensland schools

Smoking, including using e-cigarettes, is banned at all Queensland education facilities – state and non-state schools, early childhood education and care services, and outside school hours care – within the grounds and for 5 metres beyond the boundary of the facility. The law applies at all times during and after school/service hours, on weekends and during holiday periods. <sup>101</sup>

Schools have a role in increasing awareness and educating young people in Queensland about the risks of smoking and e-cigarette use.

The information in sections 4.2.1 and 4.2.2 below is drawn from details provided to the committee by DoE about the current policies and preventive activities that have been implemented by the department to discourage the use of e-cigarettes by students at schools in Queensland. 102

#### 4.2.1 Current approaches taken by the Department of Education

DoE acknowledged the role of Queensland state schools in supporting the health and wellbeing of students and the importance of preventive measures and health, safety and wellbeing education, which includes teaching children about the risks associated with smoking, tobacco products and e-cigarettes. DoE stated that:

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Tobacco and Other Smoking Products Act 1998, ss 26VQ, 26VU. See also https://www.health.gld.gov.au/public-health/topics/atod/tobacco-laws/education.

Department of Education, correspondence, 5 May 2023.

- it is the primary responsibility of principals to ensure systems are in place to promote and support the health and wellbeing of students when at school or involved in school activities<sup>103</sup>
- schools ensure systems are in place to promote and support the health and wellbeing of students when they are at school or involved in school activities
- every Queensland state school is required to publish a Student Code of Conduct<sup>104</sup> on the school's website and provide a copy to newly enrolled students and their parents containing details of items considered inappropriate to bring to school such as e-cigarettes, and details of student property (such as vaping products) that state school staff may temporarily remove without the consent of parents or students, or that may be seized by police
- education on alcohol and other drugs is covered in the department's P-12 Curriculum into the Classroom (C2C) Health and Physical Education (HPE) units
- individual state schools are encouraged to determine how they provide age-appropriate programs in consultation with the local school community and the specific needs of their students (this may include accessing programs from private providers or using DoE's Alcohol and Other Drugs education program)
- in secondary schools, School-Based Youth Health Nurses work with students and staff to highlight the risks associated with vaping
- external organisations, such as the drug and alcohol support service, Dovetail, <sup>105</sup> can provide training, workshops and e-learning resources, as well as clinical advice and professional support to staff working with young people who vape.

DoE advised that it encourages schools to consider appropriate and proportional consequences when managing behaviours associated with vaping, and the use of preventive measures that involve education to raise awareness of the harms of substance misuse. An example of this approach is the 'Solution Plan' recently developed by DoE staff to assist schools to reduce vaping rates, shown in Appendix D.<sup>106</sup>

#### 4.2.2 Department of Education programs and resources

#### 4.2.2.1 <u>Current programs and resources</u>

DoE's Alcohol and Other Drugs education program is the department's main program for educating students about substance use. In relation to the current program and other resources provided by the department, DoE advised:

• DoE's Alcohol and Other Drugs education program is available to all Queensland schools for students in Years 7 to 12.

(An overview of the topics covered in the program is shown in Table 2 below. The program topics are focused on increasing awareness and developing decision-making skills and responsible behaviours, and include specific topics on alcohol and drugs, but not e-cigarettes.)

The 2019 *Queensland Alcohol-related violence and Night Time Economy Monitoring (QANTEM)* report recommended a comprehensive independent review of the Alcohol and Other Drugs school education program.<sup>107</sup> In 2022, the Queensland Government provided \$600,000 over

<sup>&</sup>lt;sup>103</sup> See https://education.qld.gov.au/students/student-health-safety-wellbeing/student-health/supporting-students-policy-statement.

See https://behaviour.education.qld.gov.au/procedures-guidelines-and-forms/student-code-of-conduct.

The Queensland Health service, Dovetail, provides clinical advice and professional support to workers, services and communities who engage with young people affected by alcohol and other drug use. See https://www.dovetail.org.au/.

Department of Education, correspondence, 5 May 2023.

See https://www.publications.qld.gov.au/dataset/quantem-report.

2 years to DoE for the review, which is currently being conducted in collaboration with the National Centre for Youth Substance Use Research at The University of Queensland.

- Suggestions for ways parents can support their children as they learn about alcohol and other drugs are provided on the DoE website<sup>108</sup> (including links to external websites).
- A range of resources is available to school staff through DoE's intranet, including information developed by Queensland Health and by external organisations such as the Cancer Council Queensland and the Lung Foundation Australia.
- Vaping was the focus of DoE's Behaviour Bulletin newsletter in January 2022.
- Staff wellbeing resources are also available within DoE to support staff to quit smoking and vaping.

#### Table 2: Department of Education Alcohol and Other Drugs education program

#### Alcohol and Other Drugs education program - Year level overview of topics

#### Year 7

Designed to help young people develop good decision-making skills:

- coping with change
- helping myself and supporting others
- · making choices
- accessing health information
- researching health information.

#### Year 8

Designed to help young people develop good decision-making skills:

- good decision-making
- understanding community thinking
- being kind to your body
- being in control
- knowing the truth about cannabis.

#### Year 9

Designed to help young people understand and safely respond to the culture of drinking in Australia:

- responsible drinking
- drinking culture
- considering gender norms and stereotypes
- exploring alcohol advertising and consumer rights
- analysing advertising messages.

#### Year 10

Designed to help young people take responsibility for positively influencing, and contributing to, their friends and community:

- responsible partying;
- alcohol and drug myths determining the truth;
- recognising real risks;
- reducing risk through good decision-making; and
- responding to harmful situations.

#### Year 11

Designed to help young people make good decisions and develop skills to ensure their own and other's safety:

- investigating drugs, alcohol and violence;
- considering the legal implications of drug and alcohol use;
- having strategies for a safe night out;
- leading by example; and
- responsible decision-making to ensure safety of self, peers and others.

#### Year 12

Designed to help young people adopt some of the responsibility for their own safety when in social situations:

<sup>108</sup> See https://education.qld.gov.au/curriculum/stages-of-schooling/alcohol-and-other-drugs.

- contributing to a safe community;
- being aware in social situations;
- thinking about respect, values and actions; and
- promoting positive action for self, peer and community safety
- celebrating safely.

Source: Department of Education, correspondence, 5 May 2023.

#### 4.2.2.2 Planned programs and resources

DoE advised that a revised Alcohol and Other Drugs education program will be available to Queensland schools in early 2024 and will cover specific vaping topics. The revised program will include:

- teaching guidelines
- resources to support students to develop greater awareness and understanding of the impacts of alcohol and other drug use, including e-cigarettes
- resources to support students' capacity to make responsible, safe and informed decisions and to improve their ability to effectively manage challenging situations
- resources that address peer influence and social influence as contributing factors for vaping amongst students.

DoE advised that education resources about e-cigarette use to assist schools are also currently being developed by the department in collaboration with Queensland Health.<sup>109</sup>



On 3 August 2023, the Minister for Education, Minister for Industrial Relations and Minister for Racing, announced funding of \$5 million to provide access for all Queensland state, Catholic and Independent secondary schools to the *Blurred Minds Academy*, <sup>110</sup> from Term 4 2023.

The *Blurred Minds Academy* is a program of 13 gamified alcohol and drug education modules, including new modules on vaping, for Years 7 to 10, with a slide pack and teacher guide for each module to assist teachers to plan lessons.

#### 4.3 Approaches reported by Queensland schools



Submitters told the committee that approaches used by Queensland schools to respond to vaping to date have involved education and raising awareness, changes to school procedures and building access, and consequences for students caught vaping or with vaping products, 111 although measures have not been employed consistently across schools. 112

The Queensland Secondary Principals' Association submitted that many schools report:

- holding regular information sessions for whole school assemblies and/or individual cohorts
- incorporating information about the dangers of e-cigarettes within various aspects of the curriculum, mostly for Years 7 to 9
- using posters and digital information signage to provide information about e-cigarettes
- engaging, where possible, support from health professionals and Queensland Police to deliver information and awareness activities for students, parents and the community
- attempting to reduce opportunities for students to use e-cigarettes by –

Department of Education, correspondence, 5 May 2023.

Blurred Minds Academy was created by Blurred Minds, a social enterprise at Griffith University, in partnership with The University of Queensland National Centre for Youth Substance Use Research; see https://www.blurredminds.com.au/academy/.

<sup>111</sup> Queensland Secondary Principals' Association, submission 34.

<sup>112</sup> Queensland Family and Child Commission, submission 62, pp 9-10.

- changing the supervision of student movement around schools, including extra supervision during break times and between classes, toilet passes, locking some amenities blocks, and closer supervision of toilets
- some schools, with available funds, building or retrofitting amenities blocks to ensure their design is less accommodating to vaping, and installing vaping detectors
- for students caught with e-cigarettes -
  - in most cases education is the first response, involving the School Based Youth Health Nurse (where there is one), or completing a health education program
  - consequences for continued incidents range from internal detention to suspension from school for a period of days (schools report students who have never received a behaviour consequence for anything prior during their enrolment receiving a School Disciplinary Absence for vaping).<sup>113</sup>

In addition to these kinds of approaches, the Queensland Catholic Education Commission submitted that it had used drug and alcohol funding provided by the Queensland Government to offer the *Blurred Minds Academy*<sup>114</sup> to Catholic School Authorities. The Queensland Catholic Education Commission also authored a publication on vaping for its members in 2021, and hosted Dovetail at its 2022 Wellbeing Forum.<sup>115</sup> Some Catholic schools have also:

- developed bespoke programs to address vaping behaviours
- used materials based on Queensland Health resources, Life Education<sup>116</sup> and the work of Paul Dillon<sup>117</sup>
- engaged external agencies such as Dovetail and National Drug Awareness<sup>118</sup> to give presentations to students on vaping
- supported at-risk students via school guidance officers, psychologists or counsellors providing direct support or relevant referrals to external service providers.

An example of one Independent school's approach to discourage e-cigarette use was outlined for the committee by the Principal of AB Patterson College in Queensland, Ms Joanne Sheehy. The school first became aware of students (mostly in Years 8 to 10: 14–16 year olds) using e-cigarettes at the beginning of 2021 and made immediate changes to its education program. None of the children using e-cigarettes were previously conventional cigarette smokers, and all were using disposable devices. <sup>120</sup>

The school employed, and continues to use, a multi-layered strategy which involved:

- an education and awareness campaign for students aged 10–18 years to increase their awareness and understanding of the risks associated with vaping
- yearly cohort information sessions about vaping
- regular communication with parents (via letters and on-line services) about the dangers of e-cigarettes
- incorporating specific information about e-cigarettes in the school's HPE program (under the national curriculum) for Years 3 to 10

<sup>&</sup>lt;sup>113</sup> See submission 34.

See https://www.blurredminds.com.au/.

<sup>115</sup> See submission 30.

See https://lifeeducationqld.org.au/about-us/.

See https://darta.net.au/about/.

<sup>118</sup> See https://nationaldrugawareness.com.au/about/.

<sup>&</sup>lt;sup>119</sup> Submission 30, pp 3-4.

Public hearing transcript, Southport, 13 April 2023, p 20.

- communicating the consequences of bringing vapes on to the school campus to all stakeholders across the school
- installing vape sensors in all toilets
- through the school's online anonymous notification system, enabling students to let the school know about other students choosing to vape
- an education program for students, parents and staff about the laws relating to vaping. 121

Ms Sheehy reported that the strategy resulted in a marked decrease in the prevalence of the use of e-cigarettes, from 'a number a week in 2021' to 'one last term' (Term 1, 2023). She advised that the school had found the education program was effective for students and parents, and suggested that the approach could be implemented at any school, and irrespective of whether it is at a junior or senior school. 122



Approaches taken in schools to discourage the use of e-cigarettes have differed depending on geographical location. In 2022, schools in major cities in Queensland (42.4%) were more likely to have provided information about vaping than schools in inner regional areas (23.0%), or outer regional areas (16.3%). <sup>123</sup>

#### 4.3.1 Issues affecting approaches taken in Queensland schools

Queensland schools and students reported<sup>124</sup> that there are a range of issues which have impeded the effectiveness of approaches taken in schools to date to educate young people about the risks of vaping and discourage e-cigarette use. These issues include:

- educational materials produced by DoE not being updated quickly enough to align with current trends in e-cigarette use and there being no resources specifically on vaping available (as at May 2023)
- difficulty obtaining online and other resources, although schools reported that this is improving
- variability in the quality of educational approaches between schools and concern about the
  potential risks from poorly delivered educational sessions (such as special one-off presentations
  creating perceptions among students that vaping is common and generating more interest in
  using e-cigarettes)
- difficulty accessing health professionals with the capacity to assist in the delivery of information about vaping in rural and remote Queensland
- impacts on school budgets and planning resulting from the need to access targeted vaping programs from external providers
- the need for additional funding to enable support or interventions to be available at all schools and to provide more access to health counselling for students struggling to reduce their use of e-cigarettes
- limited understanding among parents/carers of the risks of e-cigarettes for young people –
  parents frequently commenting to schools that they 'didn't believe vapes are dangerous', or
  'didn't know that vaping is harmful', 125 or 'at least they weren't smoking' 126

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Public hearing transcript, Southport, 13 April 2023, pp 20-23.

Public hearing transcript, Southport, 13 April 2023, p 20, 21.

<sup>&</sup>lt;sup>123</sup> Queensland Health, correspondence, 25 May 2023, p 7.

See Queensland Secondary Principals' Association, submission 34; P&Cs Qld, submission 76; Queensland Catholic Education Commission, submission 30; Queensland Family and Child Commission, submission 62, Queensland Teachers Union, submission 59; Griffith University, submission 57.

<sup>&</sup>lt;sup>125</sup> Queensland Secondary Principals' Association, submission 34, p 4.

P&Cs Qld, submission 76, p 2.

- the high cost of retrofitting amenities blocks and installing vape sensors: the cost being prohibitive for most schools
- additional adverse effects from vaping behaviour, such as students being unwilling or afraid to
  use the toilets throughout an entire school day due to vaping in amenities blocks, with students
  complaining of 'passive vaping' and reporting fear of using toilets in case they are asked to
  identify students who are vaping or possible consequences if it is perceived they have been in
  the toilet block to vape
- reliance on punitive approaches to respond to students found with e-cigarettes, in the absence of alternative approaches or guidance for schools.



Submitters were concerned about punitive approaches being used in Queensland schools to respond to e-cigarette use by students, raising the potential harms to young people that can result from suspension from school. They noted that removing the protective factors of school (e.g. social connection, education, peer and teacher support) and reinforcing risk factors (e.g. isolation, shame, stigma) can increase the risk that students will become disengaged from school and the risk that they will develop social and substance use problems.

Submitters recommended supportive approaches, particularly for young people who have become nicotine dependent or are working through withdrawal, and diversion to education programs for students found to be supplying e-cigarettes to other students.<sup>127</sup>

## 4.4 Approaches that work for Aboriginal and Torres Strait Islander students

Tackling Indigenous Smoking (TIS)<sup>128</sup> teams in Queensland have been working with Aboriginal and Torres Strait Islander young people, including in schools, to increase knowledge and awareness of the risks of e-cigarette use. However, according to the Queensland Aboriginal and Islander Health Council and the National Centre for Aboriginal and Torres Strait Islander Wellbeing Research, limited information, especially Aboriginal and Torres Strait Islander-specific information and resources, confusion about the legality and relative harms of e-cigarettes, and conflicting messaging from industry promotion and marketing, has meant that the workforce 'have felt underprepared to communicate about vaping harms'. 129

The Queensland Aboriginal and Islander Health Council and the National Centre for Aboriginal and Torres Strait Islander Wellbeing Research submitted that a better understanding of the prevalence and harms associated with e-cigarette use in Aboriginal and Torres Strait Islander communities is needed for effective preventive strategies to be implemented. In addition, local and regional approaches led by Aboriginal and Torres Strait Islander peoples and communities, such as those provided via TIS teams, are needed to target e-cigarette use among Aboriginal and Torres Strait Islander people. (See also section 6.2 of this report).

## 4.5 Approaches to support students with nicotine addiction

Schools report evidence of addiction and associated impacts on learning and school routine for students, including students being 'distracted, agitated, and at times aggressive' when they are unable to vape during the school day, and asking to leave class in order to vape. 130

There appear to be no particular approaches or withdrawal supports typically utilised or recommended by Queensland schools to support young people who are nicotine dependent as a result of using e-cigarettes.

See for example submission 69 and supplementary submission, submissions 62, 53, 60, 77, 59. See also Dovetail, https://www.dovetail.org.au/resources/vaping/.

See https://www.health.gov.au/our-work/tackling-indigenous-smoking; https://tacklingsmoking.org.au/.

<sup>&</sup>lt;sup>129</sup> Submission 77, p 13.

Queensland Secondary Principals' Association, submission 34, p 3.

The DoE website provides links to various alcohol and other drugs support services and programs on its 'Alcohol and other drugs education program' webpage, <sup>131</sup> and directs to *QuitCoach* for online smoking cessation support. Queensland Health's *Quit HQ* website <sup>132</sup> includes a webpage on e-cigarettes which directs to the support services, *Quitline*, a telephone counselling service to help people to quit smoking, and *My Quit Journey*, a 12 week email support program. (See also section 6.3 of this report.)

## 4.6 Approaches for use in other settings

Dovetail, which is funded by Queensland Health and managed by Metro North Mental Health – Alcohol and Drug Service, provides free training, resources, and telephone advice to Queensland-based professionals who engage with young people affected by alcohol and other drug use. 133

Dovetail states that its position on vaping is:

- Vaping is not for young people who are non-smokers
- Evidence-informed prevention work is important
- Poorly designed responses can increase harm
- The best thing for health is to be smoke and vape free
- Vaping is not harmless but current evidence suggests it is likely less harmful than smoking
- Evidence suggests vaping can help some people quit smoking.

Dovetail has developed a 'vaping toolbox' to support workers responding to young people who use e-cigarettes. The vaping toolbox includes the *Vape Check* tool, and resources that include fact sheets, short videos and 2 recorded webinars to support workers in responding to young people who use e-cigarettes, and links to other resources from other sources. *Vape Check*<sup>134</sup> is a tool designed to help a worker conduct a single session intervention with a young person who frequently uses non-prescription nicotine e-cigarettes.

## **Committee comment**

Medical experts agree - young people should not use e-cigarettes. The situation that now exists, where young people in our communities who had never smoked conventional cigarettes before are inhaling harmful chemicals via e-cigarettes, and most likely also becoming dependent on the nicotine usually present in them, is disturbing.

The increase in vaping by young people has become a challenging situation in schools. The committee recognises the concern of teachers and school leaders for the young people in their schools and acknowledges their efforts to respond to this issue.

We note the variability in approaches to e-cigarette use taken in Queensland schools and that these approaches have been limited by a variety of factors and circumstances. Schools, students and parents have highlighted the need for an organised, whole of community approach to increasing awareness about e-cigarettes, as well as more vaping specific teaching resources, and specific approaches for students in schools to manage addiction and support quitting. Factors such as limited access to external providers and services in regional and remote areas need to be addressed. The use of punitive approaches to respond to e-cigarette use may need to be reconsidered.

The recent announcement by the Minister for Education of \$5 million in funding for access for all schools to the *Blurred Minds Academy* education program, which includes components to inform students about e-cigarettes, is significant, and will enable a more consistent approach in schools.

See https://education.qld.gov.au/curriculum/stages-of-schooling/alcohol-and-other-drugs.

See https://www.quithq.initiatives.qld.gov.au/.

See https://www.dovetail.org.au/about/what-is-dovetail/.

See https://www.dovetail.org.au/resources/vaping/.

The revised Department of Education Alcohol and Other Drugs education program due to be available to Queensland schools by early 2024, which is planned to include vaping-specific topics, will also be an important part of the response in teaching young people about the risks of using e-cigarettes and helping them build skills to make good decisions about vaping.

The committee has identified some additional actions to assist schools in their responses to vaping. These and other opportunities to increase awareness about the risks of vaping and improve the effectiveness of preventive activities and support services are discussed in the following sections 5 and 6 of this report.

# 5 Opportunities to increase awareness of the harmful effects of e-cigarette use to an individual's health and the effectiveness of preventative activities

## 5.1 Key findings

- Awareness of the potentially harmful effects of e-cigarette use is increasing although there is uncertainty and contrasting views about the safety of ingredients in e-cigarettes, their use by non-smokers, and their efficacy as a tool to quit smoking.
- A significant proportion of young people do not know about the risks of e-cigarette use.
- Existing preventive activities in Australia focus on the provision of information about the health risks associated with e-cigarettes. These activities include public education campaigns and school-based education programs.
- Schools play a central role in preventing vaping by providing students with information about associated health risks. However, it appears that Queensland teachers have had relatively limited access to teaching materials specifically focused on vaping, compared to the quality and quantity of materials available to teachers in some overseas jurisdictions.
- Specialised preventive activities and interventions that target vaping among young people are
  beginning to emerge overseas. The evidence available so far suggests these kinds of preventive
  activities have the potential to be effective in discouraging young people from vaping and
  helping those who do vape to quit.
- Evidence about many aspects of e-cigarette use is currently limited. Research is needed in many areas to continue to inform the development of preventive activities and targeted programs. More research is required to properly understand, and respond to, patterns of e-cigarette use in Aboriginal and Torres Strait Islander communities.
- Schools need preventive activities and programs to include more vaping specific resources that
  are better integrated with the broader alcohol and drug education framework in the curriculum.
   Schools also need assistance to support students struggling with nicotine dependence in the
  school environment.
- Easily accessible, vaping specific support services and interventions, particularly those designed to reach young people, are needed to reduce e-cigarette use.
- Stakeholders identify compliance, enforcement and legislative reform to be key aspects of prevention.

## 5.2 Awareness of the effects of e-cigarette use on personal health

An analysis of studies of Australians' perceptions of e-cigarettes<sup>135</sup> showed that in 2019, smokers and e-cigarette users perceived e-cigarettes could have some positive effects on personal health by

Greenhalgh, EM, Scollo, MM, '18.12 Public perceptions of the risks and benefits of e-cigarettes', in Greenhalgh, EM, Scollo, MM, and Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, Melbourne, Cancer Council Victoria, 2023, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-12-public-perceptions-of-the-risks-and-benefits-of-e-cigarettes.

assisting them to smoke less or quit. However, being cheaper than conventional cigarettes was reported as frequently as being less harmful as a reason for vaping:

- among smokers, the most common reasons for using e-cigarettes were as an aid to quitting smoking (46%) and out of curiosity (42%). Others reported using e-cigarettes to reduce smoking (38%), or to prevent relapse to smoking (25%), or because they thought they were less harmful (29%) and cheaper (28%) than conventional cigarettes
- among those who had never smoked and had tried e-cigarettes, trying them out of curiosity (80%), thinking they are less harmful (13%), and tasting better (12%) than conventional cigarettes, were reported as reasons for using e-cigarettes
- about two-thirds of all Australians aged 14+ years were in favour of restrictions on advertising of e-cigarettes and on vaping in public places, and most supported prohibiting sales to minors.

More recently, a 2023 study<sup>136</sup> of adult current or former e-cigarette users in Australia<sup>137</sup> surveyed to assess their e-cigarette usage patterns, practices and perceptions, found that:

- while some users perceived e-cigarettes to be safer than conventional cigarettes and to be
  effective for quitting smoking, in general, there was a large amount of uncertainty or
  ambivalence about the safety of e-cigarettes and their efficacy for smoking cessation
- current users were more likely than former users to consider e-cigarettes to be less harmful than conventional cigarettes, with 30.6% of current users considering e-cigarettes completely safe to use long-term
- the main reasons for starting to use e-cigarettes were to reduce or quit smoking conventional cigarettes, to save money, because they were recommended by friends or family, and as a perceived healthier alternative to smoking
- the most common reason for stopping e-cigarette use was that the user successfully quit smoking and did not need e-cigarettes anymore (unlike other studies which have found that users stopped because e-cigarettes were not the same as smoking conventional cigarettes, or because they did not help them quit or reduce smoking)<sup>138</sup>
- most respondents (50.5%) agreed/strongly agreed that people who have never smoked conventional cigarettes should not use e-cigarettes, with older Australian adults (40+ years) being almost 2 times more likely to strongly agree that e-cigarettes should not be used by people who have never smoked
- while most respondents (67.7%) believed that e-cigarettes can help people quit or reduce smoking, the responses suggested, as in other studies, that adolescents and young adults viewed e-cigarettes 'as relatively harmless devices associated with fun, flavour experimentation, and discreet use of nicotine', 139 rather than aids to smoking cessation
- 37.6% of users considered e-cigarettes to be safe around other people, and 36.0% thought e-cigarettes should be allowed in smoke-free areas

Larcombe, AN, Chivers, EK, Huxley, RR, Musk, AW, Franklin, PJ, Mullins, BJ, 'Electronic Cigarette Usage Patterns and Perceptions in Adult Australians', *Toxics*, 2023, 11(3), 290, https://doi.org/10.3390/toxics11030290.

A high proportion of current e-cigarette users in the study were also smokers (74.6%), and most used e-liquids containing nicotine (70.3%) despite it being illegal in Australia without a prescription, with the majority buying their devices and liquids in Australia (65.7%); see Larcombe, AN, et al, 'Electronic Cigarette Usage Patterns and Perceptions in Adult Australians', *Toxics*, 2023, 11(3), 290, https://doi.org/10.3390/toxics11030290.

Larcombe, AN, et al, 'Electronic Cigarette Usage Patterns and Perceptions in Adult Australians', *Toxics*, 2023, 11(3), 290, pp 10-11, https://doi.org/10.3390/toxics11030290.

Larcombe, AN, et al, 'Electronic Cigarette Usage Patterns and Perceptions in Adult Australians', *Toxics*, 2023, 11(3), 290, p 12, https://doi.org/10.3390/toxics11030290.

• almost half of users (49.7%) would use a government-approved e-cigarette and e-liquid instead of their current device and e-liquid.



There are very few studies of Aboriginal and Torres Strait Islander peoples' perceptions of the effects of e-cigarettes on personal health. A study of e-cigarette use and beliefs about harmfulness of their use conducted in 2013-14 found that fewer Aboriginal and Torres Strait Islander smokers considered e-cigarettes to be less harmful than conventional cigarettes than did all Australian smokers at that time. 140

## 5.2.1 Young people's awareness of health effects of e-cigarette use

Studies in 2019 investigating perceptions of e-cigarettes among 18–25 year old Australians, found:

- substantial proportions of young adults do not know whether e-cigarettes are harmful (20%) or addictive (34%)<sup>141</sup>
- more positive perceptions of e-cigarettes among smokers and e-cigarette users, particularly in relation to their efficacy for smoking cessation<sup>142</sup>
- some support for restrictions relating to the sale and use of e-cigarettes, although current smokers and e-cigarette users were typically less likely to support restrictions
- little support from young adults for a requirement for a prescription from a medical practitioner to use e-cigarettes. 143

There is a 'drastic lack of awareness' about the harmful effects of e-cigarettes (with and without nicotine) among students as well as parents/carers in Queensland, according to P&Cs Qld. 144 P&Cs Qld reported:

- 'widespread lack of parent awareness and understanding as to the contents of vapes' and many parents/carers believing 'vapes with flavours such as cotton candy, jellybeans, orange, grape etc are harmless to children' 145
- some parents/carers purchasing vaping products for students with lack of awareness of the legalities of supply<sup>146</sup>
- 'parents/carers and schools are often clashing as to the enforcement and discipline of students undertaking vaping'. 147

In contrast, Life Ed Queensland reported that surveys of its network of students, teachers and parents conducted in April 2023 showed that high proportions of students and parents involved with Life Ed

Submission 76, p 1.

Submission 76, p 2.

Thomas, DP, Lusis, N, Van der Sterren, AE, Borland, R, 'Electronic Cigarette Use and Understanding Among a National Sample of Australian Aboriginal and Torres Strait Islander Smokers', *Nicotine & Tobacco Research*, 2019, 21(10):1434-1440, doi: 10.1093/ntr/nty154. PMID: 30053109.

Jongenelis, MI, Kameron, C, Rudaizky, D, Slevin, T, Pettigrew, S, 'Perceptions of the harm, addictiveness, and smoking cessation effectiveness of e-cigarettes among Australian young adults', *Addictive Behaviors*, 2019, 90, pp 217–221, https://doi.org/10.1016/j.addbeh.2018.11.004.

Jongenelis, MI, et al, 'Perceptions of the harm, addictiveness, and smoking cessation effectiveness of ecigarettes among Australian young adults', *Addictive Behaviors*, 2019, 90, pp 217–221, https://doi.org/10.1016/j.addbeh.2018.11.004.

Jongenelis, MI, Kameron, C, Rudaizky, D, Pettigrew, S, 'Support for e-cigarette regulations among Australian young adults', *BMC Public Health*, 2019, 19, 67, doi: 10.1186/s12889-019-6410-4.

<sup>&</sup>lt;sup>144</sup> Submission 76, p 2.

<sup>&</sup>lt;sup>147</sup> Submission 76, pp 1-2.

programs believe there are harmful effects from using e-cigarettes. Table 3 contains a snapshot of the survey results provided to the committee by Life Ed Queensland. 148

## Table 3: Perceptions of e-cigarettes use in Queensland schools

#### **Primary school (Years 5 and 6) students** (n = 477)

The majority of students (91.91%) thought that vaping is unsafe.

1.28% believed it to be safe, and 6.81% were unsure.

69.92%% agreed that many vapes contain nicotine.

26.48% of students were unsure whether vapes contain nicotine.

4.29% thought that vapes do not contain harmful chemicals.

17.60% were unsure whether vapes contain harmful chemicals.

23.21% of students in regional areas indicated that they may vape/were very likely to vape in the future compared to 9.72% in metropolitan Queensland.

Students thought not being able to buy vapes, followed by health advertisements on social media/tv, and school programs run by service providers such as Life Ed would stop young people from vaping. Programs run in schools by teachers were seen as the least likely to stop people from vaping.

#### **Parents** (n = 630)

93% of parents said they believe vaping is unsafe.

41% parents believe that vaping is more harmful than cigarettes, and 45% believe vaping is just as harmful as cigarettes.

38% of parents thought 'peer pressure' was the key driver behind young people vaping, closely followed by 'availability' (34%).

Tougher penalties for retail outlets (27%), in-school programs for children (26%), and public health promotion campaigns designed for young people (25%), were perceived by parents as the best ways to reduce the uptake of vaping by young people.

#### Classroom teachers (n = 193)

Less than one in ten teachers (8.93%) said that education on the health impacts of vaping was a current strategy within their school to discourage vaping use.

Teachers supported a range of options to discourage vaping: parent workshops (53.85%), public health promotion campaigns designed for young people (51.75%), in-school programs for children run by external providers (43.46%), and online teacher and parent resources (37.06%), tougher penalties for retail outlets (29.37%), teacher professional development (28.97%).

Source: Life Education Queensland, submission 52.

## 5.3 Activities to increase awareness and prevent e-cigarette use

Jurisdictions around the world have adopted a wide range of policies and prevention activities designed to reduce the use of e-cigarettes, especially among children and youth. The 2 most common strategies are:

- public education campaigns designed to inform people about the risks associated with e-cigarettes and to counter misinformation
- school-based programs, including both preventive messaging/health education and practical interventions (such as increasing monitoring/supervision of, or limiting access to, bathrooms at schools).



The newness of many of the strategies designed to address e-cigarette use, including their use by children, means it is too early to fully evaluate their effectiveness. As a result some caution is necessary, as certain strategies (such as limiting bathroom access at schools) could have negative impacts on some students.

Life Education Queensland, submission 52.

The evidence that is currently available suggests that public education campaigns and school-based programs can improve knowledge about e-cigarettes, influence young people's attitudes towards them, and contribute to decisions not to use e-cigarettes.<sup>149</sup>

Although research on preventive activities relating to e-cigarettes remains relatively limited, evidence about activities targeting traditional tobacco products is substantial. That evidence may provide 'lessons learnt' that could be transferred, or adapted to the problem of e-cigarettes. For example, research on public education campaigns for cigarette smoking shows that:

- while campaigns typically have effects that are small in size, they can produce changes of high practical significance because they reach large numbers of people
- targeted public education campaigns can contribute to preventing smoking initiation among young people, and help to maintain reductions in smoking prevalence more generally
- effective campaigns tend to be longer in duration, involve activity across multiple channels, and employ combined approaches (e.g. media messages plus school-based programs)
- the context in which young people are exposed to messages matters: anti-smoking messages appear to have greater impact when youth are given an opportunity to discuss them. 150

## 5.4 Existing vaping preventive activities in Australia

In Australia, existing preventive activities focus on the provision of information about the health risks associated with e-cigarettes. These include public education campaigns and school-based education programs.

## 5.4.1 Examples of public education campaigns in Australia

Several Australian jurisdictions have recently launched public education campaigns about e-cigarette use, primarily targeting young people. Others have released material to support school-based programs. Table 4, below, provides a brief overview of some of these recent campaigns.

Table 4: Recent public education campaigns about vaping in Australia

Jurisdiction & department/agency	Key features
Queensland	• Vape Truths – launched in July 2022
Queensland Health  Available at:	<ul> <li>Series of short videos featuring celebrity scientist, Dr Karl Kruszelnicki, suitable for sharing on social media</li> </ul>
https://www.vapetruths.initiatives.qld.gov.au/	<ul> <li>Website with additional information and links to support services for quitting</li> </ul>
	Appears to only be available in English
	2-part video series for schools – <i>Think twice</i> before vaping – also launched in July 2022 by     Queensland Police Service <sup>151</sup>

For a succinct summary of this evidence, see EM Greenhalgh, EM, Scollo, MM, '18.10 Policies and programs to reduce e-cigarette use among young people and non-smokers', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues,* Melbourne, Cancer Council Victoria, 2023, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-10-policies-and-programs-to-reduce-e-cigarette-use-among-young-people-and-non-smokers.

For a more detailed discussion of the evidence on public campaigns see: Bayly, M, Cotter, T, and Carroll, T, 'Examining the effectiveness of public education campaigns', in MM Scollo, MM, Winstanley, MH (eds), Tobacco in Australia: Facts and issues, Melbourne, Cancer Council Victoria, 2019, https://www.tobaccoinaustralia.org.au/chapter-14-social-marketing/14-4-examining-effectiveness-of-public-education-c.

See https://mypolice.qld.gov.au/news/2022/07/14/police-launch-vaping-awareness-videos-for-local-schools/.

Jurisdiction & department/agency	Key features
New South Wales NSW Health	<ul> <li>Do you know what you're vaping? – launched in March 2022</li> </ul>
Available at:	<ul> <li>Clear and direct central messages (e.g. 'many vapes contain nicotine making them addictive')</li> </ul>
https://www.health.nsw.gov.au/vaping	<ul> <li>Visually appealing campaign materials designed to appeal to children/youth, including factsheets, social media tiles/graphics, short videos</li> </ul>
	<ul> <li>Website with information and resources tailored to young people, parents and carers, teachers and schools, health professionals</li> </ul>
	Certain materials (factsheets, posters, social media tiles) available in a variety of languages
Western Australia Department of Education &	<ul> <li>Do you know what you're vaping? – launched in June 2022</li> </ul>
Department of Health	<ul> <li>Based on the materials developed by New South Wales</li> </ul>
Available at: https://www.healthywa.wa.gov.au/vaping https://myresources.education.wa.edu.au/programs/vaping	WA Schools Anti-Vaping Toolkit - includes materials for use by schools, including user guide, links to teaching and learning resources, sample communication materials, short videos, factsheets
Victoria Department of Health &	E-cigarettes and teens: what you need to know     launched July 2021
Department of Education  Available at: https://www.quit.org.au/articles/teenvaping/	<ul> <li>Resources developed by Quit Victoria with funding from Department of Health, for distribution by Departments of Education and Health</li> </ul>
	<ul> <li>Includes factsheets, videos and social media tiles</li> </ul>
Victoria Department of Education	Smoking and Vaping Ban toolkit of resources to support implementation of smoking and vaping bans at schools
Available at: https://www2.education.vic.gov.au/pal/smoking-vaping- ban/resources	<ul> <li>Includes materials for use by schools, including sample communication materials (e.g. newsletters), advice, factsheets, links to teaching and learning resources</li> </ul>
	Includes information and advice for parents
	<ul> <li>Advice for schools and parents available in a range of languages</li> </ul>
Northern Territory  NT Health & Department of Education	Do you know what you're vaping? – launched in July 2023
Available at:	Based on the materials developed by New South Wales
https://nt.gov.au/wellbeing/healthy-living/vaping	

## 5.4.1.1 Effectiveness of the 'Vape Truths' campaign in Queensland

Queensland Health told the committee that its anti-vaping campaign, 'Vape Truths', was launched in July 2022 across a broad range of social media platforms<sup>152</sup> and physical signage on bus shelters and

 $<sup>^{152}</sup>$   $\,$  Including TikTok, Facebook, YouTube, Instagram, Snapchat, and Reddit.

roadside and shopping centre billboards. The campaign targeted Queensland people aged 18–34 who were 'current vapers, smokers, or 'non-rejectors' of vaping'. 153

An evaluation of the campaign found that:

- there were over 150,000 visits to the 'Vape Truths' website over the campaign period (27% of those aware of the campaign visited the 'Vape Truths' website)
- it was successful in increasing awareness of the harms and short and long-term health consequences of vaping
- 77% of people who saw the campaign agreed that it helped them to understand the health risks of vaping and told them where they could find out more about the health risks of vaping
- 85% of people visiting the website found it 'extremely useful' or 'useful'.

Queensland Health advised that a second phase of the 'Vape Truths' campaign, aiming to continue to increase awareness of the risks of e-cigarette use 'whilst also supporting those Queenslanders who may be seeking support to quit vaping', was being delivered between March and June 2023. 154

Queensland Health is also working with DoE and the Office for Youth (Department of Environment and Science) to develop a campaign, targeting Queenslanders aged 12–17. The department advised that this work 'will continue throughout the development of the campaign to leverage their knowledge and understanding of the topic and audience and to ensure campaign materials are suitable and relevant to secondary audiences such as parents, carers, and teachers'. The campaign is expected to launch late in 2023. <sup>155</sup>

## 5.4.1.2 Effectiveness of the 'Do you know what you're vaping?' campaign in New South Wales

The Tobacco and E-cigarette Policy Unit of NSW Health provided information to the committee about its 'Do you know what you're vaping?' information campaign which was launched in March 2022. <sup>156</sup> NSW Health explained that phase 1 of the campaign aimed to raise awareness of the health risks of vaping among young people aged 14–17, and included paid social media posts and videos on Facebook, Instagram, Snapchat, Spotify, and TikTok, with continuing organic social media via NSW Health and partners. The campaign also included information on buses, street posters at shopping centres and bus stops, and a resources 'toolkit' to support young people, parents, and school staff, with fact sheets, posters, videos, and newsletter content for schools.

NSW Health increased enforcement action to coincide with the launch and support the campaign, seizing over \$1 million worth of illegal e-cigarettes and e-liquids in the first half of 2022 and prosecuting retailers. <sup>157</sup>

NSW Health advised that the campaign and toolkit has been licensed to several other jurisdictions (WA, South Australia, Northern Territory, Australian Capital Territory and Tasmania).

An evaluation of Phase 1 of the 'Do you know what you're vaping?' campaign found that:

- the paid 8.5 week social media campaign, which cost \$86,559, had visibility of over 11.5 million impressions, while 46 posts on NSW Health social media platforms reached 10 million people
- there were almost 120,000 page views of the NSW Health vaping website (March June 2022), with most traffic driven by social media channels; 'The facts about vaping' factsheet for young people was most viewed
- the campaign successfully reached its target audience of young people aged 14–17

<sup>&</sup>lt;sup>153</sup> Queensland Health, correspondence, 25 May 2023, p 7.

<sup>&</sup>lt;sup>154</sup> Queensland Health, correspondence, 25 May 2023, p 7.

<sup>&</sup>lt;sup>155</sup> Queensland Health, correspondence, 25 May 2023, p 8.

<sup>&</sup>lt;sup>156</sup> NSW Health, correspondence, 10 July 2023.

NSW Health, 'NSW Health seizes more than \$1 million of illegal nicotine vapes', 16 May 2022, https://www.health.nsw.gov.au/news/Pages/20220516\_00.aspx.

- the campaign influenced positive behavioural change in 14–17 year olds in relation to e-cigarettes. An online survey of 263 NSW residents aged 14–17 undertaken before and after the campaign showed –
  - positive associations of vaping fell by 20% (from 28% to 8%)
  - 86% said the campaign adverts are easy to understand, 84% said they deliver an important message, and 80% said they are informative
  - 69% reported having taken some form of positive action in relation to vaping, including 'suggested to their friends that they cut down their vaping or stop altogether' (32%), 'spoken to their friends about the potential health risks associated with vaping' (28%), and 'cut down their own vaping or stopped altogether' (19%).

NSW Health advised that a follow up campaign targeting young people in NSW aged 14–24, which is being developed by the Cancer Institute NSW, is planned for late 2023 and that additional resources will be added to the 'toolkit', including resources on e-cigarettes and smoking for Aboriginal young people. 158

## 5.4.1.3 Effectiveness of the 'Do you know what you're vaping?' campaign in Western Australia

Information about the implementation of the 'Do you know what you're vaping?' campaign in WA was provided to the committee by the Minister for Health and Mental Health in WA, Hon Amber-Jade Sanderson. <sup>159</sup> The Minister advised that the campaign, as originally developed by NSW Health, was the first phase of action aimed to raise awareness about the health risks of vaping among school students and young people in WA, and their parents/carers. The campaign was live on digital and social media platforms and radio from June to December 2022.

At the same time, the Department of Health and Department of Education in WA also launched the WA Schools Anti-Vaping Toolkit, containing resources on the health risks of vaping for school staff, students, parents and carers, and strategies to minimise vaping among students. The Toolkit, which was adapted from the NSW Health materials to align with WA's legislation and school curriculum, was targeted at secondary schools, but the resources are also available online for all public and non-government schools in WA.

Evaluation measures showed that:

- the campaign reached over 630,000 people on digital and social media
- over 19,000 people visited the campaign webpage.

Minister Sanderson advised that the second phase of the WA Government's strategy to address vaping is currently in development and will include a new digital campaign on the dangers of vaping, targeting 14–24 year olds.

The WA Department of Health is also increasing compliance activities in relation to the illegal sale of e-cigarettes and coordinating government efforts to raise awareness of laws, public health harms, and pathways for cessation support. <sup>160</sup>

## 5.4.1.4 Quit Victoria's 'Get the Facts – See through the Haze' campaign

Another recent public education campaign is the 'See through the Haze' campaign, developed by Quit Victoria. Quit Victoria provided information to the committee<sup>161</sup> about the campaign which was conducted from May to July 2023.

<sup>&</sup>lt;sup>158</sup> NSW Health, correspondence, 10 July 2023.

Hon Amber-Jade Sanderson MLA, Minister for Health; Mental Health, Western Australia, correspondence, 3 August 2023.

Hon Amber-Jade Sanderson MLA, Minister for Health; Mental Health, Western Australia, correspondence, 3 August 2023.

<sup>&</sup>lt;sup>161</sup> Quit Victoria, correspondence, 10 August 2023.

Targeting people aged 14–39, including people who currently vape, the campaign aimed to raise awareness that many e-cigarettes contain poisonous chemicals. The campaign was run on paid, earned and owned media channels. The impact of the campaign is currently being evaluated by the Cancer Council Victoria.

Quit Victoria explained to the committee that the impacts of campaigns are typically seen in the longer term, and that campaigns as well as other tobacco and e-cigarette control policies and interventions, in combination, contribute to declines in e-cigarette use.

Quit Victoria also advised that it is currently developing a suite of anti-vaping resources for Victorian schools which are yet to be rolled out.

## 5.4.2 School-based programs in Australia

In Australia, state and territory governments have supported the development of teaching and learning resources on smoking and other drugs. Curriculum-based programs have incorporated content on conventional cigarettes and tobacco, and cover skills with broader relevance, such as how to refuse offers of substances from peers, and how to ask for help. However, until quite recently, most of these resources did not specifically address e-cigarette use. In the case of newer 'toolkits' that do address vaping, the resources available are largely limited to factsheets, short videos and communication materials (posters, newsletter templates) and typically have not included classroom activities or model lessons.

NSW Health advised that resources from its 'Do you know what you're vaping?' campaign resources toolkit have been included in 8 lessons in the NSW Department of Education curriculum for Years 7 and 8, and 8 lessons for students in Years 9 and 10.

As outlined in section 4.2 of this report, the Queensland DoE's Alcohol and Other Drugs education program for students in Years 7 to 12 is currently being revised to include education about e-cigarettes, and the department is developing other resources in collaboration with Queensland Health for use in Queensland schools. In addition, the *Blurred Minds Academy*, which has been used by some schools in Queensland to address vaping, will be available to all Queensland secondary schools from Term 4, 2023, as recently announced. This program for Years 7 to 10 includes 3 vaping education modules, with materials and a teacher guide for each module to assist teachers with lesson planning.

## 5.5 Targeted prevention activities from overseas

More specialised programs and interventions to address vaping prevention and cessation have emerged overseas. These programs differ primarily from other smoking prevention activities by being more tailored: they target young people, and most of them are specifically designed to address use of e-cigarettes.

## 5.5.1 Summary of case studies of vaping prevention activities

The following sections summarise 5 case studies of prevention activities targeting youth (the case studies are presented in Appendix E). The programs/interventions selected are all from the US and have been developed by reputable public health experts, and/or studies have demonstrated their effectiveness in preventing vaping or helping people to quit:

- You and Me, Together Vape-Free 163 a set of teaching and learning resources
- MY Healthy Future<sup>164</sup>— an interactive online course designed as an alternative to suspension for children found vaping at school

Hon Grace Grace, Minister for Education, Minister for Industrial Relations and Minister for Racing, Media Statement, 3 August 2023, '\$5 million boost to tackle vaping in schools', https://statements.qld.gov.au/statements/98363.

See https://med.stanford.edu/tobaccopreventiontoolkit/you-and-me-together-vape-free-curriculum.html.

See https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

- INDEPTH<sup>165</sup> a teacher-led course designed as an alternative to suspension
- SmokeSCREEN<sup>166</sup> a free video game aimed at preventing youth smoking and vaping
- This Is Quitting<sup>167</sup> a text messaging program that provides tailored advice to young people who want to stop vaping.

## 5.5.1.1 You and Me, Together Vape-Free

You and Me, Together Vape-Free is a set of teaching and learning resources designed for use in US schools. Launched in 2022, it forms part of the Tobacco Prevention Toolkit developed by Stanford REACH Lab. Stanford REACH Lab focuses on the developmental, cognitive, psychosocial, and cultural/social factors involved in adolescents' and young adults' health-related decision-making, perceptions of risk and vulnerability, health communication, and risk behaviour. 168

You and Me, Together Vape-Free provides a series of lessons adapted for different age groups (5-10 year olds, 11-13 year olds, and 14-18 year olds) that address key issues associated with vaping such as, what is in e-cigarettes, how they affect the body, marketing of e-cigarettes, environmental impacts, and healthy ways to cope with stress. Each lesson includes classroom activities, online quiz games, and worksheets in addition to presentations, information resources, and other materials.

The course content is designed to be reinforced outside of the classroom via discussions with trusted adults and peers. To facilitate this, teachers are provided with a discussion guide to give to students. These guides provide open-ended questions and activities that students can use to open dialogue between themselves, their peers and adults.

You and Me, Together Vape-Free has been endorsed and/or publicised by a wide range of US-based organisations that focus on public health and education.

## 5.5.1.2 MY Healthy Future

MY Healthy Future, also developed by Stanford REACH Lab, is a self-paced online course, designed as an alternative to suspension for students found vaping on school grounds.

The course comprises 3 modules, which each include a combination of activities, games and videos, <sup>169</sup> covering aspects of vaping such as what is in e-cigarettes, how vaping affects the body, why addiction happens, motivation to quit, coping with stress, and recovery.

The course can be completed independently by students in 40-60 minutes. However, the developers provide detailed guidance for teachers to help them introduce the course to students, and follow up with students after they have completed it.<sup>170</sup> The REACH Lab also provides free access to learning materials for *OUR Healthy Futures*, a course that includes similar content, but is designed to be taught in a group setting by a teacher or other appropriate facilitator.

## 5.5.1.3 <u>INDEPTH</u>

Intervention for Nicotine Dependence: Education, Prevention, Tobacco and Health (*INDEPTH*) is a free teacher-led course designed as an alternative to suspension for students found vaping or smoking at school. *INDEPTH* was developed by the American Lung Association in partnership with the Prevention Research Center of West Virginia University.

See https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

<sup>&</sup>lt;sup>166</sup> See https://www.smokescreengame.org/.

<sup>&</sup>lt;sup>167</sup> See https://truthinitiative.org/thisisquitting.

For more information on REACH Lab, see: https://med.stanford.edu/halpern-felsher-reach-lab.html.

See: https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

See 'Procedures for the MY Healthy Future Online Course', https://med.stanford.edu/content/dam/sm/tobaccopreventiontoolkit/documents/Curriuculms/HealthyFutures/MYHealthyFutureS-Course-Procedures.pdf.

According to the American Lung Association's website, *INDEPTH* was designed to provide a supportive, rather than punitive means of responding to vaping and smoking in schools. <sup>171</sup> The program has 2 components: a training course for facilitators, and a training course for students, which comprises 4, 50 minute sessions. These sessions are targeted at youth and focus on vaping, tobacco use, nicotine dependence and how to establish healthy alternatives.

In 2019, the American Lung Association piloted INDEPTH at 11 sites across the US, including middle schools, high schools, and an alternative school. An external evaluation found that 60% of students who participated in the pilot stated they were willing to try to quit nicotine, vaping and/or tobacco products. <sup>172</sup>

## 5.5.1.4 SmokeSCREEN

SmokeSCREEN is a free video game, designed for children aged 10–16, that aims to prevent smoking and vaping among adolescents. It was developed by the play2PREVENT Lab at the Yale Center for Health and Learning Games, in collaboration with the Yale and USC Tobacco Centers of Regulatory Science, 1st Playable Productions, and Schell Games.

Throughout the game, players are placed in different situations with a focus on decision-making about smoking and vaping and strategies for both smoking prevention and cessation as they play through 7 storylines. These focus on issues such as how to avoid risky situations and respond to peer pressure, the impact of smoking and vaping on your body, marketing tactics for smoking products, helping people who want to quit, and where to get help to quit. 173

Several published studies suggest that *SmokeSCREEN* has the potential to discourage young people from vaping and encourage those who do to quit.<sup>174</sup>

## 5.5.1.5 This Is Quitting

This Is Quitting<sup>175</sup> is a free, anonymous text messaging intervention that provides tailored advice to young people in the US who want to stop vaping. It was developed by Truth Initiative, a non-profit organisation whose primary mission is to end tobacco use and nicotine addiction.

Launched in 2019, *This is Quitting* was developed using input from young people who have attempted to, or successfully, stopped vaping and to date, it has provided advice and support to more than 570,000 young people. Targeted at people aged 13–24, the service provides users with advice tailored to their age and product usage. The service provides users with advice tailored to their age and product usage.

Users enrol in the program and receive age-appropriate messages, tailored to their enrolment date or quit date, which are focused on building skills and confidence and providing support around their quit date. Throughout the program, users can text COPE, STRESS, SLIP or MORE to receive instant support. On completion users can continue to receive supportive text messages for as long as they like. 178

<sup>&</sup>lt;sup>171</sup> See https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

See 'INDEPTH Pilot Evaluation Summary' and 'INDEPTH Pilot Evaluation Infographic' at https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

See https://www.smokescreengame.org/.

See for example: Pentz, MA, Hieftje, KD, Pendergrass, TM, Brito, SA, Liu, M, Arora, T, Tindle, HA, Krishnan-Sarin, S, Fiellin, LE, 'A videogame intervention for tobacco product use prevention in adolescents', *Addictive Behaviors*, 91, April 2019, pp 188-192, https://doi.org/10.1016/j.addbeh.2018.11.016; and Hieftje, KD, Fernandes, CF, Lin, IH, Fiellin, LE, 'Effectiveness of a web-based tobacco product use prevention videogame intervention on young adolescents' beliefs and knowledge', *Substance Abuse*, 2021, 42(1), pp 47-53, doi: 10.1080/08897077.2019.1691128.

See https://truthinitiative.org/thisisquitting.

<sup>176</sup> Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.

<sup>177</sup> Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.

<sup>178</sup> Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.



This is Quitting is similar to QuitTxt, <sup>179</sup> which is available in Australia. However, This Is Quitting has been developed specifically for young people who vape. The messages it sends read like they have been sent by a supportive and non-judgmental friend; they are written in the first person or presented as quotes from other users. This makes them more engaging and appealing to young people – as illustrated by the examples below.

Sample message from QuitTxt

Your first weekend is coming. Prepare your strategies to cope with social situations. Avoid your smoker friends on the weekend.

Sample message from This Is Quitting

You GOT this. You may want to avoid people, places or things that make you want to use your vape today (if that's possible!). Text COPE or STRESS if you need

According to research supported by Truth Initiative, and published in reputable peer reviewed journals, *This is Quitting* is effective in helping young people to stop vaping. <sup>180</sup>

## **Committee comment**

There are lessons that can be learnt from programs such as those outlined in section 5.5.1 above. The programs address many of the observations that have been made during this inquiry by teachers and school leaders, students, parents, and experts in the field of substance use support and education about what is needed in vaping preventive activities for young people. The evidence to date suggests that these kinds of preventive activities have the potential to discourage young people from vaping. It appears that effective preventive activities are characterised by:

- using materials and activities that are engaging and age-appropriate
- using content that young people can relate to
- clearly communicating evidence-based information
- communicating lived experiences of young people
- a focus on support
- a non-judgmental tone
- including a variety of resources
- including model lessons in the teaching resources
- teachers receiving training to deliver programs.

We also note that programs for young people that are part of a multi-layered strategy that includes other actions to increase awareness and to support quitting are more likely to produce results.

## 5.6 Increasing awareness and the effectiveness of preventive activities

Experts and agencies working in the design and delivery of programs, services and resources to reduce harms from substance use recommend that preventive activities be multi-layered and mutually reinforcing. As the Alcohol and Drug Foundation advise:

Campaigns that aim to increase awareness of harms, or to provide public information, must sit alongside other action areas such as community engagement, research, monitoring and evaluation, in addition to necessary regulatory changes. <sup>181</sup>

See https://www.quithq.initiatives.qld.gov.au/; and further information in section 6.3 of this report.

See for example: Graham, AL, Jacobs MA, Amato, MS, 'Engagement and 3-Month Outcomes From a Digital E-Cigarette Cessation Program in a Cohort of 27 000 Teens and Young Adults', *Nicotine & Tobacco Research*, 22(5), 2020, pp 859–860, https://doi.org/10.1093/ntr/ntz097; and Graham AL, Amato, MS, Cha, S, Jacobs MA, Bottcher, MM, Papandonatos, GD, 'Effectiveness of a Vaping Cessation Text Message Program Among Young Adult e-Cigarette Users: A Randomized Clinical Trial', *JAMA Internal Medicine*, 2021, 181(7), pp 923–930. doi:10.1001/jamainternmed.2021.1793.

<sup>&</sup>lt;sup>181</sup> Submission 69, p 9.

Stakeholders highlighted areas of action that need attention to improve the effectiveness of preventive activities and increase community awareness of the risks of e-cigarette use. In particular stakeholders pointed to the need for:

- research and evaluation to expand the evidence base for design and delivery of programs and services
- specific resources for schools and school-based vaping education programs
- vaping specific support services for current users of e-cigarettes dealing with addiction
- enforcement of regulations.

#### 5.6.1 Research

As noted in this report and by many submitters to the inquiry, evidence about many aspects of e-cigarette use is currently limited. More evidence is needed to continue to inform the development of preventive activities and targeted programs. Submitters<sup>182</sup> identified the need for more research in many areas, including to improve understanding of:

- the prevalence and characteristics of e-cigarette use in Queensland
- the prevalence and harms associated with e-cigarette use in Aboriginal and Torres Strait Islander peoples' communities, by location
- awareness of issues relating to e-cigarette use (ingredients in e-cigarettes, potential harms, laws relating to use)
- the effectiveness of prevention campaigns
- usage by young people
- young people's attitudes to vaping
- young people's motivations for vaping
- what activities work to prevent youth vaping and to assist young people to quit or reduce harms associated with vaping
- vaping cessation interventions, including for adolescents and young adults
- vaping cessation interventions for dual users (people who smoke and vape)
- · cessation interventions for people living in regional and remote areas
- health risks, interventions, and supports for dual users of tobacco and e-cigarettes
- health effects associated with e-cigarette use, especially long-term.

## 5.6.1.1 Research to investigate young people's motivation for vaping

Some submitters emphasised the need to learn about young people's reasons for using e-cigarettes to increase the effectiveness of preventive activities. While 'curiosity' is the main reason young people give for trying e-cigarettes (see section 5.2), young people identify multiple motivations for continuing to vape, including to manage stress and anxiety, peer connection, addiction, and external influences such as social media. 183

Stakeholders recommended preventive activities take into account these different reasons for vaping. Submitters also suggested that identifying and focusing on young people who need mental health supports and strategies to build skills for dealing with stress, anxiety and external influences, would help to target preventive activities and support services. 184

See for example submissions 53, 58, 59, 62.

<sup>&</sup>lt;sup>182</sup> See for example submissions 22, 53, 58, 59, 62, 77.

See for example submission 62.

## 5.6.1.2 Better data needed to develop responses with Aboriginal and Torres Strait Islander peoples

Some stakeholders expressed concern about the limited data available regarding e-cigarette use by Aboriginal and Torres Strait Islander peoples. Noting the disproportionate and negative impact that smoking has on this group, the Queensland Aboriginal and Islander Health Council and the National Centre for Aboriginal and Torres Strait Islander Wellbeing Research stated:

Tools to accurately understand prevalence and incidence of e-cigarette use among Aboriginal and Torres Strait Islander people must be developed and implemented in collaboration with communities. Accurate data will help inform and support tobacco control programs, policies and strategies. 185

Queensland Aboriginal and Islander Health Council and the National Centre for Aboriginal and Torres Strait Islander Wellbeing Research recommended that the Queensland Government fund 'Aboriginal and Torres Strait Islander community driven research and evaluation on the impact of e-cigarettes on Aboriginal and Torres Strait Islander peoples and communities'. 186

#### 5.6.1.3 Queensland Health research activities

Queensland Health advised that in the last 3 years the department has conducted research and surveillance activities to assist the development of campaign materials:

- In 2020, Queensland Health commissioned market research to understand perceptions and attitudes toward e-cigarettes and vaping among young Queenslanders which found that
  - young people reported using e-cigarettes for coping with stress
  - adolescents may be seeking social acceptance through vaping, while young adults relied on vaping to make social connections and minimise social anxiety
  - the taste, smell and convenience were also appealing features of e-cigarettes.
- In 2022, Queensland parents were surveyed about their views on vaping and how they had engaged with their children about vaping, which showed that -
  - 20.3% of parents had seen advertisements for e-cigarettes in shops (usually tobacconists and vaping stores) and 16.9% had seen e-cigarette advertisements online (mostly on social media and online stores)
  - less than half of parents interviewed (44.4%) had spoken to their child about vaping; those who had were mostly parents of older children
  - about one third of parents reported secondary schools had provided information about vaping, and over 90% of parents thought that secondary schools should provide more information
  - more parents in urban areas (42.4% in major cities) reported that their child's school had provided information about vaping than parents in regional areas (23.0% in inner regional areas; 16.3% in outer regional areas). 187

Queensland Health advised that it is also currently involved in the following research activities:

- member of the National E-Cigarettes Monitoring and Evidence Committee, a new coalition of researchers, clinicians and policy makers
- partnership with the University of Newcastle to develop a surveillance system to identify, synthesise and provide evidence about interventions to prevent youth uptake of e-cigarettes. Other partners include the Tasmanian and WA Departments of Health and the South Australian Department of Education (the project is funded by a 2023 Medical Research Future Fund grant until 2026)

Submission 77, p 10.

Submission 77, p 5.

Queensland Health, 'Electronic cigarettes' in The health of Queenslanders. Report of the Chief Health Officer

• engaged CSIRO and The University of Queensland to identify and map tobacconists and specialized vape stores in Queensland.

In addition, the Youth Smoking Interagency Advisory Group, comprised of representatives from Queensland Health, DoE, Queensland Catholic Education Commission, Queensland Police Service and Department of Environment and Science, has been established by Queensland Health 'to prevent and reduce youth vaping through coordinated, collaborative efforts that maximise the collective impact of policies and programs'. <sup>188</sup>

## **Committee comment**

The committee notes that evidence about many aspects of e-cigarette use is currently limited and that research is needed in many areas to continue to inform the development of preventive activities and targeted programs. Ongoing research and evaluation also will be required to continue to respond effectively to e-cigarette use in Queensland.

Preventive campaigns, education programs, and support services developed for young people are likely to be more effective if they take into account young people's attitudes to and motivations for vaping. Research in these areas will help to determine what activities work to prevent youth vaping and to assist young people to quit.

Further research about cessation, specifically in relation to vaping cessation, for people who smoke and vape, for young people, and for people living in regional and remote areas will be required.

To support the development of targeted preventive activities and programs the committee recommends that the Queensland Government fund research and data collection to obtain contemporary evidence of e-cigarette use in Queensland and to contribute to the design of programs and support services specifically for young people, people living in regional and remote areas of Queensland, and dual users of tobacco products and e-cigarettes.

The committee also notes the relatively limited data that is available regarding e-cigarette use among Aboriginal and Torres Strait Islander peoples, especially school-aged children. This is a source of concern, as the development of effective responses will require an accurate understanding of patterns of e-cigarette use across our community, including among Aboriginal and Torres Strait Islander peoples. The committee therefore recommends that the Queensland Government invest in research to improve our understanding of the dynamics of e-cigarette use among Queensland's Aboriginal and Torres Strait Islander peoples, including the prevalence of vaping by school-aged children. The committee encourages the state government to ensure that this research is undertaken in partnership with Aboriginal and Torres Strait Islander communities.

## 5.6.2 Specific resources for schools

Stakeholders emphasised the need for preventive activities and programs for schools to include more vaping specific resources that are better integrated with the broader alcohol and drug education framework in the curriculum. Submitters also suggested that engaging, age-appropriate resources are needed, as well as:

- targeted programs and interventions based on current evidence of e-cigarette usage in Queensland
- educational resources to be frequently revised, so that the information about e-cigarettes and vaping remains current in light of emerging scientific evidence
- place-based Aboriginal and Torres Strait Islander specific information and resourcing
- a whole of school approach, including parent engagement and education, and teacher professional development

<sup>188</sup> Queensland Health, correspondence, 25 May 2023, Attachment 1.2.

- adequate guidance, training, and lesson materials for teachers to educate children about the effects of e-cigarette use
- e-cigarette awareness education to extend to upper primary school students
- education of the broader community about e-cigarette use, from a public health perspective, but also to equip families and communities to have conversations about e-cigarettes with their children
- resources for teachers and parents to be developed to support young people who may be nicotine dependent to deal with withdrawal symptoms. 189

The need for resources to support students with nicotine dependence in the school environment was highlighted by a response to the Queensland Family and Child Commission's consultations on vaping in Queensland which were undertaken for this inquiry. The participant said:

Teachers aren't often told, hey, this kid is actually going through withdrawal, which is a serious health issue, and if they're already struggling with the symptoms of trying to quit it, then the teacher getting angry at them for a lack of focus or fatigue, this is not going to help, it's going to make the situation worse. Actually helping them to quit would be good because we actually don't do that. We just say it's bad. Go home for a week and think about what you've done, but that's not rehabilitation. 190

## 5.6.2.1 Department of Education investigations into vaping specific resources

DoE advised the committee that it intends to investigate extending the Alcohol and Other Drugs education program to Years 5 and 6 students with suitably modified materials. The content would focus on risks factors associated with e-cigarettes and 'risk prevention strategies that students could use if/when they are being encouraged to use these devices'. 191

The department stated that it would also investigate opportunities to:

- add a vaping/e-cigarettes resource section to DoE's Alcohol and Other Drugs education program webpage 'which would include:
  - parent and student fact sheets
  - Queensland Health and DoE support materials once finalised and
  - support organisations for parents and students available to schools and the general public'
- promote selected external provider resources 'e.g. Dovetail and the Lung Foundation' for use by state schools and families
- 'explore use of additional evidence-based education and support programs'
- 'create a public facing web presence with supportive resources tailored for students, staff and parents'.192

#### Vaping specific support services 5.6.3

The need for support services, particularly vaping-specific support services, was consistently raised during the inquiry. Stakeholders emphasised that easily accessible support services and interventions, particularly those designed to reach young people, are necessary to reduce e-cigarette use.

Submitters also suggested that e-cigarette preventive activities and school-based programs include resources and supports to assist young people to manage stress and anxiety, given young people sometimes cite mental health related reasons for vaping (as noted in section 5.6.1 above). A coordinated approach, combining assistance for young people to develop skills to manage stress and

<sup>189</sup> See for example submissions 34, 52, 53, 56, 59, 62, 69, 77.

Submission 62, p 12.

<sup>191</sup> Department of Education, correspondence, 5 May 2023, p 9.

Department of Education, correspondence, 5 May 2023, p 9.

anxiety, alongside vaping cessation supports, may be more effective for helping young people to escape nicotine dependence. 193

Support services are discussed in more detail in section 6 of this report.

## 5.6.4 Legislative reform, compliance and enforcement

As observed by state government stakeholders as well as submitters, regulatory matters are a key aspect of prevention. Submitters observed that problems associated with the illegal sale of e-cigarettes containing nicotine, and the marketing and sale of e-cigarettes to people under 18 years of age, can be minimised through enforcement and by legislative reforms, such as measures relating to advertising, packaging, and restricted sales. The actions announced by the Australian Government are intended to assist in this regard, although details of when the measures will take effect and whether it will involve legislation at the state and national level are not yet known. The effectiveness of any reforms will be dependent on compliance and enforcement. These issues are discussed in more detail in sections 6, 7 and 8 of this report.

## 5.7 Australian Government commitments to public health campaigns and support services

In the 2023-24 Budget, as part of a range of measures to help reduce smoking and e-cigarette use, the Australian Government committed over \$230 million over the next 4 years to:

- national public health campaigns to discourage people from smoking and vaping
- increasing and enhancing smoking and vaping cessation support
- expanding the Tackling Indigenous Smoking program and widening it to include vaping.

(See Section 6.5.1 and 8.5.1 of this report for more details of the measures announced by the Australian Government.)

## **Committee comment**

It is clear from the rise in e-cigarette use in Queensland and throughout Australia that there is more work to be done to explain the health risks associated with vaping and to help people to quit. We note that the most recent research shows that there is still a proportion of the community, and more young people, who are not aware of the health risks of using e-cigarettes. A high profile national public health campaign is an important step in informing the broader community, better reaching young adults, and encouraging families to have conversations about vaping with their children.

The Commonwealth Government's commitment to spending over \$230 million over the next 4 years on national public health campaigns and cessation support services to tackle smoking and vaping will provide fresh energy to these efforts. The expansion of the Tackling Indigenous Smoking program to include vaping is supported by the committee.

The second phase of the 'Vape Truths' campaign, and Queensland Health's collaboration with the Department of Education and the Office for Youth to develop a campaign which targets young Queenslanders as well as parents, carers, and teachers, are useful initiatives. The committee welcomes the announcement by the Queensland Government on 24 August 2023 of the launch of this latter campaign targeting younger Queenslanders, aged 12–17. The new campaign, 'There's Nothing Sweet about Vapes', will reach young Queenslanders via TikTok, Snapchat, YouTube, Twitch and Spotify with information about the dangers of vaping.

Stakeholders told the committee that schools need preventive activities and programs to include more vaping specific resources that are better integrated with the broader alcohol and drug education

<sup>&</sup>lt;sup>193</sup> See for example submissions 22, 53, 58, 73.

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-

on-smoking-and-vaping.

See https://www.aph.gov.au/About\_Parliament/Parliamentary\_departments/Parliamentary\_Library/Budget/reviews/2023-24/VapingSmokingMeasures.

framework in the curriculum. The committee heard that preventive activities and school-based programs could be supplemented by resources and supports to assist young people to manage stress and anxiety. Schools also need assistance to support students who are nicotine dependent. Additional guidance, training, and lesson materials (preferably including model lessons) would also assist teachers in their efforts to educate children about the risks of e-cigarette use.

The committee notes, and supports, the Department of Education's intention to investigate extending the Alcohol and Other Drugs education program, including information on vaping to Years 5 and 6 students, a proposal that was also recommended by stakeholders.

Other opportunities identified by the committee to increase the effectiveness of programs and support services are discussed in the following section 6 of this report.

#### Recommendation 1

The committee recommends that the Queensland Government investigate establishing a joint task force involving Queensland and Commonwealth agencies with the primary objective of ending the illegal retail supply of e-cigarettes, including online, especially to people under the age of 18.

#### Recommendation 2

The committee recommends that the Queensland Government fund on-going research and data collection to obtain evidence of e-cigarette use in Queensland, to support the development of targeted preventive activities, programs, and support services.

### **Recommendation 3**

The committee recommends that the Queensland Government fund on-going research, undertaken in partnership with Aboriginal and Torres Strait Islander communities, into e-cigarette use by Queensland's Aboriginal and Torres Strait Islander peoples.

### **Recommendation 4**

The committee recommends that the Queensland Government cooperate with the Australian Government and all state and territory governments, in a national health campaign to inform the public of the facts about the potential risks of using e-cigarettes.

## Recommendation 5

The committee recommends that the Department of Education assess the adequacy of the current vaping education resources for schools and supplement them where required to ensure that Queensland's schools have access to a package of high-quality, evidence-informed, age-appropriate teaching resources, as well as access to professional training to assist in delivering the program effectively.

#### Recommendation 6

The committee recommends that the Department of Education and Queensland Health prepare guidelines for all Queensland schools on interventions, such as interactive online courses, that can be used as an educative alternative for students found vaping or with vaping products, rather than pursuing punitive outcomes such as suspension.

#### **Recommendation 7**

The committee recommends that the Department of Education and Queensland Health prepare guidelines for all Queensland schools for identifying and supporting students who are nicotine dependent, including the use of support services and referrals to help students to quit vaping.

# 6 Opportunities to increase accessibility and effectiveness of services and programs to prevent uptake and continuing use of e-cigarettes

## 6.1 Key findings

- In Australia, people who want to stop vaping can access support via broader smoking cessation
  programs. However, evidence suggests that programs designed to help people quit smoking may
  need to be adapted to be effective in relation to vaping. In particular, cessation programs may
  need to be tailored for young people, and for Aboriginal and Torres Strait Islander peoples and
  people from culturally diverse backgrounds.
- Services to support people to quit vaping are an essential component of any strategy to reduce e-cigarette use, particularly as e-cigarettes may be even more difficult to quit than smoking.
- Extending the capacity of the *Quitline* service in Queensland, including engaging counsellors with youth experience, may be required. There is also good potential in using e-health interventions, such as mobile and web-based programs, for adolescents.
- Stakeholders are concerned about effective support services being available to help people to
  quit e-cigarettes, particularly in the transition from availability through retailers to a ban of all
  e-cigarettes not obtained on a prescription, as announced by the Australian Government in May
  2023.
- Measures have been announced by the Australian Government that will affect the accessibility and appeal of e-cigarettes.
- Many stakeholders encouraged greater enforcement of existing legislation relating to e-cigarettes and supported increasing restrictions through changes to legislation.

#### 6.2 Accessibility issues

In considering the delivery of programs and providing supports for e-cigarette users in Queensland, some particular accessibility issues are relevant. These include the connection of services and programs with Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse communities, reaching remote and regional communities, and effectively communicating with young people. Some of the issues are briefly outlined below.

## 6.2.1 Aboriginal and Torres Strait Islander peoples

The accessibility of prevention activities or quitting support services is dependent on their relevance of Aboriginal and Torres Strait Islander peoples.

Stakeholders maintain that the diversity of Aboriginal and Torres Strait Islander peoples, cultures, communities mean that specific, locally responsive campaigns and services, driven by local communities are necessary. A 'suite of culturally safe cessation supports, and tailored referral pathways' delivered in communities in partnership Aboriginal and Torres Strait Islander Community Controlled sector will be most effective. 196

As noted in section 5.6.1.2, data on e-cigarette use by Aboriginal and Torres Strait Islander peoples is limited and a better understanding of prevalence and harms associated with e-cigarette use for

Queensland Aboriginal and Islander Health Council and National Centre for Aboriginal and Torres Strait Islander Wellbeing Research, Australian National University, submission 77.

Aboriginal and Torres Strait Islander peoples is required, to better focus preventive activities and supports.

## 6.2.2 Culturally and linguistically diverse communities

Providing education and support to people from diverse cultural backgrounds is essential for public health programs to be fully effective. There has traditionally been a lack of culturally relevant antismoking campaigns in Australia. <sup>197</sup>

As with smokers from diverse cultural backgrounds, e-cigarette users may also be more difficult to reach because of a higher prevalence of smoking within some cultural groups, because of a range of barriers to awareness of health issues and to accessing healthcare and quitting support, and because of attitudes to interventions and therapies for quitting. Prevention programs and cessation supports which are tailored or adapted to provide for cultural diversity are more likely to be effective.

## 6.2.3 People in regional and remote communities

There has been little research on the effectiveness of smoking cessation interventions for people living in rural and remote areas. <sup>199</sup> Prevention programs or quitting support services for people in regional and remote areas are challenged by people experiencing physical and social isolation, traditionally more exposure to tobacco marketing, and higher rates of smoking in the community<sup>200</sup> (in Queensland in 2022, daily smoking prevalence was almost 80% higher in remote areas compared to major cities). <sup>201</sup>

Comparative data on e-cigarette use by all people in regional and remote areas is not available – although in regard to Aboriginal and Torres Strait Islander peoples, in 2018-19 e-cigarette use was 3 to 4 times more common in major cities and regional areas compared to remote areas (most likely related to limited accessibility of e-cigarettes in more remote areas). 202

As noted in section 4.3 in regard to education about e-cigarettes in schools in Queensland, fewer people in regional and remote communities report information being provided at secondary schools than people in urban areas. Schools in regional and remote areas also report difficulty in accessing health professionals to assist in the delivery of education programs about vaping.

Greenhalgh, EM, Scollo, MM, '9.A.2 Culturally and linguistically diverse groups', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, Melbourne, Cancer Council Victoria, 2022, http://www.tobaccoinaustralia.org.au/chapter-9-disadvantage/in-depth/9a-2-culturally-and-linguistically-diverse-groups.

Greenhalgh, EM, Scollo, MM, '9.A.2 Culturally and linguistically diverse groups', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, Melbourne, Cancer Council Victoria, 2022, http://www.tobaccoinaustralia.org.au/chapter-9-disadvantage/in-depth/9a-2-culturally-and-linguistically-diverse-groups.

Greenhalgh, EM, Scollo, MM, '9A.1 People living in regional and remote areas of Australia', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, Melbourne, Cancer Council Victoria, 2022, http://www.tobaccoinaustralia.org.au/chapter-9-disadvantage/in-depth/9a-1-people-living-in-regional-and-remote-areas-of-australia.

Greenhalgh, EM, Scollo, MM, '9A.1 People living in regional and remote areas of Australia' in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues,* Melbourne, Cancer Council Victoria, 2022, http://www.tobaccoinaustralia.org.au/chapter-9-disadvantage/in-depth/9a-1-people-living-in-regional-and-remote-areas-of-australia.

Queensland Health. 'Electronic cigarettes' in The health of Queenslanders. Report of the Chief Health Officer Queensland. Queensland Government. Brisbane 2023, https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes.

Thurber, KA, et al, A review of evidence on the prevalence of and trends in cigarette and e-cigarette use by Aboriginal and Torres Strait Islander youth and adults, Aboriginal and Torres Strait Islander Health Program, National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, 2020, https://openresearch-repository.anu.edu.au/handle/1885/210569.

Actions to improve the accessibility of e-cigarette cessation services and programs to people in regional and remote communities should include:

- using locational data and research on e-cigarette use to focus efforts
- increasing awareness of available cessation support
- evaluations of the effectiveness of prevention programs and cessation services
- integrating cessation support with local health care services.<sup>203</sup>

## 6.2.4 Using advertising and social media campaigns

Many stakeholders were critical of e-cigarette promotion and sales on social media. Others observed that there is also the potential for greater access to health messages, especially by young people, via the broad reach of social media and the internet.<sup>204</sup> As pointed out by submitters, information needs to reach users in a variety of settings and for young people, this means reaching them in the places where they spend much of their time – at home, at school and online.<sup>205</sup> There was support from some submitters for a high profile public health campaign about the health risks associated with vaping to be sustained across all media and social media platforms.

Submitters also noted however, that there is a risk of e-cigarette use being normalising by media reports and articles about vaping, particularly among young people. Specific guidelines for responsible reporting, similar to the Australian Press Council recommendations for newspaper reporting of drugs and drug addiction, <sup>206</sup> were recommended. <sup>207</sup>

## 6.3 Services and programs to quit using e-cigarettes



Australian jurisdictions, including Queensland, already provide support to people who want to stop using e-cigarettes. This support has been primarily provided via the broader smoking cessation service, Quit. Quit recently developed and disseminated a 'Stopping vaping' protocol to *Quitline* providers in Australia.

The Queensland Health website,  $Quit\,HQ$ ,  $^{208}$  provides information about quitting smoking with links to Quitline and other tools and resources to help people quit. The website also provides information for health professionals and about current smoking laws in Queensland.

Quit provides free counselling and information to people who want to stop smoking, including those who vape. It is a program of Cancer Council Victoria, funded by Cancer Council Victoria, VicHealth, the Victorian Department of Health, and the Australian Government's Alcohol, Tobacco and Other Drugs Branch.<sup>209</sup> Quit operates *Quitline* for Victoria, South Australia, WA and the Northern Territory. Each state and territory funds the *Quitline* service within its own jurisdiction.<sup>210</sup>

Quit provides counselling and support through several channels:

• Quitline,<sup>211</sup> a confidential telephone service which can provide a single contact call through to a 12 week intensive quit support program with free NRT (for eligible priority populations)

See submissions 75, 77.

<sup>&</sup>lt;sup>204</sup> See submissions 30, 53, 59, 62.

<sup>&</sup>lt;sup>205</sup> Submission 62.

<sup>&</sup>lt;sup>206</sup> See https://presscouncil.org.au/document/guideline-drugs-and-drug-addiction.

Submission 53.

See https://www.quithq.initiatives.qld.gov.au/.

See: https://www.quit.org.au/articles/our-story/.

See: https://www.quithq.initiatives.qld.gov.au/.

<sup>211</sup> See https://www.quit.org.au/articles/about-quitline-13-7848/.

- QuitCoach, <sup>212</sup> an interactive website that provides users with advice and a personalised quitting plan
- My QuitBuddy,<sup>213</sup> a mobile app that provides tips and distractions to overcome cravings, tracking systems to chart progress and the facts about the health impacts of smoking
- QuitTxt, <sup>214</sup> a text-messaging service that provides users with daily messages designed to help them prepare to quit, maintain their motivation and stay on track after they quit
- QuitMail,<sup>215</sup> a new email support service which sends regular emails over 12 weeks to help users track their financial and health gains and provide targeted tips to help them to continue to quit.

Quitline and other Quit services have been or are being adapted to support people giving up e-cigarettes. Quit is also currently updating the National Minimum Quitline Standards.<sup>216</sup> To increase accessibility, Quitline (in Victoria, South Australia, WA and Northern Territory) now uses WhatsApp, Facebook Messenger, Request a Call Back service, and live chat. Quit is also currently expanding QuitTXT to provide vaping cessation support for young people.<sup>217</sup>

There is evidence that the support provided by Quit is effective in helping people to quit smoking. <sup>218</sup> However, at this stage it is unclear whether these services are also effective in helping people to stop vaping.

## 6.3.1 Extending intensive quitting support to e-cigarettes

Queensland Health told the committee that the Queensland *Quitline* has been supporting people with questions about e-cigarettes for many years and acts within the recommendations and precautions of Queensland Health, the RACGP, and the Australian Government. Queensland Health advised that all *Quitline* clients are asked about e-cigarette use and increasingly, people between 10–70 years are contacting *Quitline* for support to quit vaping.<sup>219</sup>



The intensive quit support program (which involves multiple contacts and 12 weeks of free NRT) that is provided by the *Quitline* service in Queensland has now been expanded to include people (over 12 years) who exclusively vape and want to quit.<sup>220</sup>

Quit Victoria advised that *Quitline* (in Victoria, South Australia, WA and Northern Territory) receives some, but not a lot of youth calls. Until recently *Quitline* counsellors' experience was largely with adults, but given the increasing demand for youth vaping cessation services Quit Victoria suggested that employment of counsellors with youth experience and increased resourcing to build capacity is

See http://www.quitcoach.org.au/.

See https://www.health.gov.au/resources/apps-and-tools/my-quitbuddy-app.

See http://www.quitcoach.org.au/QuitTextInformation.aspx.

See https://mail.quit.org.au/pub/pubType/EO/pubID/zzzz598c5f026b265169/interface.html.

The National Minimum Quitline Standards developed by Cancer Council Victoria were implemented in 2021 – see https://www.cancervic.org.au/get-support/for-health-professionals/national-quitline-standards.

<sup>&</sup>lt;sup>217</sup> Quit Victoria, correspondence, 10 August 2023, pp 2-3.

For example, see Borland, R, Balmford, J, Swift, E, 'Effects of Encouraging Rapid Implementation and/or Structured Planning of Quit Attempts on Smoking Cessation Outcomes: a Randomized Controlled Trial', Annals of Behavioural Medicine, 49(5), 2015, pp 732-42; Borland, R, Balmford, J, Benda, P, 'Population-level effects of automated smoking cessation help programs: a randomized controlled trial', Addiction, 108(3), 2013, pp 618-28; Peek, J, Hay, K, Hughes, P, Kostellar, A, Kumar, A, Bhikoo, Z, Serginson, J, Marshall, HM, 'Feasibility and Acceptability of a Smoking Cessation Smartphone App (My QuitBuddy) in Older Persons: Pilot Randomized Controlled Trial', JMIR Formative Research, 5(4), 2021, p e24976.

<sup>&</sup>lt;sup>219</sup> Queensland Health, correspondence, 25 May 2023, p 4.

<sup>&</sup>lt;sup>220</sup> Queensland Health, correspondence, 25 May 2023, p 4.

warranted. Quit Victoria noted the great potential for using e-health interventions for adolescents, such as mobile and web-based programs, as well.<sup>221</sup>

## 6.4 Effectiveness of services and programs to support quitting

At present there is very limited evidence about the effectiveness of interventions designed to help people quit vaping.<sup>222</sup> Only the *'This is Quitting'* vaping cessation program developed in the US for young people (see section 5.5.1.5 of this report) has been shown to be effective in a randomised controlled trial.<sup>223</sup>

Tobacco smoking cessation interventions may be applicable to vaping cessation. However, several factors suggest that programs designed to help people quit smoking may need to be adapted to be effective in relation to vaping. These factors include:

- the low cost of e-cigarettes relative to conventional cigarettes
- the nicotine content of e-cigarettes, which can be higher than that of conventional cigarettes
- the prevalence of vaping among young people combined with the fact that existing programs to support smoking cessation were typically developed for adults
- the prevalence of dual use of tobacco products and e-cigarettes may also need to be considered in the provision of services to help people to quit.<sup>224</sup>

Accessibility issues such as those outlined in section 6.2 above are likely to also influence the effectiveness of services to support quitting e-cigarettes.

## 6.5 Increasing the accessibility and effectiveness of services and programs

## 6.5.1 National plans to change access to e-cigarettes and expand campaigns, programs and support services

As noted earlier in this report, in May 2023, the Australian Government announced plans to work with states and territories to change the legislative framework that applies to e-cigarettes. This will include measures to:

- stop the importation of non-prescription e-cigarettes
- increase the minimum quality standards for e-cigarettes including by restricting flavours, colours, and other ingredients
- require pharmaceutical-like packaging
- reduce allowed nicotine concentrations and volumes
- ban all single use, disposable e-cigarettes.
- end the sale of e-cigarettes in retail settings, such as convenience stores and other retailers

<sup>&</sup>lt;sup>221</sup> Quit Victoria, correspondence, 10 August 2023, p 3.

Greenhalgh, EM, '18.11 Cessation interventions for e-cigarette users', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues,* Melbourne, Cancer Council Victoria, 2023, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-11-cessation-interventions-for-e-cigarette-users.

Graham, AL, Amato, MS, Cha, S, Jacobs, MA, Bottcher, MM, Papandonatos, GD, 'Effectiveness of a Vaping Cessation Text Message Program Among Young Adult e-Cigarette Users: A Randomized Clinical Trial', *JAMA Internal Medicine*, 2021, 181(7), pp 923–930, doi:10.1001/jamainternmed.2021.1793.

Greenhalgh, EM, '18.11 Cessation interventions for e-cigarette users', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, Melbourne, Cancer Council Victoria, 2023, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-11-cessation-interventions-for-e-cigarette-users; see also Quit Victoria, correspondence, 10 August 2023, p 2.

• make it easier to get a prescription for legitimate therapeutic use of e-cigarettes. <sup>225</sup>

The Australian Government has also committed funding of:

- \$63.4 million over 4 years for national public health campaigns to discourage people from smoking and vaping
- \$29.5 million over 4 years to increase and enhance smoking and vaping cessation support
- \$141.2 million over 4 years to expand the Tackling Indigenous Smoking program and widen it to include vaping. 226



In announcing changes to the regulation of e-cigarettes in Australia in May 2023, the Minister for Health and Aged Care, Hon Mark Butler MP, said, 'Vaping was sold to governments and communities around the world as a therapeutic product to help long-term smokers quit. It was not sold as a recreational product – especially not one targeted to our kids but that is what it has become'.<sup>227</sup>

## 6.5.2 Support services to help people quit vaping

Services to support people to quit vaping are an essential part of a multi-layered strategy to reduce e-cigarette use, particularly as e-cigarettes may be even more difficult to quit than smoking. As Quit Victoria told the committee:

Qualitative work we have conducted recently suggests that people seeking help with vaping cessation are looking for vaping-specific support. Whilst smoking and vaping are both nicotine addictions, smoking and vaping behaviours are quite distinct. For example, people vape in many more situations compared to people who smoke, recreational vaping can be more accessible and cheaper than smoking, some vaping products reportedly contain very high levels of nicotine, and smoking a cigarette has a natural end, but vaping does not. Together these factors may make quitting vaping harder than quitting smoking. <sup>228</sup>

In addition, the Australian Government's proposed ban of all e-cigarettes and e-liquids that are not obtained on a prescription, is likely to increase the demand for vaping cessation support. As noted above, the Australian Government has committed \$29.5 million over 4 years to increase and enhance smoking and vaping cessation support.

Government may need to consider offering a variety of support services, and some changes in approach. The committee heard that making cessation support available in a variety of contexts and through a range of providers is more likely to be effective. Stakeholders recommended that support services should be provided by health and community health services, alcohol and other drug treatment and harm reduction services, mental health services, youth counsellors via *Quitline*, online interventions and services, and in schools via School Based Youth Health Nurses. The capacity of organisations to provide assistance varies and additional resources will most likely be necessary.<sup>229</sup>

There was considerable concern from many submitters<sup>230</sup> about support services being available to help people to quit e-cigarettes during the transition from availability through retailers to a ban on

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

See https://www.aph.gov.au/About\_Parliament/Parliamentary\_departments/Parliamentary\_Library/Budget/reviews/2023-24/VapingSmokingMeasures.

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

Quit Victoria, correspondence, 10 August 2023, p 2.

<sup>&</sup>lt;sup>229</sup> See submissions 56, 58, 62, 77.

<sup>&</sup>lt;sup>230</sup> See for example submissions 53, 56, 58, 60, 69, 77.

obtaining e-cigarettes except from a pharmacy on prescription, as announced by the Australian Government in May 2023. The Alcohol and Drug Foundation submitted:

In light of upcoming changes to the supply of vaping products, serious consideration needs to be given to the population of individuals who are nicotine dependent. The Queensland government is well placed to provide services and support to people needing support with nicotine dependency, particularly for young people. Going forward, the ADF recommends that the Queensland government investigate options for supporting young people who may be nicotine dependent through interventions that may include developing resources for parents and teachers, targeted campaigns informing young people of changes, and the subsidisation and provision of nicotine replacement therapies where needed, including in schools. These approaches may need to be relatively radical compared to usual health interventions, in that they will need to be highly targeted, and may have a fixed duration. The ADF encourages the Queensland government to be openminded in its approach, and to place an emphasis on reducing the harms associated with nicotine dependence and withdrawal. <sup>231</sup>

NRT products and prescribed nicotine vaping products could also be made more accessible, and available through specialised services to help smokers and e-cigarette users to quit.

## 6.5.2.1 Nicotine Replacement Therapy

The committee heard that the cost of NRT products can be prohibitive for users. Better access to NRT products, by making them available for free, or for a subsidised price, could assist people who are currently dependent on e-cigarettes or conventional cigarettes, or both, to quit. There was support from submitters for the Queensland Government to fund a program to supply NRT to people at reduced or zero cost.<sup>232</sup>

#### 6.5.2.2 Access to prescription e-cigarettes

The NHMRC and public health experts from the ANU have stated that e-cigarette use may benefit current smokers if they use them for a short period of time to completely quit smoking and have been previously unsuccessful with other smoking cessation aids.<sup>233</sup> There are currently no nicotine vaping products registered in the Australian Register of Therapeutic Goods (ARTG).<sup>234</sup>

Vaping products containing nicotine are regulated as medicines under the *Therapeutic Goods Act 1989* (Cth) which means that they cannot be imported into, manufactured in, or in some cases supplied in, Australia, unless they are registered in the ARTG, or an exception to registration applies. Since there are no TGA-approved nicotine vaping products registered in the ARTG, they can only be accessed with a prescription as an unapproved medicine (via the TGA Personal Importation Scheme, the Authorised Prescriber Scheme, or the Special Access Scheme B) so long as they meet minimum safety requirements set out in the Therapeutic Goods (Standard for Nicotine Vaping Product) (TGO 110) Order 2021 (TGO 110). TGO 110 includes rules about:

product labelling (including mandatory warning statements)

<sup>232</sup> See submissions 45, 56, 60.

Submission 69.

Banks E, et al, Electronic cigarettes and health outcomes: systematic review of global evidence, Report for the Australian Department of Health. National Centre for Epidemiology and Population Health, Canberra: April 2022; National Health and Medical Research Council, 2022 CEO Statement on Electronic Cigarettes, 2022, https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement.

Nicotine vaping products can be accessed through established pathways for unapproved medicines so long as they meet minimum safety requirements set out in the Therapeutic Goods (Standard for Nicotine Vaping Product) (TGO 110) Order 2021 which has been in force since 1 October 2021; see https://consultations.tga.gov.au/medicines-regulation-division/proposed-reforms-to-the-regulation-of-nicotine-vap/user\_uploads/tga-consultation-paper---nicotine-vaping-products---nov-22-1.pdf.

Australian Government, Therapeutic Goods Administration, *Potential reforms to the regulation of nicotine vaping products Consultation paper*, https://consultations.tga.gov.au/medicines-regulation-division/proposed-reforms-to-the-regulation-of-nicotine-vap/user\_uploads/tga-consultation-paper---nicotine-vaping-products---nov-22-1.pdf, p 6.

- child-resistant packaging
- maximum nicotine concentration (although, people can still only access nicotine in the concentration specified in their prescription)
- requiring actual nicotine concentration/content to reflect what the product's label states
- prohibited ingredients
- records that need to be kept by the Australian sponsor for the product.<sup>236</sup>

In May 2023 the Australian Government announced measures to make it easier to get a prescription for therapeutic use of e-cigarettes.

Young people, in particular, can find it difficult to obtain prescriptions or are less likely to see a general practitioner for prescription e-cigarettes. The NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame and the National Centre for Youth Substance Use Research suggested that youth alcohol and drug services, mental health services, or other specialised services receive training to treat tobacco dependence and nicotine vaping dependence and be 'given support to provide access to quality vaping products via prescription in some circumstances (such as where a young person has a dependence to vaping and is using illicit products)'. They noted that supply in this way could facilitate management of nicotine dependence while 'tapering off or transitioning to' NRT products.<sup>237</sup>

The Australian College of Nursing submitted that more resources and training for healthcare professionals about e-cigarette use, interventions and support services for people who use e-cigarettes, and the effectiveness and safety of prescribing e-cigarettes to aid quitting smoking, would also assist health services to manage e-cigarette use in the community.<sup>238</sup>

## 6.5.3 Reducing vaping product appeal and access

Disposable e-cigarettes and e-liquids come in bright, colourful packaging and in tempting flavours with fun and appealing names. Many appear more likely to appeal to a child than to an adult user. Vaping products are promoted by some retailers, including through social media, despite restrictions on advertising and display.

Young people under the age of 18 are sold e-cigarettes through retail outlets, online stores and social media, and they obtain them from friends and family, despite the supply of e-cigarettes to a person under the age of 18 being illegal.

E-cigarettes containing nicotine are sold without a prescription to children and adults, with the current legislation allowing supply of e-cigarettes which do not contain nicotine providing 'a cover for nicotine-containing products to enter the market, as many products are poorly or deliberately mis-labelled'.<sup>239</sup>

Conflicting messages about e-cigarettes — between information about health risks published by governments and agencies, information about using e-cigarettes to quit smoking, and the promotion of e-cigarettes as fun, 'cool', and safe — have enabled some sellers of e-cigarettes to capitalise on uncertainty among users and in the community about their safe use.

The measures announced by the Australian Government in May 2023 to ban disposable e-cigarettes, restrict flavours, colours, and other ingredients, reduce allowed nicotine concentrations and volumes, require pharmaceutical-like packaging, and stop the sale of e-cigarettes by convenience stores and other retailers, are likely to reduce the appeal of e-cigarettes and make them less accessible,

<sup>239</sup> Queensland Health, correspondence, 25 May 2023, p 9.

Australian Government, Therapeutic Goods Administration, *Potential reforms to the regulation of nicotine vaping products Consultation paper*, https://consultations.tga.gov.au/medicines-regulation-division/proposed-reforms-to-the-regulation-of-nicotine-vap/user\_uploads/tga-consultation-paper---nicotine-vaping-products---nov-22-1.pdf, pp 6-7.

Submission 53; see also submission 60.

<sup>&</sup>lt;sup>238</sup> Submission 58.

particularly to young people. The measures will also make illegal products easier to distinguish from prescribed e-cigarettes.

There was broad support among submitters for these types of reforms. Most submitters supported increasing restrictions on e-cigarettes, including banning all disposable e-cigarettes regardless of nicotine content, restricting product packaging, and restricting or banning promotion on social media.

## 6.5.3.1 Ban on disposable e-cigarettes

Many submitters expressed support for limiting the sale of disposable e-cigarettes to reduce their accessibility to young people and/or minimise negative impacts on the environment.<sup>240</sup> Most of these submitters expressed support for a complete ban on single use, disposable e-cigarettes.<sup>241</sup>

## 6.5.3.2 Requiring pharmaceutical-like packaging

Several submitters indicated support for extending existing health warning and plain packaging requirements to e-cigarettes. For example, Professor Matthew Rimmer, from the Queensland University of Technology submitted that 'it is completely anomalous that e-cigarette and vaping products have been adorned with such targeted, seductive, alluring packaging – while tobacco products have been subject to plain packaging'. <sup>243</sup>

However, a small number of submitters expressed scepticism about whether health warnings and plain packaging are likely deter consumers from using e-cigarettes.<sup>244</sup>

## 6.5.3.1 Reducing allowed nicotine concentrations and volumes

Submitters expressed concern about the amount of nicotine present in some e-cigarettes currently on the market.<sup>245</sup> Some of these submitters indicated support for regulatory measures that would reduce the maximum nicotine concentrations permitted. Others stressed the need for clear and accurate labelling.

The Bulimba Electorate Youth Advisory Panel, for example, submitted that 'despite restrictions put in place over e-cigarettes, some commercial e-liquids have nicotine concentrations much higher than the legal limits, and others have misleading information produced by the company, and others incorrect contents labels displayed on the e-cigarettes'.<sup>246</sup>

#### *6.5.3.2 Restricting flavours*

Many submitters expressed support for the greater restrictions on e-cigarette flavours. A significant number of submitters expressed concern that flavoured products appealed to younger people, including children, and were deliberately marketed at this cohort.<sup>247</sup> For example, the Australian Dental Association Queensland Branch stated that the 'latest generation of 'youth-appealing e-liquids' are undeniably manufactured and marketed specifically to appeal children and teens, because that is the fastest growing customer base for this industry'.<sup>248</sup>

However, a small number of submitters expressed concern that flavour restrictions could discourage current smokers from using e-cigarettes in place of more harmful tobacco products.<sup>249</sup>

<sup>244</sup> For example submission 67.

<sup>&</sup>lt;sup>240</sup> Including submissions 10, 28, 34, 36, 37, 39, 42, 49, 60, 67, 73 and 77.

<sup>&</sup>lt;sup>241</sup> Including submissions 34, 36, 39, 49, 60, 67, 73 and 77.

<sup>&</sup>lt;sup>242</sup> Including submissions 34, 49, 54 and 60.

<sup>&</sup>lt;sup>243</sup> Submission 49, p 32.

<sup>&</sup>lt;sup>245</sup> Including submissions 5, 34, 49, 54, 65, 68 and 77.

Submission 54, p 2.

Including submissions 22, 31, 34 and 37.

Submission 22, p 2.

<sup>&</sup>lt;sup>249</sup> Including submissions 20, 36 and 67.

## 6.5.3.3 Restricting promotion of vaping products on social media

Submitters indicated support for greater regulation of e-cigarette advertising on social media, with many noting that social media is often used to target younger consumers.<sup>250</sup> Some supported a complete ban on e-cigarette advertising via this channel.<sup>251</sup>

Many submitters also identified social media as offering an opportunity to reduce e-cigarette use, including by increasing awareness of health risks, countering misinformation, and shifting public attitudes to vaping, especially among young people.<sup>252</sup>

## 6.5.3.4 Restricting location of vaping product retails in clost proximity to schools

Stakeholders expressed concern with increasing numbers of tobacco and e-cigarette retailers opening stores in close proximity to schools or along popular travel routes for students. Local residents and school communities have become frustrated by retailers opening close to primary and secondary schools, 'clearly encouraging uptake and interest by young people'.<sup>253</sup>

The Member for Cooper, Jonty Bush, highlighted the problem:

By way of example, a tobacco and vape store has recently opened in Ashgrove just over 200 meters from a primary school. This store also sells Go Cards and gifts including items designed to look like child's toys. While I recognize that there are more complex motivations behind a person's uptake of cigarettes and vapes, the community expectation is that overt and covert attempts to market products to minors should be addressed.<sup>254</sup>

## 6.5.4 Compliance with Queensland legislation

Submitters called for greater enforcement of existing laws regulating e-cigarettes, with many similar statements to this one:

Full commitment from the Queensland Government is required to enforce e-cigarette policy and regulation, especially among retailers and the industry to help foster nicotine and smoke free norms. While strong and effective enforcement is required in regulating the industry, enforcement must not be punitive for current e-cigarette users and those working through their nicotine withdrawals.<sup>255</sup>



Enforcement of current legislation prohibiting supply of a smoking product (which includes an e-cigarette or vaping product) to a person under 18 was considered by most stakeholders to be imperative. Submitters emphasised however that the focus must be on retailers supplying vaping products to minors rather than on punishing e-cigarette users. <sup>256</sup>

## 6.5.4.1 Challenges for compliance monitoring and enforcement

In Queensland, complaints relating to e-cigarettes are investigated by Queensland Health's Public Health Units and enforcement action for non-compliance is taken under the *Tobacco and Other Smoking Products Act 1998*<sup>257</sup> and the *Medicines and Poisons Act 2019*.<sup>258</sup>

<sup>&</sup>lt;sup>250</sup> See for example submissions 22, 30, 48, 49, 54, 65, 68, 73.

<sup>&</sup>lt;sup>251</sup> Including submissions 22, 65, 68, 73.

<sup>&</sup>lt;sup>252</sup> See for example submissions 54, 58, 59.

<sup>&</sup>lt;sup>253</sup> Member for Cooper, correspondence, 14 August 2023; submissions 34, 49, 53.

<sup>&</sup>lt;sup>254</sup> Member for Cooper, correspondence, 14 August 2023.

<sup>&</sup>lt;sup>255</sup> Submission 77.

<sup>&</sup>lt;sup>256</sup> See for example submissions 20, 53, 58, 62, 69, 77.

Under the *Tobacco and Other Smoking Products Act 1998* e-cigarettes are considered smoking products and cannot be sold to children under 18 years; advertised, promoted or displayed at retail outlets; sold in vending machines, or used in no-smoking indoor and outdoor places.

Under the *Medicines and Poisons Act 2019* e-cigarettes and e-liquids containing nicotine are unapproved therapeutic goods and are illegal unless on prescription and supplied from a pharmacist, or obtained through Therapeutic Goods Administration processes (Authorised Prescriber, Special Access Scheme

Queensland is in the process of introducing a licensing scheme for the sale of smoking products, including e-cigarettes. Retailers and wholesalers will require licences to sell smoking products in Queensland from 1 September 2024.

Queensland Health identified significant issues which have challenged compliance monitoring and enforcement actions relating to e-cigarettes, as listed in Table 5 below.

Table 5: Compliance monitoring and enforcement challenges for e-cigarettes in Queensland

## Resourcing

Limits on workforce capacity available to investigate all complaints, monitor large numbers of smoking product retailers, assess compliance with smoke-free areas and progress complex investigations

Competing priorities under multiple public health legislation that must be managed within available resources

Public health events of local or state significance, such as the COVID-19 pandemic, or disease outbreaks, that divert resources away from routine compliance monitoring and enforcement action

Constrained laboratory capacity delaying analysis of nicotine content of e-cigarettes, which is further exacerbated by the large quantity of samples requiring analysis to confirm presence of nicotine

## **E-cigarette industry**

Large number of retailers selling smoking products and absence of quality data on supply systems for e-cigarettes

Complexity of business models, coupled with lack of cooperation from some businesses can interrupt identification of the offending party for enforcement action

Difficulties in proving offences of sale of smoking products, including e-cigarettes, to minors

## **Operational issues**

Authorised officer powers, workplace health and safety concerns of authorised officers and storage and disposal of significant seizures of e-cigarettes.

Source: Queensland Health, correspondence, 25 May 2023.

Queensland Health stated that recent changes to the *Tobacco and Other Smoking Products Act 1998* will address some of the challenges in monitoring and enforcement by:

- the licensing scheme for wholesalers and retailers of smoking products, which will operate from 1 September 2024, will collect data on suppliers and wholesalers of e-cigarettes which the department will use 'to develop more focused and targeted monitoring and enforcement programs'
- providing extended powers to address uncooperative business practices and assist in identifying business owners
- the income from licence applications providing some additional funding to support compliance activity.<sup>259</sup>

In regard to the enforcement issues that particularly concerned stakeholders – illegal sales of e-cigarettes to children, and the location of retail outlets selling e-cigarettes near schools – Queensland Health advised:

- proactive compliance monitoring of requirements under the Tobacco and Other Smoking Products Act 1998 in retailers located close to schools and major transport hubs is currently underway, with 'over 200 inspections completed' by Public Health Units
- 'options to enhance compliance and enforcement activities for the sale of smoking products to minors are being considered' by the department.<sup>260</sup>

Category B, Personal Importation Scheme); wholesalers with the appropriate licence under the Act can sell nicotine to pharmacists; and it is not an offence to use medicinal cannabis in a personal vaping device.

<sup>&</sup>lt;sup>259</sup> Queensland Health, correspondence, 25 May 2023, p 11.

Queensland Health, correspondence, 25 May 2023, Attachment 1.2.

## 6.5.5 Legislative reform in Queensland

Some legislative changes which align with the regulatory measures announced by the Australian Government may be able to be advanced at the state level in the short term. More likely though is that for the planned regulatory measures to be effective, the timing of any changes to Queensland legislation will need to coincide with changes to national laws and the legislation in the other states and territories.

Possible amendments to Queensland legislation that would reinforce measures at the national level to restrict all but legitimate e-cigarette use for therapeutic purposes might include:

- extending the existing ban on confectionary-flavoured and fruit-flavoured cigarettes under the *Tobacco and Other Smoking Products Act 1998* to e-cigarettes
- introducing a power to ban e-cigarette products with packaging that appeals to children in the Tobacco and Other Smoking Products Act 1998
- amending the definition of 'illicit tobacco' in the Tobacco and Other Smoking Products Act 1998
   (which includes tobacco products which do not comply with Commonwealth requirements for
   plain packaging and health warnings) to include any e-cigarettes which do not comply with
   (future) Commonwealth requirements for e-cigarettes, making it an offence under Act the to
   supply them.

## **Committee comment**

During this inquiry Queensland's Chief Health Officer, Dr John Gerrard, told the committee:

I think we have been very distracted by COVID. During this period of distraction this extraordinary public health disaster has occurred. This has occurred while we were not focused. I think we have to move to stop it now because I think we were all focused on other matters.

...

Just to emphasise: this is the time to do something. In five or 10 years time—once it is well and truly established—it is too late. ... We cannot ban cigarettes now ... but we have the opportunity to take an aggressive control of this right now. This timing is perfect.<sup>1</sup>

The committee agrees with Dr Gerrard – there is a window of opportunity at this time to have an impact on reducing e-cigarette use and minimise health consequences for individuals, especially young people, and the community.

The committee supports the plan announced by the Australian Government in May 2023 to reduce e-cigarette use by introducing stronger regulation and enforcement, including banning disposable e-cigarettes, prohibiting the sale of e-cigarettes in convenience stores and other retail stores, and imposing new controls on importation, contents and packaging for prescription only e-cigarettes.

The committee believes there is community support for these measures as a way to change e-cigarette use for young people and to avoid vaping becoming normalized in our community.

We understand the objections of adult e-cigarette users about losing access to products they choose to use, but we consider the dangers of toxic chemicals and high nicotine content in illegal products, particularly disposable devices, are significant. In addition, while the exposure to toxic substances is probably lower from e-cigarettes than conventional tobacco cigarettes, the long term effects of e-cigarettes on health, and on the health of a young person, are not known at this stage. As submitters from the e-cigarette industry have agreed, access to e-cigarettes must be removed from children and these changes are needed to achieve that goal.

Banning all disposable e-cigarettes (whether claimed to be 'nicotine free' or not) so that the only e-cigarettes available legally are on prescription at pharmacies in limited flavours, is also consistent with current health advice – that if there is a role for e-cigarettes in smoking cessation it is as a short-term supervised therapy, if other methods for quitting (NRT and behavioural therapies) have not been successful.

There is a risk that e-cigarettes will continue to be produced and sold on a black market. A coordinated national public awareness campaign and preventive activities to change the community's understanding about the health issues and laws relating to e-cigarettes will be important (see Recommendation 4 in section 5).

Recent changes to the *Tobacco and Other Smoking Products Act 1998* to introduce a licencing scheme for retailers and wholesalers of smoking products from 1 September 2024 will enable the state government to keep accurate data on these businesses which will assist Queensland to transition when changes in supply are implemented at the national level.

Key to successfully reducing e-cigarette use will be enforcement. The committee notes that Queensland Health has increased its compliance monitoring of retailers located near schools and is looking at ways to prevent the sale of e-cigarettes to people under 18. The committee encourages the Queensland Government to assess and assign the necessary resources to support compliance monitoring and enforcement activities. Extra resources may also be needed in time, to manage activities required as a result of legislative reforms.

Key to success will also be providing support to people who want to quit vaping, and particularly to young people and children who are already dependent on nicotine. Access to support services specifically equipped to help people to manage withdrawal and quit vaping, in places and via modes that reach e-cigarette users, is critical, particularly during the transition away from easy access to potentially illegal products. These services should aim to avoid an outcome where people who are currently vaping nicotine switch to conventional cigarettes to continue their nicotine use.

The committee notes that the intensive quit support program provided by the *Quitline* service in Queensland has been expanded to include people who exclusively vape and want to quit. The committee recommends that extending the capacity of *Quitline* in Queensland be considered.

#### **Recommendation 8**

The committee recommends that the Queensland Government support the implementation of measures, as proposed by the Australian Government, to:

- stop the importation of non-prescription e-cigarettes
- increase the minimum quality standards for e-cigarettes including by restricting flavours, colours, and other ingredients
- require pharmaceutical-like packaging
- reduce allowed nicotine concentrations and volumes
- ban all single use, disposable e-cigarettes
- end the sale of e-cigarettes in retail settings, such as convenience stores and other retailers
- make it easier to get a prescription for legitimate therapeutic use of e-cigarettes.

#### **Recommendation 9**

The committee recommends that Queensland Health assess the availability and capacity of services to support people to quit e-cigarettes and consider additional resourcing for these services, as required, so that vaping support is available in a variety of contexts and through a range of providers.

## **Recommendation 10**

The committee recommends that Queensland Health collaborate with health departments in other Australian jurisdictions and Quit Victoria to facilitate the development of a specialised service to provide tailored support to young people who want to stop vaping.

#### **Recommendation 11**

The committee recommends that the Queensland Government consider extending the capacity of the *Quitline* service in Queensland, including to provide for engagement of additional counsellors with youth experience.

#### **Recommendation 12**

The committee recommends that the Queensland Government consider a program to supply Nicotine Replacement Therapy at reduced cost to people who want to quit tobacco products or e-cigarettes.

#### **Recommendation 13**

The committee recommends that the Queensland Government assess workforce requirements and assign necessary resources to support compliance monitoring and enforcement activities relating to e-cigarettes under the *Tobacco and Other Smoking Products Act 1998* and the *Medicines and Poisons Act 2019*.

## 7 Waste management and environmental impacts of e-cigarette products

## 7.1 Key findings

- E-cigarettes create significant challenges for waste management and have a number of negative environmental impacts. These are likely to grow if the popularity of e-cigarettes continues to rise.
- While the most pressing challenges are associated with disposable e-cigarettes, all types of e-cigarettes have negative impacts on the environment.
- There are a variety of regulatory and policy options for improving the management of e-cigarette waste and mitigating their environmental impact. These include, but are not limited to, banning the sale of disposable e-cigarettes.
- Action to mitigate the environmental impact of e-cigarettes and respond to the waste management challenges they create may be necessary even if disposable e-cigarettes are banned.
- The introduction of a licensing scheme for the sale of smoking products in Queensland may make some policy options, such as a deposit, return and recycling scheme, more feasible.
- Some options for reducing the environmental impact of e-cigarettes, such as banning the sale
  of disposable products and increasing public awareness of their environmental footprint, may
  also help to reduce the prevalence of vaping, especially among young people.

## 7.2 Overview of environmental impacts

E-cigarettes have a variety of environmental impacts that arise at each stage of their life-cycle. This cycle encompasses the sourcing of raw materials, the manufacture of e-cigarettes and their components, their use, and their disposal.<sup>261</sup>

Beutel MW, et al, 'A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts', Sustainability, 2021, 13(23), pp 1-13, https://doi.org/10.3390/su132312994.

Table 6, below, provides an overview of the environmental impacts of e-cigarettes at each stage of their life-cycle, drawing on a recent literature review, <sup>262</sup> evidence provided by the Department of Environment and Science, <sup>263</sup> and several of the submissions received by the committee. <sup>264</sup> As shown in Table 6, many of environmental impacts of e-cigarettes relate to their disposal, which is discussed in more detail in section 7.3 below.

The environmental impacts of e-cigarettes are likely to grow over time if the popularity of vaping increases. Existing data shows that the e-cigarette market is expanding at a rapid rate. In 2018, it was estimated that the size of the global e-cigarette market is expanding at a compound annual growth rate of 30%. This is consistent with the survey data discussed in section 2.3 of this report, which indicates that e-cigarette use has grown rapidly in Queensland in recent years.

Table 6: E-cigarettes impact the environment throughout their product life-cycle

Stage of life-cycle	Environmental impacts
Sourcing raw materials	<ul> <li>Mining of metallic components, including lithium</li> <li>Extraction of fossil fuels to manufacture plastic</li> </ul>
Manufacture	Carbon emissions associated with production, including production of batteries
Use	<ul> <li>Air pollution from aerosols released during use – vapour can include toxic metal ions, nanoparticles, nicotine, and potentially carcinogenic compounds</li> <li>Packaging waste, including plastic waste</li> </ul>
Disposal	Increased volume of hazardous waste due to residue from e-liquids (including nicotine), batteries and electronic circuitry in e-cigarettes
	<ul> <li>Increased risk of fires at waste management and recycling centres, causing air pollution (smoke) and spoiling materials that could have been recycled</li> </ul>
	Increased risks associated with littering, including:
	<ul> <li>potential for pollutants including nicotine and toxic metals to leach into water and soil, posing a risk to people and animals</li> </ul>
	<ul> <li>plastic waste from products and packaging</li> </ul>
	<ul> <li>risk that batteries will explode or burn</li> </ul>
	If products not recycled, loss of valuable materials (e.g. lithium) contributes to need for more mining of scarce resources

### 7.3 Challenges for waste management

Many of the environmental impacts associated with e-cigarettes stem from the challenges associated with managing the different types of waste they generate, which have led some commentators to describe e-cigarette waste as a potential waste management 'disaster'. 266

Adroit Market Research, 'Global e-cigarette market size 2017 by type (disposable, rechargeable, modular), by region and forecast 2018-2025', Industry Report, December 2018, https://www.adroitmarketresearch.com/industry-reports/e-cigarette-market.

Beutel MW, et al, 'A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts', Sustainability, 2021, 13(23), pp 1-13, https://doi.org/10.3390/su132312994.

See public briefing transcript, Brisbane, 3 May 2023, pp 1-6.

Including submissions 11 and 74.

Kari P, 'Vaping's other problem: Are e-cigarettes creating a recycling disaster?', 2019, https://www.theguardian.com/society/2019/aug/26/.



E-cigarettes generate 3 types of waste:

- plastic waste most e-cigarettes have a plastic cartridge or pod
- electronic waste e-cigarettes include both circuit-boards and lithium-ion batteries
- hazardous chemical waste used e-cigarettes can contain residue from a range of toxic chemicals, including nicotine.<sup>267</sup>

The different types of waste generated by e-cigarettes create 2 significant challenges for waste management:

- e-cigarettes are dangerous, difficult, and expensive, to recycle
- e-cigarettes increase the risk of fires at waste management facilities and recycling centres.

## 7.3.1 E-cigarette waste is dangerous, difficult and expensive to recycle

As discussed in section 3.3.2, e-cigarette liquids contain a wide range of toxic chemicals, some of which are known or suspected to be carcinogenic.<sup>268</sup> Many e-cigarettes also contain a variety of metals and heavy metals, including aluminium, barium, cadmium, copper, iron, lead, nickel, silver, tin and zinc.<sup>269</sup> Since used e-cigarettes inevitably contain residue from these chemicals and metals, some experts classify them as hazardous waste.<sup>270</sup>

The fact that e-cigarette waste can be hazardous makes it more dangerous, and thus more expensive to recycle. This problem is exacerbated by the design of e-cigarettes, particularly disposable e-cigarettes, which are generally not manufactured in a way that makes them easy to safely disassemble.

As the Department of Environment and Science explained:

The single-use vapes are more problematic from a waste management perspective. They create complexities around recycling because the process of trying to dismantle those single-use products is labour intensive and it introduces much more costs... [in addition] there has to be a fair effort put into considering workplace health and safety aspects associated with having people perform that task of disassembly.<sup>271</sup>

## 7.3.2 E-cigarettes increase the risk of fires at waste management facilities

The batteries contained in e-cigarettes also pose a significant challenge for waste management.

As the Department of Environment and Science explained to the committee:

Some vapes have integrated batteries that are not meant to be removed or replaced, which have a limited number of recharges after which the device needs to be disposed of. A small number of devices have removable batteries which can be recharged a limited number of times. These can be replaced and are typically found in more advanced equipment.<sup>272</sup>

See Pourchez, J, Mercier, C, Forest, V, 'From smoking to vaping: a new environmental threat?', Lancet Respiratory Medicine, 2022, 10(7), pp E63-64, https://doi.org/10.1016/S2213-2600(22)00187-4.

<sup>&</sup>lt;sup>268</sup> Larcombe, A, Allard, S, Pringle, P, Mead-Hunter, R, Anderson, N, Mullins, B, 'Chemical analysis of fresh and aged Australian e-cigarette liquids', *Medical Journal of Australia*, 2022, 216(1), pp 27-32, https://doi.org/10.5694/mja2.51280.

Beutel MW, et al, 'A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts', Sustainability, 2021, 13(23), pp 1-13, https://doi.org/10.3390/su132312994.

Hendlin, YH, 'Alert: Public Health Implications of Electronic Cigarette Waste', *American Journal of Public Health*, 2018, 108(11), pp 1489-1490, https://doi.org/10.2105/AJPH.2018.304699.

Mr Simon Hausler, Policy Manager, Office of Circular Economy, Environment and Heritage Policy and Programs, Department of Environment and Science, public briefing transcript, Brisbane, 3 May 2023, pp 3-4.

Department of Environment and Science, correspondence, 2 May 2023, p 1.

The batteries in discarded e-cigarettes can explode or burn, increasing the risk of fires at waste management facilities.<sup>273</sup> Where such fires occur, they have negative impacts on the environment in both the short-term (increased air pollution from hazardous smoke) and the long-term (by damaging waste management facilities).

The risk of fires is likely to be greater where e-cigarettes are disposed of improperly or incorrectly. This risk was illustrated by the fire that destroyed a recycling centre near Canberra on 26 December 2022. That fire was 'directly linked' to a lithium-ion battery in a disposable e-cigarette, which had been incorrectly placed in a household recycling bin and was undetectable by sorting processes at the facility.<sup>274</sup> Damage caused by the fire forced the ACT government to transport thousands of tonnes of waste to alternative centres in NSW at a cost of at least \$1.4 million.<sup>275</sup> The cost of rebuilding the recycling centre has been estimated at more than \$50 million.<sup>276</sup>

A recent report estimated that in the US, 4.5 e-cigarettes are thrown out each second. Another report estimated that 2 e-cigarettes are thrown out every second in the UK. 278



While e-cigarette waste may accumulate more slowly in Queensland, due to its smaller population, the total volume of that waste could be significant over the longer term. The Department of Environment and Science advised the committee that around 100 tonnes of e-cigarette waste is generated in Queensland each year, based on conservative estimates.<sup>279</sup>

#### 7.4 Regulatory and policy options

There are a variety of ways that regulation and policy could be used to reduce the environmental impact of e-cigarettes and ensure effective management of waste related to these products.

Experts suggest that a combination of 'upstream' approaches requiring manufacturers to assume more responsibility for reducing and managing waste, and 'downstream' approaches that target consumers who can directly influence the disposal of e-cigarettes, will be required to achieve change.<sup>280</sup>

A range of regulatory and policy measures have been considered in overseas jurisdictions. Their experiences could inform the development of similar options in Queensland. For example, in June 2023, the New Zealand Government announced that it will introduce regulations that require all e-cigarettes to have removable or replaceable batteries. This move is expected to reduce the environmental impact of e-cigarettes by limiting the sale of disposable e-cigarettes. It may also help to

<sup>&</sup>lt;sup>273</sup> Mr Simon Hausler, Policy Manager, Office of Circular Economy, Environment and Heritage Policy and Programs, Department of Environment and Science, public briefing transcript, Brisbane, 3 May 2023, p 1.

Department of Environment and Science, correspondence, 15 May 2023, p 1.

ACT Government, *Investigation released into fire at Hume recycling facility*, media release, 6 April 2023, https://www.cmtedd.act.gov.au/open\_government/inform/act\_government\_media\_releases/chris-steel-mla-media-releases/2023/investigation-released-into-fire-at-hume-recycling-facility.

Brewer, P, 'ACT government calls a hasty tender process to rebuild the burnt-out Hume recycling centre', Canberra Times, 31 May 2023, https://www.canberratimes.com.au/story/8216146/govt-seeks-cashed-up-partner-for-hume-recycling-facility-rebuild/.

Gutterman, LR, *Vape Waste: The environmental harms of disposable vapes,* report, US PIRG Education Fund, July 2023, https://pirg.org/resources/vape-waste-the-environmental-harms-of-disposable-vapes/.

<sup>&</sup>lt;sup>278</sup> Chapman, M, 'Rise of single-use vapes sending tonnes of lithium to landfill', *The Bureau of Investigative Journalism*, 15 July 2022, https://www.thebureauinvestigates.com/stories/2022-07-15/rise-of-single-use-vapes-sending-tonnes-of-lithium-to-landfill.

Department of Environment and Science, correspondence, 2 May 2023, p 1.

Shamhuyenhanzva, RM, Muposhi, A, Hungwe, DR, 'A downstream social norms approach for curtailing ecigarette waste: Promising social marketing interventions from consumer interactions', Waste Management & Research: The Journal for a Sustainable Circular Economy, 2023, 41(7), pp 1238-1245, https://doi.org/10.1177/0734242X231160083.

reduce vaping among young people, who are more likely to use disposable, rather than re-usable, e-cigarettes.<sup>281</sup>

A review commissioned recently by the Scottish Government identified 9 policy options for reducing the environmental impact of disposable e-cigarettes. These were:

- setting design criteria for e-cigarettes
- requiring that batteries can be removed and replaced (an option that could be extended to all forms of electronic and electrical waste, not just e-cigarettes)
- banning the sale of disposable e-cigarettes
- introducing a deposit, return and recycling scheme
- introducing a tax linked to recycling performance
- making changes to existing regulations on electronic and electrical waste
- introducing a levy of charge to be paid by consumers at the point-of-sale
- banning flavoured e-cigarettes
- improving enforcement of existing laws relating to underage sales.<sup>282</sup>

As of August 2023, the Scottish Government was still considering these policy options.

The review commissioned by the Scottish Government in 2023 identified 3 policy options as 'front-runners' based on how likely they are to succeed in reducing the environmental impact of disposable e-cigarettes:



- setting design criteria for e-cigarettes
- requiring that batteries can be removed and replaced
- banning the sale of disposable e-cigarettes entirely.

Of the other options identified, the review concluded that only the introduction of a deposit, return and recycling scheme had the potential to both reduce the pollution impact of disposable e-cigarettes and improve the management of e-cigarette waste.

The selection of the most appropriate regulatory and policy options for Queensland is likely to depend on a number of factors, including:

- the existing regulatory framework, and the need to collaborate with the Australian Government
- anticipated changes to the existing regulatory framework, at both state and national levels
- the degree of stakeholder support for different options
- opportunities to reinforce programs that are designed to discourage people from using e-cigarettes and help those that do to quit.

Each of these factors is discussed in more detail below.

# 7.4.1 The existing regulatory framework and need for collaboration

Both the existing regulatory framework, and the need to collaborate with other Australian jurisdictions, will shape which responses are most appropriate for addressing the environmental impact of e-cigarettes in Queensland.

The Department of Environment and Science advised the committee that the *Waste Reduction and Recycling Act 2011* 'contains provisions that allow for the development of voluntary, co-regulatory or

Hon Dr Ayesha Verrall, 'New moves to curb youth vaping', press release, 6 June 2023, https://www.beehive.govt.nz/release/new-moves-curb-youth-vaping.

Zero Waste Scotland, Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes, Summary Report, June 2023, https://cdn.zerowastescotland.org.uk/managed-downloads/mf-thteewjk-1688050310d.

mandatory product stewardship schemes in Queensland'. <sup>283</sup> This could include, for example, a deposit, return and recycling scheme for e-cigarettes. However, as the Department of Environment and Science noted, any scheme that involves national suppliers would ideally be a national scheme, requiring collaboration with the Australian Government. <sup>284</sup>

#### 7.4.2 Anticipated changes to the existing regulatory framework

Anticipated changes to the existing regulatory framework will influence which solutions are most appropriate for reducing the environmental impact of e-cigarettes in Queensland.

At the national level, details of the plan announced by the Australian Government to ban disposable e-cigarettes, <sup>285</sup> including when it will start and whether it will involve legislation at the state and/or national level are not yet known. At the state level, Queensland is in the process of introducing a licensing scheme for the sale of smoking products, including e-cigarettes. Retailers and wholesalers will require licences to sell smoking products in Queensland from 1 September 2024.<sup>286</sup>

Both these changes will affect the need for, and feasibility of, different options for responding to the environmental challenges associated with e-cigarettes. Most obviously, the Australian Government's plan to ban disposable e-cigarettes will necessarily entail a ban on those products being introduced in Queensland in some form. While this would help to reduce the environmental impacts of e-cigarettes, it would not eliminate them entirely.



Even with a ban on disposable e-cigarettes, the state government may still need to take additional action to address the environmental impact of e-cigarettes and the challenges they pose for waste management. This is because disposable e-cigarettes are only part of the problem: reusable e-cigarettes would still be sold and would need to be disposed of in a manner that minimises risks to people and the environment. As such, the Queensland Government may need to consider options such as a deposit, return and recycling scheme regardless of the changes announced by the Australian Government.

The licensing scheme legislated in the *Tobacco and Other Smoking Products Act 1998* may create opportunities for the government to pursue additional measures in a more effective and efficient way than would be possible at present. For example, the licensing scheme will ensure that the government is able to identify all (legal) points of sale. It will also provide the government with a mechanism through which it can impose conditions on licence holders. Both these things may make it easier to introduce a deposit, return and recycling scheme for e-cigarettes.

Similarly, even with a ban on disposable-cigarettes, the Queensland Government may still need to consider whether to introduce a requirement that the batteries of all e-cigarette devices (including reusable devices) must be easily removable. This option could improve any deposit, return and recycling scheme by making it easier to recycle e-cigarettes in a safe and cost-effective manner. However, it may be difficult to introduce and enforce such a requirement in isolation: collaboration with the Australian Government and other state and territory governments may be necessary.

#### 7.4.3 Stakeholder support for action

The level of stakeholder support for different options is an important factor in determining which options for reducing the environmental impact of e-cigarettes are most suitable for Queensland.

There appears to be relatively broad support for a ban on disposable e-cigarettes among key stakeholders in Queensland. A significant number of submitters expressed support for limitations on

Department of Environment and Science, correspondence, 2 May 2023, p 2.

Department of Environment and Science, correspondence, 2 May 2023, p 2.

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

<sup>&</sup>lt;sup>286</sup> Tobacco and Other Smoking Products Act 1998, Part 1A.

the sale of disposable e-cigarettes to reduce their accessibility to young people and/or minimise negative impacts on the environment. Most of these submitters expressed support for a complete ban on single use, disposable e-cigarettes. 288

Some submitters expressed support for additional or alternative measures to reduce the environmental impact of e-cigarettes. For example, in their submissions, No More Butts and the Queensland Youth Policy Collective expressed support for the introduction of a deposit, return and recycling scheme for e-cigarettes. Policy No More Butts suggested that such a scheme would help to reduce littering and may discourage some people from using e-cigarettes by increasing the cost of devices. Policy Source Sourc

Other submitters also supported the introduction of a recycling program funded by manufacturers and/or retailers, <sup>291</sup> though some noted that such programs may only be viable if e-cigarettes are available via legal channels. <sup>292</sup>

In contrast, the submission made by Super Vape Store expressed concern about the financial impact of recycling schemes on the business community. They stated that existing battery recycling schemes 'require significant financial investment and ongoing dedication' on the part of affected businesses.<sup>293</sup>

#### 7.4.4 Opportunities to reinforce prevention and cessation campaigns

The Department of Environment and Science advised the committee that 'there is merit in exploring options to increase awareness of the risks associated with inappropriate end-of-life management of vapes'.<sup>294</sup> Such options could also offer a way to reinforce prevention and cessation campaigns.

In the 2000s, high-profile campaigns that emphasised the environmental impacts of smoking, including the littering of cigarette butts and the risk of accidentally lighting bushfires, played a role in the 'denormalisation' of smoking. <sup>295</sup> For example, in 1997 a billboard campaign in NSW featured photographs of wildlife killed by fires causes by littered cigarettes. <sup>296</sup>

Although the environmental impacts of e-cigarettes differ from those of conventional smoking products, surveys suggest that there may be similar opportunities to use environmental messaging to reinforce campaigns designed to prevent e-cigarette use and help people to quit. In 2022, a survey of 5,680 young people in Queensland found that almost half of them (47%) identified the environment as one of the most important issues in Australia. Overall, more of Queensland's young people identified the environment as a top priority than any other issue.<sup>297</sup>

# **Committee comment**

The committee notes that the Queensland Government may need to take steps to reduce the environmental impact of e-cigarettes, and manage e-cigarette waste effectively, even with the

<sup>&</sup>lt;sup>287</sup> Including submissions 10, 28, 34, 36, 37, 39, 42, 49, 60, 67, 73 and 77.

<sup>&</sup>lt;sup>288</sup> Including submissions 34, 36, 39, 49, 60, 67, 73 and 77.

Submissions 11 and 70.

<sup>&</sup>lt;sup>290</sup> Submission 11, p 4.

<sup>&</sup>lt;sup>291</sup> Including submissions 20, 35, 48

<sup>&</sup>lt;sup>292</sup> Dr Colin Mendelson, submission 20, p 13.

<sup>&</sup>lt;sup>293</sup> Submission 10 (supplementary submission).

Department of Environment and Science, correspondence, 2 May 2023, p 2.

Chapman, S, Freeman, B, 'Markers of the denormalisation of smoking and the tobacco industry', *Tobacco Control*, 2008, 17(1), pp 25-31, http://dx.doi.org/10.1136/tc.2007.021386.

<sup>&</sup>lt;sup>296</sup> Chapman, S, 'Where there's smoke, there's fire', *Tobacco Control*, 1999 8(1), pp 12-13, https://doi.org/10.1136%2Ftc.8.1.12.

Mission Australia, *Youth Survey 2022*, report, 2022, p 67, https://www.missionaustralia.com.au/publications/youth-survey/2618-youth-survey-2022-report/file.

implementation of the proposed ban on disposable e-cigarettes announced by the Australian Government in May 2023.

The committee also notes the opportunities created by the introduction of a licensing scheme for the sale of smoking products under the *Tobacco and Other Smoking Products Act 1998*, as well as the potential to connect efforts to reduce the environmental impact of e-cigarettes with prevention and cessation campaigns.

The committee considers that there would be significant value in exploring the feasibility of introducing a deposit, return and recycling scheme for prescription vaping products, and the introduction of product design requirements that would facilitate recycling and/or safe disposal of e-cigarettes, such as a requirement that the batteries of all such devices be easily removable.

#### **Recommendation 14**

The committee recommends that the Queensland Government investigate:

- the feasibility of introducing a return and recycling scheme for vaping products
- the introduction of product design requirements that would facilitate recycling and/or safe disposal of e-cigarettes and their batteries.

# 8 Jurisdictional analysis of other e-cigarette use inquiries, legislative frameworks, policies and preventative activities, including their effectiveness in reducing e-cigarette use

#### 8.1 Key findings

- Most public inquiries have found that e-cigarettes pose a risk to public health, especially the
  health of children. Many have also concluded that evidence demonstrating the effectiveness of
  e-cigarettes as a smoking cessation tool is mixed.
- Australian jurisdictions including Queensland have opted for a precautionary approach to the regulation of e-cigarettes. As a result, the legislative frameworks that regulate e-cigarettes across the country are currently very similar.
- Many jurisdictions in Australia, and overseas, are seeking to develop new legislative and policy
  measures to reduce e-cigarette use among children and young people. However, it is too early
  to evaluate the effectiveness of some of these new measures.
- Inquiries and experience from other jurisdictions suggests that future legislative and policy interventions in Queensland could include:
  - bans or restrictions on flavoured e-cigarettes, especially flavours that appeal to children
  - greater regulation of e-cigarette packaging and labelling, including bans on packaging likely to appeal to children, or an expansion of plain packaging requirements and health warnings that currently apply to tobacco products
  - a ban on disposable e-cigarettes
  - greater regulation of the marketing of e-cigarettes, especially to children and young people via social media.

Many of these measures could be pursued in partnership with the Australian Government, <sup>298</sup> which recently announced its intention to pursue some of these reforms.

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Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

#### 8.2 Analysis of other e-cigarette inquiries

The findings of selected public inquiries from Australia and overseas are summarised in Table 7, below. This summary is not exhaustive. Instead, it focusses on those reports that are more recent and most relevant to the committee's inquiry, including those conducted by committees of the Australian Parliament in 2017, 2018 and 2020.



Almost all of the public inquiries in this analysis concluded that e-cigarettes are harmful, especially to the health of children. Many found that evidence about the effectiveness of e-cigarettes as a smoking cessation tool remains weak.

However, several of these inquiries stressed that evidence about the potential harms and benefits of e-cigarettes is constantly evolving and should be re-assessed on a regular basis.

The 2017 inquiry by the UK's House of Commons Science and Technology Select Committee is the only inquiry included in the analysis to express a more positive view of e-cigarettes. However, the UK committee relied heavily on a 2015 report commissioned by Public Health England<sup>299</sup> that has been heavily criticised. Several leading experts have queried the methodology employed by the central study cited in the Public Health England report, and noted potential conflicts of interest relating to some of the study's authors.<sup>300</sup>

Several inquiries, including those conducted by the Australian Parliament in 2018 and 2020, expressly endorsed precautionary approaches to e-cigarettes, such as the approach currently taken in Australia.

A number of inquiries have also taken a positive view of proposals to restrict the sale of flavoured e-cigarettes, including recent inquiries in Ireland (2022), New Zealand (2020) and Australia (2020).

#### 8.3 Legislative frameworks for e-cigarettes

This section:

- provides a brief overview of global patterns in the regulation of e-cigarettes
- presents a comparative analysis of legislative frameworks in Australian states and territories
- provides an outline of relevant sections of the Australian Tobacco Strategy 2023–2030, and proposed legislative changes announced in May 2023
- discusses a variety of new legislative measures that have been adopted or proposed in certain jurisdictions to reduce the use of cigarettes and mitigate their environmental impact, including—
  - restrictions on flavours that appeal to children
  - requiring health warnings or plain packaging for e-cigarettes
  - proposals to ban disposable e-cigarettes
  - measures to restrict the advertising of e-cigarettes via social media.

#### 8.3.1 Global patterns in the regulation of e-cigarettes

Legislative frameworks for e-cigarettes differ in 3 main ways:

- the extent to which they adopt a precautionary approach
- the type of legislation they use to regulate e-cigarettes
- the domain or aspect of e-cigarettes that they regulate.

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McNeill, A, Brose, LS, Calder, R, Hitchman, SC, Hajek, P, McRobbie, H, *E-cigarettes: an evidence update. A report commissioned by Public Health England*, 2015, Public Health England, London, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/733 022/Ecigarettes\_an\_evidence\_update\_A\_report\_commissioned\_by\_Public\_Health\_England\_FINAL.pdf.

Polosa, R, 'E-cigarettes: Public Health England's evidence-based confusion', *The Lancet*, 29 August 2015, 386, p 829, https://doi.org/10.1016/S0140-6736(15)00042-2; Mckee, M, Capewell, S, 'Evidence about Electronic Cigarettes: Foundation Built on Rock or Sand?', *British Medical Journal*, 2015, 351, h4863, https://doi.org/10.1136/bmj.h4863.

Table 7: Comparative analysis of public inquiries relating to e-cigarettes

Year	lurisdiction & Institution	Nature & scope of inquiry	Key findings & recommendations
2022	Ireland  Houses of the Oireachtas (Ireland), Joint Committee on Health	Examined the Public Health (Tobacco and Nicotine Inhaling Products) Bill 2019. The Bill proposed a new regulatory regime for the sale of ecigarettes containing nicotine, including:	<ul> <li>While noting that scientific research on e-cigarettes was ongoing, the committee stated that it was 'satisfied that there is a growing body of evidence in relation to the harms caused by e-cigarettes'. 301</li> <li>Cited evidence regarding:         <ul> <li>smoking initiation in adolescents, including evidence that young people who use e-cigarettes are more likely to take up smoking cigarettes</li> <li>the manner in which e-cigarettes are marketed, including the use of packaging and flavours likely to attract young people, and the use of online marketing</li> <li>the potential value of e-cigarettes as a smoking cessation tool, which has yet to be shown to be more effective than established alternatives</li> <li>Supported the Bill, but recommended further measures, including:</li> <li>prohibiting all flavours of e-cigarettes, except for tobacco</li> <li>restricting the use of brightly coloured packaging for e-cigarettes and mandating the use of plain packaging</li> <li>prohibiting all forms of e-cigarette advertising, including on social media platforms and via influencer marketing methods</li> </ul> </li> </ul>
2020	Australia Senate Select Committee on Tobacco Harm Reduction	Inquired into tobacco reduction strategies with particular reference to e-cigarettes, including:  • approaches taken to e-cigarettes in similar countries  • their impact on smoking rates and population-level health impacts  • their effectiveness as a smoking cessation tool	<ul> <li>Supported development of a 'prescription pathway' for accessing nicotine e-cigarettes.</li> <li>Concluded there is insufficient evidence to support claims that nicotine e-cigarettes are a valuable smoking cessation tool, citing evidence that the cessation effect of e-cigarettes is shorter than existing alternatives.</li> <li>Expressed concern 'that there appears to be significant mounting evidence that e-cigarettes have some 'gateway' effect' i.e. lead to use of traditional tobacco products.<sup>302</sup></li> <li>Agreed there should be stringent regulation of flavourings used in e-cigarettes due to health risks associated with flavourings and their appeal to young people.</li> </ul>

Houses of the Oireachtas (Ireland), Joint Committee on Health Report on Pre-Legislative Scrutiny of the Public Health (Tobacco and Nicotine Inhaling Products) Bill 2019, July 2022, p. 26. 301

Health and Environment Committee

Commonwealth of Australia, Senate, Select Committee on Tobacco Harm Reduction - Report, December 2020, p 84. 302

Year	Jurisdiction & Institution	Nature & scope of inquiry	Key findings & recommendations
		<ul> <li>their potential to act as a gateway to tobacco products</li> <li>measures to reduce use by youth</li> <li>access to e-cigarettes in Australia</li> <li>the role of the tobacco industry in marketing and selling e-cigarettes.</li> </ul>	<ul> <li>Stated that Australia's precautionary approach to the regulation of liquid nicotine should not be weakened unless the safety and effectiveness of e-cigarettes as a smoking cessation tool is conclusively demonstrated.</li> <li>Recommended the implementation of national evidence-based regulations for nicotine and e-liquids and e-cigarette devices.</li> <li>Suggested commercialisation of e-cigarettes by tobacco companies is not in the public interest and took a critical view of efforts by the tobacco industry to lobby for a more permissive approach to e-cigarettes.</li> </ul>
2020	<b>New Zealand</b> Parliament, Health Committee	Examined the Smokefree Environments and Regulated Products (Vaping) Amendment Bill 2020, which proposed broadening the <i>Smoke-free</i> Environments Act 1990 to include e- cigarettes. The Bill also proposed restricting the sale of most flavoured e-cigarettes to specialist retailers, and banning the advertising of e-cigarettes.	<ul> <li>Recommended that the Bill be passed with some amendments.<sup>303</sup></li> <li>Supported the introduction of restrictions on where flavoured e-cigarettes may be sold, on the basis these restrictions are necessary.</li> <li>Generally, did not provide detail about the submissions or scientific evidence on which the committee relied.</li> </ul>
2018	Australia House of Representatives Standing Committee on Health, Aged Care and Sport	Inquired into the use and marketing of electronic cigarettes and personal vaporisers in Australia, including:  • their effectiveness as a smoking cessation tool  • their health impact  • international approaches to regulation  • the appropriate regulatory framework for Australia	<ul> <li>Made several recommendations, 304 including:         <ul> <li>that the National Health and Medical Research Council fund an independent and comprehensive review of the evidence relating to the health impacts of ecigarettes</li> <li>that a national approach be taken to the regulation of non-nicotine e-cigarettes</li> <li>that the Therapeutic Goods Administration continues to oversee the classification and use of nicotine e-cigarettes</li> <li>that the Australian Government establish a regulatory process for assessing and, if necessary, restricting colourings and flavourings used in e-cigarettes.</li> </ul> </li> </ul>

New Zealand Parliament, Health Committee, Smokefree Environments and Regulated Products (Vaping) Amendment Bill, Final Report, 2020. 303

Commonwealth of Australia, House of Representatives, Standing Committee on Health, Aged Care and Sport, Report on the Inquiry into the Use and Marketing of Electronic Cigarettes and Personal Vaporisers in Australia, March 2018. 304

Year	Jurisdiction & Institution	Nature & scope of inquiry	Key findings & recommendations
2018	Northern Territory Legislative Assembly, Economic Policy Scrutiny Committee	Examined the Tobacco Control Legislation Amendment Bill 2018. Among other changes, the Bill proposed extending laws applicable to tobacco products to e-cigarettes.	<ul> <li>While acknowledging divergent views among submitters, considered 'that the possible benefits of e-cigarettes are outweighed by evidence suggesting that they may re-normalise smoking and increase the likelihood of tobacco smoking initiation, particularly among adolescents'. <sup>305</sup></li> <li>Concluded that a precautionary approach – such as that taken in the Bill – was justified given conflicting evidence about the impact of e-cigarettes on health.</li> </ul>
2017	<b>Australia</b> Senate Community Affairs Legislation Committee	Examined the Vaporised Nicotine Products Bill 2017 (a private member's bill, introduced by Senator Leyonhjelm). The Bill proposed excluding e-cigarettes from regulation by the Therapeutic Goods Administration, legalising their use in Australia.	<ul> <li>Stressed the uncertain state of evidence regarding the safety of e-cigarettes and their efficacy as a smoking cessation tool, particularly with regard to long-term health effects.</li> <li>Recommended that the Senate not pass the Bill 'until further scientific evaluation of the efficacy and safety of e-cigarettes and related products has been undertaken'.<sup>306</sup></li> <li>'Given the lack of a strong evidentiary basis surrounding e-cigarettes' supported the existing precautionary approach 'which is based on the need to consider the overall impact that e-cigarettes may have on population health, including smokers and nonsmokers'.<sup>307</sup></li> </ul>
2017	<b>United Kingdom</b> House of Commons, Science and Technology Select Committee	<ul><li>Examined:</li><li>the science behind e-cigarettes</li><li>their impact on health</li><li>the regulation of the products and</li><li>financial implications</li></ul>	<ul> <li>Relied heavily on a report from Public Health England that has been heavily criticised by leading experts.</li> <li>Concluded that e-cigarettes are substantially less harmful than traditional tobacco products and are an effective smoking cessation tool.<sup>308</sup></li> <li>On this basis, supported policies to make e-cigarettes more accessible, including permitting their use in areas where smoking tobacco products is banned.</li> <li>Noted that some uncertainty remains, particular with regard to the long-term health effects of e-cigarette use.</li> <li>Called on the UK government to fund long-term research to strengthen the evidence base regarding the relative risks of e-cigarettes.</li> </ul>

Legislative Assembly of the Northern Territory, Economic Policy Scrutiny Committee, Inquiry into the Tobacco Control Legislation Amendment Bill 2018, November 2018, p 13. Commonwealth of Australia, Senate Community Affairs Legislation Committee, Vaporised Nicotine Products Bill 2017, Report, September 2017, Recommendation 1, p 15. 305 306

Health and Environment Committee

Commonwealth of Australia, Senate Community Affairs Legislation Committee, Vaporised Nicotine Products Bill 2017, Report, September 2017, p 14. 307

United Kingdom, House of Commons, Science and Technology Select Committee, E-cigarettes, Seventh Report of Session 2017–19, 17 August 2018.

#### 8.3.1.1 <u>Precautionary approaches</u>

Legislative frameworks for the regulation of e-cigarettes vary between more permissive frameworks that focus on harm reduction, and more restrictive frameworks that adopt a precautionary approach.  $^{309}$ 

Permissive approaches, such as that taken in the UK, prioritise providing access to e-cigarettes as an alternative to other smoking products. Precautionary approaches, such as those taken in Australia by the Commonwealth and states and territories, prioritise restricting access to e-cigarettes to reduce the potential risk to public health.

Initially, precautionary approaches were driven by concern that there was insufficient evidence to demonstrate the safety of e-cigarettes. As research has expanded, they have increasingly been justified on the basis of evidence that e-cigarettes are harmful, and by doubts about the efficacy of e-cigarettes as a smoking cessation tool.

Increasing evidence about the harmful effects of e-cigarettes, as well as their increasing popularity, has also led some jurisdictions to introduce new legislative measures designed to reduce their use. The most notable measures include restrictions on flavourings, and additional packaging requirements (health warnings and/or plain packaging), both of which are discussed in more detail below.



On 2 May 2023, the Minister for Health and Aged Care, the Hon Mark Butler MP, announced that the Australian Government will reinforce its precautionary approach to e-cigarettes with stronger legislation, enforcement, education and support. <sup>310</sup> Several of the measures that will be introduced are discussed in more detail below. Most notably, the Australian Government plans to shift to a prescription-only model, under which e-cigarettes will only be available on a prescription, regardless of whether or not they contain nicotine.

Recently, New Zealand also announced changes designed to strengthen its precautionary approach to e-cigarettes. However, rather than the prescription-only model announced by the Australian Government, the New Zealand Government has announced that it will:

- prohibit new specialist e-cigarette stores from opening near schools and marae (communal and sacred meeting grounds used by Māori communities)
- require e-cigarettes and their packaging to have only generic flavour descriptions
- reduce the nicotine strength of disposable e-cigarettes to make them less addictive
- require all e-cigarette products to have removable or replaceable batteries and child-safety mechanisms.<sup>311</sup>



Many submitters expressed support for the precautionary approach adopted by Australian jurisdictions, including Queensland. Professor Michelle Jongenelis, from the University of Melbourne's School of Psychological Sciences, noted that Australia's Chief Medical Officer, the National Health and Medical Research Council, and the World Health Organization have all endorsed a precautionary approach to e-cigarettes. 313

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Smith, M, Hilton, S, 'Global Regulatory Approaches towards E-Cigarettes, Key Arguments, and Approaches Pursued', in Hoe, V, Wong, LP (eds), *E-cigarettes and Health*, 2022, IntechOpen, London, https://www.intechopen.com/online-first/83859.

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

New Zealand Ministry of Health, 'New policies will help reach Smokefree goal and address increase in youth vaping', news article, 6 June 2023, https://www.health.govt.nz/news-media/news-items/new-policies-will-help-reach-smokefree-goal-and-address-increase-youth-vaping.

<sup>&</sup>lt;sup>312</sup> Including submissions 16, 22, 49, 75 and 77.

<sup>&</sup>lt;sup>313</sup> Submission 16, p 5.

However, a small number of submitters argued that a more permissive approach would increase the use of e-cigarettes by people seeking to quit tobacco products and so benefit public health overall. BAT Australia, for example, stated that the government 'should reconsider its precautionary approach' to ensure current smokers have access to lower risk products. 315

#### 8.3.1.2 Type of legislation used to regulate e-cigarettes

Broadly, jurisdictions around the world have regulated e-cigarettes under the legislative frameworks that apply to tobacco products, poisons, medicines (including medical devices) and/or consumer products. In many jurisdictions, including in Australia, e-cigarettes are regulated under a combination of these frameworks.

#### 8.3.1.3 Domain or aspect of e-cigarettes that is regulated

Legislative frameworks around the world differ in the extent to which they regulate different domains or areas related to e-cigarettes. Those most frequently regulated are the sale, product, marketing and use of e-cigarettes.

Table 8: Main domains of e-cigarette regulation 316

Domain	Topics commonly subject to regulation
Sale	<ul> <li>whether permitted at all, via prescription only</li> <li>minimum age for purchase and/or sale</li> <li>registration and licensing of retailers and/or wholesalers</li> <li>locations from which sale is permitted or prohibited (vending machines, temporary/mobile locations, specified events e.g. major sporting events, near schools or other significant community spaces)</li> </ul>
Product	<ul> <li>permitted ingredients</li> <li>nicotine levels</li> <li>permitted flavours, including restrictions on flavours likely to appeal to children</li> </ul>
Marketing	<ul> <li>whether advertising permitted at all, subject to restrictions</li> <li>restrictions on promotion and display at point of sale</li> <li>packaging and labelling, including plain packaging, restrictions on packaging likely to appeal to children, labelling of ingredients, labelling of nicotine concentration</li> </ul>
Use	<ul> <li>whether permitted at all</li> <li>whether permitted in 'smoke-free' areas</li> <li>whether permitted in other circumstances where smoking is banned (e.g. in a car when a child is present)</li> </ul>

#### 8.4 Comparison of legislative frameworks in Australian jurisdictions

All Australian jurisdictions have opted for a precautionary approach to the regulation of e-cigarettes. As a result, the legislative frameworks that regulate e-cigarettes across the country are very similar.

In all states and territories:

 e-cigarettes that contain nicotine are illegal unless obtained on prescription from a pharmacist, or from an overseas vendor via the TGA's personal importation scheme<sup>317</sup>

<sup>&</sup>lt;sup>314</sup> Including submissions 20 and 41.

BAT Australia, submission 41, p 3.

Adapted from: Klein, DE, et al, 'A Literature Review on International E-cigarette Regulatory Policies', *Current Addiction Reports*, 2020 (7), pp 509–519, https://doi.org/10.1007/s40429-020-00332-w; Kennedy, RD, Awopegba, A, De León, E, Cohen, JE, 'Global approaches to regulating electronic cigarettes', *Tobacco Control*, 2017 (26), pp 440-445, http://dx.doi.org/10.1136/tobaccocontrol-2016-053179.

This is because nicotine vaping products are listed in Schedule 4 of the national Poisons Standard, which is referenced by relevant state and territory laws: *Medicines and Poisons Act 2019, Poisons and Therapeutic* 

- e-cigarettes cannot be sold to people under 18, regardless of whether they contain nicotine<sup>318</sup>
- bans on confectionary and fruit flavoured cigarettes and/or tobacco products exist, but have not
  yet been extended to e-cigarettes<sup>319</sup>
- plain packaging requirements and mandatory health warnings that apply to tobacco products under national laws do not apply to e-cigarettes.<sup>320</sup>

Table 9 below, provides an overview of the main differences in how each state and territory currently regulates e-cigarettes.

In all states and territories except WA:

- the sale of e-cigarettes that do not contain nicotine is permitted
- state/territory restrictions on the advertising, promotion and display of smoking products extend to e-cigarettes, <sup>321</sup> with exceptions for specialist e-cigarette retailers in Victoria. <sup>322</sup>

Other points of difference between Australian jurisdictions, detailed in Table 9, include:

- Victoria and Queensland are the only states that do <u>not</u> currently require vendors of e-cigarettes to register or obtain a licence. However, Queensland is in the process of introducing a licensing scheme, with wholesale and retail licences to be required from 1 September 2024<sup>323</sup>
- NSW, Tasmania and the Northern Territory, permit e-cigarettes to be sold via vending machines in liquor-licensed venues, subject to certain restrictions
- South Australia expressly prohibits the online sale of e-cigarettes
- WA permits e-cigarette use in areas where smoking is banned
- in the ACT, the power to ban products that are confectionary or fruit-flavoured extends to e-cigarettes, though to date it has only been used to prohibit cigarettes
- in Victoria and the ACT, the power to ban products with packaging that appeals to children extends to e-cigarettes, though it appears no such bans have yet been made
- in Victoria, there is a broad power to ban products, including e-cigarettes, that are of a nature to appeal to children, or advertised to them.<sup>324</sup>

Goods Act 1966 (NSW), Drugs, Poisons and Controlled Substances Act 1981 (Vic), Controlled Substances Act 1984 (SA), Poisons Act 1964 (WA), Poisons Act 1971 (Tas), Medicines Poisons and Therapeutics Goods Act 2012 (NT), Medicines, Poisons and Therapeutic Goods Act 2008 (ACT).

Tobacco and Other Smoking Products Act 1998, s 19; Public Health (Tobacco) Act 2008 (NSW), s 22; Tobacco Act 1987 (Vic), s 12; Tobacco and E-Cigarette Products Act 1997 (SA), s 38A; Tobacco Products Control Act 2006 (WA), s 6; Public Health Act 1997 (Tas), s 64, Tobacco Control Act 2002 (NT), s 42, Tobacco and Other Smoking Products Act (ACT), s 14.

<sup>319</sup> See Table 8: Main points of difference in how Australian jurisdictions regulate e-cigarettes.

Tobacco Plain Packaging Act 2011 (Cth), Competition and Consumer (Tobacco) Information Standard 2011 (Cth).

Either because 'smoking products' are defined to include e-cigarettes, or because the relevant Act otherwise provides for e-cigarettes to be treated in the same manner as tobacco products: *Tobacco and Other Smoking Products Act 1998, Dictionary; Public Health (Tobacco) Act 2008 (NSW),* ss 8A and 15A; *Tobacco Act 1987 (Vic),* s 3; *Tobacco and E-Cigarette Products Act 1997 (SA),* ss 40-43; *Public Health Act 1997 (Tas),* s 3, *Tobacco Control Act 2002 (NT),* s 4A, *Tobacco and Other Smoking Products Act (ACT),* s 3A.

<sup>&</sup>lt;sup>322</sup> Tobacco Act 1987 (Vic), s 6B.

<sup>&</sup>lt;sup>323</sup> See Tobacco and Other Smoking Products Amendment Act 2023.

See Table 9 for details of specific legislative provisions.

Table 9: Main points of difference in how Australian jurisdictions regulate e-cigarettes

	Queensland	New South Wales	Victoria	South Australia	Western Australia	Tasmania	Northern Territory	ACT
	Tobacco and Other Smoking Products Act 1998	Public Health (Tobacco) Act 2008	Tobacco Act 1987	Tobacco and E-Cigarette Products Act 1997	Tobacco Products Control Act 2006	Public Health Act 1997	Tobacco Control Act 2002	Tobacco and Other Smoking Products Act
Permits sale of e-cigarettes that do <u>not</u> contain nicotine	Yes	Yes	Yes	Yes	No. Ban on sale of products resembling tobacco products includes e-cigarettes 325 (s 106)	Yes	Yes	Yes
Registration & licensing requirements for vendors	Licenses will be required for wholesalers and retailers from 1 September 2024 (Tobacco and Other Smoking Products Amendment Act 2023)	Vendors must register – for free – with NSW Health. (ss 39 and 39A)	None	Retailers must have a license (s 6)	n/a (see above)	Vendors must have a license (s 74A)	Retailers must have a licence (s 28)	Retailers and wholesalers must have a licence (ss 61 and 62)
Permits sale of e-cigarettes from vending machines	No (s 18)	At licensed venues in areas restricted to over 18s, operation must be controlled by staff (ss 12 and 13)	No. (s 13(1A))	No (s 37(2))	n/a (see above)	At licensed venues in areas restricted to over 18s, operation must be controlled by staff (s 71(5),(6) and (7))	At licensed venues, allowed where children are supervised if in line of sight of bar (s 26)	No (s 16, s 48A)
Expressly bans sale from temporary or mobile locations	Yes (s 13C)	Yes (s 11)	Yes (s 15L)	Yes (s 37A)	n/a (see above)	No, but sale only permitted at premises on licence	No, but sale only permitted at premises on licence	No, but sale only permitted at premises on licence
Expressly bans sale online	No	ON.	No	Yes (s 30(2))	n/a (see above)	No	No	No

<sup>325</sup> Van Heerden v Hawkins 2016 WASCA 42.

	Queensland	New South Wales	Victoria	South Australia	Western Australia	Tasmania	Northern Territory	ACT
	Tobacco and Other Smoking Products Act 1998	Public Health (Tobacco) Act 2008	Tobacco Act 1987	Tobacco and E-Cigarette Products Act 1997	Tobacco Products Control Act 2006	Public Health Act 1997	Tobacco Control Act 2002	Tobacco and Other Smoking Products Act
Bans use where smoking is banned ('smoke' includes e-cigarette use)	Yes (Dictionary, Parts 2B, 2BA, 2BB, 2C)	Yes (Smoke-free Environment Act 2000, s 4)	Yes (s 3, Divisions 1 and 1A)	Yes (s4, Part 4)	No, but owners/managers of public areas can apply smoking bans to e- cigarettes; Councils can prohibit e- cigarettes in smoke-free zones (Glossary, s 107E)	Yes (s 3, Division 1A)	Yes (s4A(2), Part 2)	Yes (Smoke-Free Public Places Act 2003, s 5B)
Scope of ban on/power to ban confectionary and fruit flavours	Ban applies only to cigarettes (s 26ZT)	Power to prohibit applies only to tobacco products (s 29)	Specific power to prohibit confectionary and fruit flavours applies only to tobacco products (s 150(2)(a)(i)) Broader power to ban products that appeal, or are advertised, to children extends to e-cigarettes and may capture flavours (s 150(2)(a)(iv))	Power to prohibit applies only to tobacco products. (s 34A(2)(a))	(see above)	Ban applies only to tobacco products (s 68A(d))	Unclear, ban may be imposed as a licence condition <sup>326</sup> (s 31)	Power to ban extends to e-cigarettes (s 21(2)(a))
Power to ban if packaging appeals to children	No such power exists	No such power exists	Yes, relevant power extends to e-cigarettes (s 150(2)(a)(ii))	No, relevant power applies only to tobacco products (s 34A(1))	n/a (see above)	No such power exists	No express power exists in Act. May be possible to impose as licence condition.	Yes, power to ban extends to e-cigarettes (s 21(2)(b))

326 Explanatory statement, Tobacco Control Act and Regulations Amendment Bill 2010 (NT).

Health and Environment Committee



The advertising of e-cigarettes that contain nicotine is prohibited by the *Therapeutic Goods Act 1989* (Cth), which prohibits the advertising of prescription-only medicine, as well as the advertising of therapeutic goods that have not received regulatory approval.

At present, it appears that there is no Australian jurisdiction that expressly prohibits the promotion of e-cigarettes that do <u>not</u> contain nicotine via social media.

While state and territory restrictions on the advertising and promotion of e-cigarettes have the potential to extend to online advertising and promotion, they apply primarily at the point of sale. As such, while they may prohibit e-cigarettes from being advertised at an online store, <sup>327</sup> they would not capture the promotion of e-cigarettes on social media.

The national ban on tobacco advertising prohibits the promotion of conventional tobacco products on social media.<sup>328</sup> However, this ban does not apply to e-cigarettes, which are not included in the definition of a 'tobacco product' in the *Tobacco Advertising Prohibition Act 2012* (Cth).<sup>329</sup>

#### 8.5 National Tobacco Strategy 2023-2030

The most recent National Tobacco Strategy 2023–2030 (Strategy), developed in consultation with state and territory governments, Australian Government agencies, public health and tobacco control experts, Tackling Indigenous Smoking advisory groups, and public submitters, was released by the Australian Department of Health and Aged Care in May 2023. The Strategy states that 'normalisation of e-cigarette marketing and use is undermining population health and has the potential to disrupt the significant achievements Australia has made in tobacco control to date'. <sup>330</sup>

The Strategy notes that Commonwealth and state and territory ministers have agreed to national guiding principles for e-cigarettes which affirm:

- the need to maintain and, where appropriate, strengthen and make consistent across jurisdictions the current controls that apply to the marketing and use of e-cigarettes in Australia
- the primary focus and goal of any change to the regulation of e-cigarettes in Australia will be protecting children and young people. 331

In relation to e-cigarettes, the Strategy includes among its objectives:

- Prevent uptake of e-cigarettes by young people and those who have never smoked.
- Prevent and reduce nicotine addiction.
- Denormalise and limit the marketing and use of e-cigarettes.
- Encourage and assist as many people as possible who use tobacco and e-cigarettes to quit as soon as possible, and prevent relapse.

To achieve these objectives, the Strategy identifies actions or notes the relevance of actions in relation to e-cigarettes, to be implemented under the following priority areas:

 Priority Area 4 – Strengthen and expand efforts and partnerships to prevent and reduce tobacco use among First Nations people

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In Queensland, the relevant provision of the *Tobacco and Other Smoking Products Act 1998* was recently amended to expressly include online shops; see s 26A, *Tobacco and Other Smoking Products Act 1998*.

<sup>&</sup>lt;sup>328</sup> Tobacco Advertising Prohibition Act 2012 (Cth).

Tobacco Advertising Prohibition Act 2012 (Cth), s 8.

Australian Government, Department of Health and Aged Care, *National Tobacco Strategy 2023–2030*, 2023, https://www.health.gov.au/resources/publications/national-tobacco-strategy-2023-2030?language=en, p 7.

Australian Government, Department of Health and Aged Care, *National Tobacco Strategy 2023–2030*, 2023, https://www.health.gov.au/resources/publications/national-tobacco-strategy-2023-2030?language=en, p 25.

- Priority Area 5 Strengthen efforts to prevent and reduce tobacco use among populations at a higher risk of harm from tobacco use and populations with a high prevalence of tobacco use
- Priority Area 9 Strengthen regulations on e-cigarettes and novel and emerging products
- Priority Area 10 Eliminate exceptions to smoke-free workplaces, public places and other settings
- Priority Area 11 Provide greater access to evidence-based cessation services to support people to quit the use of tobacco, e-cigarettes and novel and emerging products.

Details of specific actions identified in the Strategy are shown in Table 10 below.

# Table 10: National Tobacco Strategy 2023–2030 – Actions on e-cigarettes

#### Actions for Priority Area 9 - Strengthen regulations on e-cigarettes and novel and emerging products

**9.1** Develop and implement additional measures to further restrict the marketing, availability, use, and end-of-life disposal of all e-cigarette components in Australia, regardless of their nicotine content.

Responsibility: Australian Government, state and territory governments.

**9.2** Develop and implement measures to prohibit the sale of flavoured e-cigarettes, regardless of their nicotine content.

Responsibility: Australian Government, state and territory governments.

**9.3** Raise awareness about the marketing and use of e-cigarettes and their immediate and long-term impacts on individual and population health.

Responsibility: Australian Government, state and territory governments, NGOs

9.4 Develop and implement an evidence-based comprehensive regulatory framework for e-cigarettes and all novel and emerging products that pose risks to tobacco control and population health.

**Responsibility:** Australian Government, state and territory governments.

**9.5** Prohibit the use of e-cigarettes and novel and emerging inhaled products such as shisha in areas where smoking is prohibited.

Responsibility: State and territory governments, Australian Government.

**9.6** Prohibit advertising, promotion and sponsorship relating to e-cigarettes and other new and emerging products.

 $\textbf{Responsibility:} \ \textbf{Australian Government}, state and territory governments.$ 

**9.7** Explore the feasibility of having a consistent licensing scheme in place covering all aspects of the e-cigarette supply chain in Australia.

Responsibility: Australian Government, state and territory governments.

9.8 Continue to monitor the supply and use of illicit e-cigarettes and other novel and emerging products in Australia; continue enforcement efforts to prevent illegal importation and supply; and enhance technology and staff capability to identify and respond to illicit trade.

Responsibility: Australian Government, state and territory governments, NGOs.

**9.9** Strengthenresearch, monitoring and surveillance activities pertaining to the marketing and use of ecigarettes and novel and emerging products.

**Responsibility:** Australian Government, state and territory governments.

Actions for Priority Area 5 – Strengthen efforts to prevent and reduce tobacco use among populations at a higher risk of harm from tobacco use and populations with a high prevalence of tobacco use

**5.10** Consider the feasibility of introducing a Census question on tobacco and e-cigarette use and complement this with additional related questions in other government-funded surveys to strengthen monitoring of tobacco prevalence in smaller geographic areas and population subgroups.

Responsibility: Australian Government, state and territory governments.

Actions for Priority Area 11 – Provide greater access to evidence-based cessation services to support people to quit the use of tobacco, e-cigarettes and novel and emerging products

**11.4** Strengthen tobacco control workforce capability and capacity to deliver evidence-based services to support people to quit the use of tobacco, e-cigarettes and novel and emerging products.

Responsibility: Australian Government, state and territory governments, Quit Centre and other NGOs.

#### 8.5.1 Changes announced by the Australian Government in May 2023

As noted earlier, in May 2023, the Australian Government announced plans to work with states and territories to change the legislative framework that applies to e-cigarettes. This will include measures to:

- stop the importation of non-prescription e-cigarettes
- increase the minimum quality standards for e-cigarettes including by restricting flavours, colours, and other ingredients
- require pharmaceutical-like packaging for e-cigarettes
- reduce the allowed nicotine concentrations and volumes
- ban all single use, disposable e-cigarettes.
- end the sale of e-cigarettes in retail settings, such as convenience stores and other retailers
- make it easier to get a prescription for legitimate therapeutic use of e-cigarettes
- prevent young people from swapping e-cigarettes for conventional cigarettes as illegal vaping products become harder to obtain, by increasing the tax on tobacco to reduce its affordability.<sup>332</sup>

Education and support measures intended to complement the legislative changes were also announced and included in the 2023-24 Budget:

- \$63.4 million over 4 years for national public health campaigns to discourage people from taking up vaping and smoking and encourage more people to quit
- \$29.5 million over 4 years for support programs to help people to quit, including through enhanced nicotine cessation education and training among health practitioners.
- \$141.2 million over 4 years to expand the Tackling Indigenous Smoking program and widen it to include vaping. 333

To support the announced action on e-cigarettes and vaping, the Commonwealth, state and territory health Ministers have established a National E-Cigarette Working Group. The Working Group's stated role is to review and advise on measures to protect young people from the harms of e-cigarettes by addressing the increasing availability, appeal, and uptake of vaping products.<sup>334</sup> Queensland Health is participating in the intergovernmental working group.

#### 8.6 Legislative measures to reduce e-cigarette use and mitigate environmental impacts

#### 8.6.1 Restricting or banning flavours that appeal to children

Some research suggests that the flavour of e-cigarettes contributes to their use by children and young people. For example, in 2018, one systematic review concluded that flavour may be the most important factor that encourages young people to start using e-cigarettes. Many of the studies examined in that review found that young people identified flavours as a reason to try e-cigarettes and expressed a preference for fruit flavoured e-cigarettes.

In light of this evidence, an increasing number of jurisdictions have introduced laws that ban or restrict the sale of flavoured e-cigarettes. As illustrated in Table 11 below, this has taken a variety of forms.

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Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

See https://www.aph.gov.au/About\_Parliament/Parliamentary\_departments/Parliamentary\_Library/Budget/reviews/2023-24/VapingSmokingMeasures.

See https://www.health.gov.au/sites/default/files/2023-02/health-ministers-meeting-communique-24-february-2023.pdf.

Zare, S, Nemati, M, Zheng, Y, 'A systematic review of consumer preference for e-cigarette attributes: flavor, nicotine strength, and type', PLoS One, 2018, 13(3), e0194145, https://doi.org/10.1371/journal.pone.0194145.



On 2 May 2023, the Minister for Health and Aged Care, the Hon Mark Butler MP, announced that the Australian Government will introduce minimum quality standards for e-cigarettes, including restrictions on flavours.<sup>336</sup> It is not yet clear what form these restrictions will take, or when they will take effect.

Some jurisdictions have banned all flavours except for tobacco. In some places, such as Finland, these bans capture all e-cigarettes. In others, including most EU member states, they apply only to e-cigarettes containing nicotine.

Similarly, the US Food and Drug Administration (FDA) now maintains a defacto ban on flavoured e-cigarettes that contain nicotine. While it has not, strictly speaking, banned these products, it has indicated that it is highly unlikely to grant them premarket authorization and will prioritize enforcement action against those who offer flavoured nicotine e-cigarettes for sale without it.<sup>337</sup>

**Table 11: Flavour bans** 

Form of restriction	Examples of jurisdictions that take this approach
Ban on flavours other than tobacco	Some Canadian provinces (including Nova Scotia, New Brunswick, Prince Edward Island, North West Territories)
	Some US states and cities (San Francisco, California)
	EU member states (for nicotine e-cigarettes, phased introduction, expected to be fully effective from October 2023)
	Finland (including non-nicotine e-cigarettes)
Ban on flavours other than	US (de facto, for nicotine e-cigarettes)
tobacco and menthol	Some US states and cities (New York City)
Restrictions on where flavoured	New Zealand
e-cigarettes may be sold	Some Canadian provinces (Ontario, British Columbia)

Other jurisdictions, such as New Zealand, limit where flavoured e-cigarettes may be sold. Typically, these jurisdictions permit only specialist e-cigarette retailers to sell the full range of flavours.

For example, in New Zealand, general retailers (including service stations and supermarkets) are only permitted to sell 3 flavours of e-cigarettes (tobacco, mint, and menthol) while specialist vape retailers can sell a broader range of flavours, but must be registered. From August 2023, new regulations will also restrict the manner in which flavours can be named or described on packaging to generic labels that accurately describe the flavour. For example, a product could be labelled as 'berry' but not 'strawberry jelly donut'. 939



Since flavour bans and restrictions are relatively new, there is limited evidence available regarding their effectiveness. Generally, the research that is available suggests that flavour bans can help to reduce e-cigarette use, but are most effective when they are properly enforced and form part of a comprehensive public heath response.

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Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', Media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

FDA, US Food and Drug Administration FDA Finalizes Enforcement Policy on Unauthorized Flavored Cartridge-Based E-Cigarettes That Appeal to Children, Including Fruit and Mint, news release, 2 January 2020, https://www.fda.gov/news-events/press-announcements/fda-finalizes-enforcement-policy-unauthorized-flavored-cartridge-based-e-cigarettes-appeal-children.

<sup>338</sup> Smokefree Environments and Regulated Products Act 1990 (New Zealand).

Hon Dr Ayesha Verrall, 'New moves to curb youth vaping', press release, 6 June 2023, https://www.beehive.govt.nz/release/new-moves-curb-youth-vaping.

While opponents of flavour bans often claim they will undermine the effectiveness of e-cigarettes as a smoking cessation tool, this does not appear to be borne out by empirical studies. For example, the results of a recent study in Finland suggest that the introduction of a flavour ban did not prevent people from accessing e-cigarettes, including as a smoking cessation tool.<sup>340</sup>

Opponents of flavour bans have also expressed concern that they could encourage people who use e-cigarettes to switch to conventional cigarettes. While one US study found some signs of a link between San Francisco's flavour ban and an increase in use of conventional cigarettes among young people, the evidence of that link was relatively weak.<sup>341</sup> Notably, the risk of substitution (consumers switching to cigarettes) may also be lower in Australia, where the regulation of tobacco products is generally stricter than in the US.

Research does, however, suggest that flavour bans may be ineffective in reducing e-cigarette use where they fail to decrease access to flavoured e-cigarettes in practice. This may occur because neighbouring jurisdictions do not have equivalent bans, or where governments fail to implement a more comprehensive public health approach including media campaigns and education.<sup>342</sup>

#### 8.6.2 Health warnings and plain packaging requirements

A small number of countries have extended plain packaging requirements for tobacco products to e-cigarettes. This includes:

- Israel, which in 2020 was the first country to implement plain packaging for e-cigarettes<sup>343</sup>
- Denmark, which has required plain packaging for e-cigarettes and refill containers since October 2021 (though these requirements did not take full effect until October 2022)<sup>344</sup>
- The Netherlands, which has required plain packaging for e-cigarettes from January 2022<sup>345</sup>
- Finland, which requires plain packaging for e-cigarettes and refill containers from 1 May 2023.

A broader range of countries require e-cigarette packaging to include mandatory health warnings. According to one source, at least 51 countries require health warnings to be placed on e-cigarette

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Ruokolainen, O, Ollila, H, Karjalainenet, K, 'Correlates of e-cigarette use before and after comprehensive regulatory changes and e-liquid flavour ban among general population', *Drug and Alcohol Review*, 2022, 41(5), pp 1171-1183, https://doi.org/10.1111/dar.13435.

Yang, Y, Lindblom, EN, Salloum, RG, Ward, KD, 'The impact of a comprehensive tobacco product flavor ban in San Francisco among young adults', *Addictive Behaviors Reports*, 2020, 11(June), 100273, https://doi.org/10.1016/j.abrep.2020.100273.

Dove, MS, Gee, K, Tong, EK, 'Flavored Tobacco Sales Restrictions and Teen E-cigarette Use: Quasi-experimental Evidence From California', *Nicotine & Tobacco Research*, 2023, 25(1), pp 127–134, https://doi.org/10.1093/ntr/ntac200.

Prohibition of Advertising and Restriction of Marketing of Tobacco and Smoking Products Law 1983 (Israel), art 9B.

WHO Framework Convention on Tobacco Control Secretariat, 'Denmark: plain packaging legislation adopted', *UN Tobacco Control,* https://untobaccocontrol.org/impldb/denmark-plain-packaging-legislation-adopted/.

<sup>&</sup>lt;sup>345</sup> WHO Framework Convention on Tobacco Control Secretariat, 'The Netherlands: Implementation of plain packaging from 01/10/2020', *UN Tobacco Control*, https://untobaccocontrol.org/impldb/the-netherlands-implementation-of-plain-packaging-from-01-10-2020/.

WHO Framework Convention on Tobacco Control Secretariat, 'Finland: strengthened regulation on packaging, flavours and outdoor smoking', UN Tobacco Control, https://untobaccocontrol.org/impldb/finland-strengthened-regulation-on-packaging-flavours-and-outdoor-smoking/.

packaging.<sup>347</sup> However, in most cases, including in most EU member states, these requirements apply only to e-cigarettes containing nicotine.



Although evidence about the impact of health warnings and plain packaging for e-cigarettes is relatively limited, there is robust evidence that these measures are effective in reducing the appeal of tobacco products. <sup>348</sup> Early studies suggest that these measures are likely to have a similar effect in relation to e-cigarettes. <sup>349</sup>

#### 8.6.3 Legislative initiatives to reduce the environmental impact of e-cigarettes

#### 8.6.3.1 Collection and recycling requirements

In some jurisdictions, laws relating to the collection and recycling of electrical waste apply to e-cigarettes.

The most notable of these is the EU's 2012 Waste Electrical and Electronic Equipment Directive (WEEE Directive) which sets targets for the collection, recycling and recovery of all types of electrical goods. The EU is currently conducting an evaluation of whether this directive remains fit for purpose.<sup>350</sup>

#### 8.6.3.2 <u>Proposals to ban disposable e-cigarettes</u>

Recently several jurisdictions have announced plans to ban disposable e-cigarettes, both due to concerns about their impact on the environment, and due to their popularity among young people. On 2 May 2023, the Minister for Health and Aged Care, the Hon Mark Butler MP, announced that the Australian Government will ban all single use, disposable e-cigarettes.<sup>351</sup> It is not clear when this ban will take effect, as necessary legislative changes have yet to be made.

In June 2023, the New Zealand Government announced that it will require all e-cigarettes to have removable or replaceable batteries, limiting the sale of disposable e-cigarettes. The prohibition is expected to take effect in August 2023. In announcing the ban, the New Zealand Health Minister, Hon Dr Ayesha Verrall, explained that the ban was a response to the popularity of disposable

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Jenkins, S, Greenhalgh, EM, Grace, C, Scollo, MM, '18.14 International regulatory overview', in Greenhalgh, EM, Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, 2023, Cancer Council Victoria, Melbourne, https://www.tobaccoinaustralia.org.au/chapter-18-e-cigarettes/18-14-regulatory-overview.

For succinct reviews of evidence on the effectiveness of these measures in relation to tobacco products, see: Scollo, MM, Greenhalgh, EM, '11A Packaging as promotion', in Scollo, MM, Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, 2018, Cancer Council Victoria, Melbourne, http://www.tobaccoinaustralia.org.au/chapter-11-advertising/indepth-11a-packaging-as-promotion; and Scollo, MM, Hippolyte, D, Miller, C, '12A.3 Evidence about the effects of health warnings', in Scollo, MM and Winstanley, MH (eds), *Tobacco in Australia: Facts and issues*, 2019, Cancer Council Victoria, Melbourne, https://www.tobaccoinaustralia.org.au/chapter-12-tobacco-products/attachment-12-1-healthwarnings/12a-3-evidence-about-effects-of-health-warnings.

See for example: Mendel, JR, Hall, MG, Baig, SA, Jeong, M, Brewer, NT, 'Placing Health Warnings on E-Cigarettes: A Standardized Protocol', *International Journal of Environmental Research and Public Health*, 2017, 15(8), p 1578, https://www.mdpi.com/1660-4601/15/8/1578#; Li, W, Vargas-Rivera, M, Kalan, ME, Taleb, ZB, Asfar, T, Osibogun, O, Noar, SM, Maziak, W, 'The Effect of Graphic Health Warning Labels Placed on the ENDS Device on Young Adult Users' Experience, Exposure and Intention to Use: A Pilot Study', *Health Communication*, 2021, 37(7), pp 842-849, https://doi.org/10.1080/10410236.2021.1872158.

European Commission, Waste from Electrical and Electronic Equipment (WEEE), accessed 22 March 2023, https://environment.ec.europa.eu/topics/waste-and-recycling/waste-electrical-and-electronic-equipment-weee\_en.

Hon Mark Butler MP, Minister for Health and Aged Care, 'Taking action on smoking and vaping', media release, 2 May 2023, https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/taking-action-on-smoking-and-vaping.

e-cigarettes among young people, and formed part of a package of reforms designed to reduce vaping among that cohort.<sup>352</sup>

Several other jurisdictions are currently considering bans on disposable e-cigarettes, including:

- <u>Ireland</u> On 1 June 2023, the Irish government opened a public consultation on disposable e-cigarettes, seeking public feedback on several policy options, including a ban on disposable products.<sup>353</sup> The outcome of the public consultation, which closed on 11 August 2023, is not yet known.
- Scotland In January 2023, the Scottish Government announced that it is considering a ban on disposable e-cigarettes and has commissioned a review to be undertaken by Zero Waste Scotland<sup>354</sup> Zero Waste Scotland published its review in June 2023. It identified 9 policy options for consideration by the Scottish Government. These options included a ban on disposable e-cigarettes, introduction of a requirement that e-cigarette batteries be removable and replaceable, and/or introduction of a deposit and recycling scheme.<sup>355</sup> The Scottish Government is currently considering its response to this report.
- <u>UK</u> In February 2023, Dr Caroline Johnson MP (a member of the Conservative Party) introduced a private member's Bill into the UK House of Commons that would prohibit the sale of disposable e-cigarettes.<sup>356</sup> The second reading of this Bill is currently scheduled to take place on 24 November 2023.<sup>357</sup>

# 8.6.4 Greater regulation of e-cigarette advertising via social media

As noted in section 8.4 above, it appears no Australian jurisdiction currently prohibits the promotion of non-nicotine e-cigarettes via social media.

Internationally, some jurisdictions have sought to restrict the promotion of e-cigarettes via social media. However, it appears that most of these restrictions have applied only to e-cigarettes containing nicotine — as is currently the case in Australia.

For example, EU member states have banned the advertising of nicotine-containing e-cigarettes (unless licensed as medicines) in certain media channels including online advertising, giving effect to the revised EU Products Directive (2014/40/EU). However, e-cigarette companies are allowed to put factual information about their products on their websites. In the UK, this ban was made law by the Tobacco and Related Products Regulations 2016.

Hon Dr Ayesha Verrall, 'New moves to curb youth vaping', press release, 6 June 2023, https://www.beehive.govt.nz/release/new-moves-curb-youth-vaping.

Government of Ireland, Department of the Environment, Climate and Communications, 'Public consultation on disposable vaping devices', https://www.gov.ie/en/consultation/826a1-public-consultation-on-disposable-vaping-devices/.

Scottish Government, *Environmental impact of single-use vapes*, press statement, 20 January 2023, https://www.gov.scot/news/environmental-impact-of-single-use-vapes/.

<sup>&</sup>lt;sup>355</sup> Zero Waste Scotland, *Scoping policy options for Scotland focusing on understanding and managing the environmental impact of single use e-cigarettes,* Summary Report, June 2023, https://cdn.zerowastescotland.org.uk/managed-downloads/mf-thteewjk-1688050310d.

Disposable Electronic Cigarettes (Prohibition of Sale) Bill 2023 (UK).

<sup>&</sup>lt;sup>357</sup> UK Parliament, 'Disposable Electronic Cigarettes (Prohibition of Sale) Bill – Latest News, 9 February 2023, https://bills.parliament.uk/bills/3417/news; Note: as the House of Commons is not expected to sit on 24 November 2023, the Bill is unlikely to be taken up for debate.



In 2020, New Zealand banned the advertising of all e-cigarettes, including via social media. It appears to be one of the only countries to do so to date. The *Smokefree Environments* and *Regulated Products Act 1990* (NZ) now prohibits the advertising of vaping products, including those that do not contain nicotine.<sup>358</sup>

The relevant provision states that 'a person must not publish a regulated product advertisement in New Zealand, or arrange for another person to publish it in New Zealand' unless it falls within one of a limited number of exceptions.<sup>359</sup>

The penalty for breaching New Zealand's advertising prohibition depends on the nature of the product, and the identity of the person or entity that breaches it, with lower fines applying in relation to vaping products. For example, a manufacturer who advertises conventional cigarettes can be fined up to NZ\$600,000, but in the case of e-cigarettes the maximum fine is NZ\$200,000 (equivalent to approximately AUD\$187,000, as at 31 March 2023). A large retailer would face fines of up to NZ\$200,000 and NZ\$70,000 (AUD\$65,000) respectively.

Research suggests that there is a significant degree of non-compliance with existing bans on advertising e-cigarettes via social media. For example, a recent study in New Zealand found that despite the new advertising ban, e-cigarette and tobacco companies 'still use social media to stimulate co-created content, reward referrals and maintain associations with youth-oriented events, such a music festivals'. <sup>362</sup>

A recent study from the UK found that although there is a high level of compliance with their advertising ban in traditional advertising channels, compliance with regards to social media advertising was poor. In that study, all of the Instagram posts examined by the researchers breached the relevant restriction.<sup>363</sup> Similarly, in 2019, the UK's Advertising Standards Authority ruled that Instagram posts by 4 companies (BAT, Ama Vape Lab, Attitude Vapes and Mylo Vapes) breached the ban on promoting e-cigarettes online. It stated that the posts by BAT, many of which featured celebrities, 'clearly went beyond the provision of factual information and was promotional in nature'.<sup>364</sup>

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The pre-existing advertising ban on smoking products was extended to vaping products by the *Smokefree Environments and Regulated Products (Vaping) Amendment Act 2020* (NZ).

<sup>&</sup>lt;sup>359</sup> Smokefree Environments and Regulated Products Act 1990 (NZ), s 23(1). A 'regulated product' includes a vaping product: see s 2 of that Act.

<sup>&</sup>lt;sup>360</sup> Smokefree Environments and Regulated Products Act 1990 (NZ), s 23(5)(a).

Smokefree Environments and Regulated Products Act 1990 (NZ), s 23(5)(b).

Cochran, C, Robertson, L, Hoek, J, 'Online marketing activity following New Zealand's vaping legislation', Tobacco Control, 2023, 32, pp 263-264, http://dx.doi.org/10.1136/tobaccocontrol-2021-056750.

Stead, M, Ford, A, Angus, K, MacKintosh, AM, Purves, R, Mitchell, D, 'E-Cigarette Advertising in the UK: A Content Analysis of Traditional and Social Media Advertising to Observe Compliance with Current Regulations', *Nicotine & Tobacco Research*, 2021, 23(11), pp 1839–1847, https://doi.org/10.1093/ntr/ntab075.

<sup>&</sup>lt;sup>364</sup> UK Advertising Standards Authority, quoted in Sweney, M, 'Advertising watchdog bans e-cigarette promotion on Instagram', *The Guardian*, 18 December 2019, https://www.theguardian.com/society/2019/dec/18/advertising-watchdog-bans-e-cigarette-promotion-on-instagram.

# **Appendix A – Submitters**

1 Name withheld 2 Sarah Ritchie 3 James Reid 4 Tablelands Regional Council 5 Butler Vorster 6 Name withheld 7 Confidential 8 Asian Consultancy on Tobacco Control 9 Name withheld 10 Super Vape Store (and supplementary submission) 11 No More Butts 12 Dalgarno Institute 13 TheCoilMan 14 Drug Free Australia 15 Shannon Brown 16 Associate Professor Michelle Jongenelis 17 TSG Franchise Management 18 Meg Geering 19 Richard Creswick 20 Dr Colin Mendelsohn 21 National Health and Medical Research Council 22 Australian Dental Association Queensland Branch 23 Tom Gordon 24 Tania Lane 25 Name withheld 26 Imperial Brands Australasia 27 Kerry McKenzie 28 Name withheld 29 Name withheld 30 Queensland Catholic Education Commission 31 The George Institute for Global Health 32 Kathleen Harper 33 The University of Sydney student group	Sub #	Submitter
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The George Institute for Global Health  Kathleen Harper	29	Name withheld
32 Kathleen Harper	30	Queensland Catholic Education Commission
·	31	The George Institute for Global Health
The University of Sydney student group	32	Kathleen Harper
	33	The University of Sydney student group

Sub #	Submitter
34	Queensland Secondary Principals' Association
35	Andrew Thompson
36	Jason Raimondo
37	Royal Australian College of General Practitioners Queensland Faculty
38	Matthew Cork
39	Emeritus Professor, Wayne Hall AM, National Centre for Youth Substance Use Research, The University of Queensland
40	Ali King MP, Member for Pumicestone
41	BAT Australia
42	Leah Tankard
43	Name withheld
44	Thomas Watson
45	Jack McWilliam
46	Joe Kelly MP, Member for Greenslopes
47	Queensland Nurses and Midwives' Union
48	Australian Association of Convenience Stores
49	Professor Matthew Rimmer, Australian Centre for Health Law Research, Queensland University of Technology
50	Health and Wellbeing Queensland
51	Orygen
52	Life Education Queensland
53	Professor Coral Gartner, Dr Kylie Morphett, Dr Janni Leung, Ms Carmen Lim, Associate Professor Sheleigh Lawler, & Ms Hollie Bendotti, NHMRC Centre of Research Excellence on Achieving the Tobacco Endgame and the National Centre for Youth Substance Use Research, The University of Queensland
54	Bulimba Electorate Youth Advisory Panel
55	Australian Medical Association Queensland
56	Queensland Network of Alcohol and Other Drugs Agencies
57	Griffith University
58	Australian College of Nursing
59	Queensland Teachers' Union
60	National Centre for Youth Substance Use Research, The University of Queensland
61	Australian Lottery & Newsagents Association
62	Queensland Family and Child Commission
63	Australian Retailers Association
64	Youth Advocacy Centre

Sub#	Submitter
65	Lung Foundation Australia, Thoracic Society of Australia and New Zealand, Cancer Council Queensland, National Heart Foundation of Australia, Asthma Australia, Australian Medical Association Queensland, Public Health Association Australia, and Arthritis Queensland
66	Name withheld
67	BB Labs Pty Ltd trading as JuiceFreak
68	Lung Foundation Australia
69	Alcohol and Drug Foundation (and supplementary submission)
70	Queensland Youth Policy Collective
71	Deb Frecklington MP, Member for Nanango
72	Lisa Price
73	Queensland Chinese Forum
74	The Australian National University
75	Community Enterprise Queensland
76	P&Cs Qld
77	Queensland Aboriginal and Islander Health Council and Centre for Aboriginal and Torres Strait Islander Wellbeing Research, The Australian National University
78	Name withheld

# Appendix B – Officials at public briefings

#### Brisbane, 3 May 2023

#### **Department of Environment and Science**

- Andrew Connor, Executive Director, Office of Circular Economy, Environment and Heritage Policy and Programs
- Simon Hausler, Policy Manager, Office of Circular Economy, Environment and Heritage Policy and Programs

# **Department of Education**

- Stacie Hansel, Deputy Director-General, Schools and Student Support
- Hayley Stevenson, Acting Assistant Director-General, Disability Inclusion and Student Services

#### **Chief Health Officer and Queensland Health**

- Dr John Gerrard, Chief Health Officer
- Karson Mahler, Director, Legislative Policy Unit, Strategy, Policy and Reform Division
- Colleen Smyth, Manager, Prevention Strategy Team, Preventive Health Branch, Strategy, Policy and Reform Division
- Rebecca Whitehead, Senior Health Promotion Officer, Preventive Health Branch, Strategy, Policy and Reform Division

# Appendix C – Witnesses at public hearings

#### Townsville, 12 April 2023

#### **No More Butts**

• Shannon Mead, Executive Director

#### **Tobacco Station Group**

- Deb Soley, Tobacconist
- Pam Wright, Tobacconist

#### Vape Vault

Rob Adams

#### **Private capacity**

- Deven Sporn
- Bob Elliot

#### **Townsville Hospital and Health Service**

• Dr Steven Donohue, Director, Townsville Public Health Unit

#### Southport, 13 April 2023

#### **Gold Coast Public Health Unit**

- Anne Cowdry, A/Director Public and Environmental Health
- Dr Candice Colbran, Public Health Physician

#### Vape vendors

- Leah Tankard
- James Harvey

#### JuiceFreak E-liquid Manufacturing and Distribution

- Bede Tansley, Director
- Aleksandra Moore, Business Partner

#### A.B. Paterson College

• Joanne Sheehy, Principal

#### **Tobacco Station Group, Franchise Management**

• Leo Gerandonis, Queensland Business Manager

#### Brisbane, 30 May 2023

#### **Australian Association of Convenience Stores**

• Theo Foukkare, Chief Executive Officer

# JuiceFreak E-liquid Manufacturing and Distribution

- Bede Tansley, Director
- Aleksandra Moore, Business Partner

#### **Tobacco Station Group, Franchise Management**

• Leo Gerandonis, Queensland Business Manager

#### **Private capacity**

- Dr Colin Mendelsohn
- Emeritus Professor Wayne Hall, National Centre for Youth Substance Use Research, The University of Queensland

#### **Queensland Nurses and Midwives' Union**

- Denise Breadsell, Acting Director, Organising and Professional Services
- Dr Belinda Barnett, Research and Policy Officer

#### **Australian College of Nursing**

- · Adjunct Professor Kylie Ward, Chief Executive Officer
- Linda Davidson, National Director, Professional Practice

#### **Lung Foundation Australia**

• Mark Brooke, Chief Executive Officer

#### **Australian Medical Association Queensland**

• Dr Maria Boulton, President

Lung Foundation Australia, Thoracic Society of Australia and New Zealand, Cancer Council Queensland, National Heart Foundation of Australia, Asthma Australia, Australian Medical Association Queensland, Public Health Association Australia and Arthritis Queensland

- Laura Clarke, Policy Advisor, Asthma Australia
- Sheree Hughes, General Manager Qld, National Heart Foundation of Australia
- Associate Professor Henry Marshall (Thoracic Physician), Research Fellow, Thoracic Research Centre, The University of Queensland, Thoracic Society of Australia and New Zealand
- Sharyn Chin Fat, Senior Manager, Information and Programs, Cancer Council Queensland

#### **Royal Australian College of General Practitioners Queensland**

- Dr Cathryn Hester, Deputy Chair
- James Flynn, State Manager

# **Australian Dental Association – Queensland Branch**

- Dr Jay Hsing, President
- Alessandra Boi, Policy & Projects Coordinator

#### **Queensland Network of Alcohol and Other Drug Agencies**

- Rebecca Lang, Chief Executive Officer
- Susan Beattie, Director, Policy and Systems

#### **Alcohol and Drug Foundation**

- Dr Erin Lalor AM, Chief Executive Officer
- Martin Milne, Queensland Manager

# **Private capacity**

- Professor Matthew Rimmer, Professor of Intellectual Property and Innovation Law, Faculty of Business and Law, Queensland University of Technology
- Associate Professor Michelle Jongenelis, Principal Research Fellow, Melbourne Centre for Behaviour Change, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne

#### Brisbane, 31 May 2023

#### **Bulimba Electorate Youth Advisory Panel** (private hearing)

#### **Queensland Teachers' Union**

- Cresta Richardson, President
- Meegan Jackson, Acting Research Officer

# **Queensland Secondary Principals' Association**

- Mark Breckenridge, President
- Denise Kostowski, Principal, Forest Lake State High School
- Annette Cameron, Deputy Principal, Gympie State High School

#### **Queensland Youth Policy Collective**

• James Rigby, Member

#### The University of Sydney student group

- Rosie McCulloch
- Katherine di Bona
- Kusum Khatiwada
- Laura Ganley
- Justine Daoud
- Diya Marwah

#### **Griffith University Blurred Minds**

 Associate Professor Timo Dietrich, Department of Marketing, Griffith University; Co-founder and Director, Blurred Minds

#### Life Ed Queensland

- Michael Fawsitt, Chief Executive Officer
- Sue Osmond, Program Delivery Manager

#### National Centre for Youth Substance Use Research, The University of Queensland

• Associate Professor Gary Chan, Principal Research Fellow

#### **Queensland Family and Child Commission**

- Luke Twyford, Principal Commissioner
- Tyla, private citizen

# Appendix D – Example of a Department of Education Solution Plan to assist schools to reduce vaping

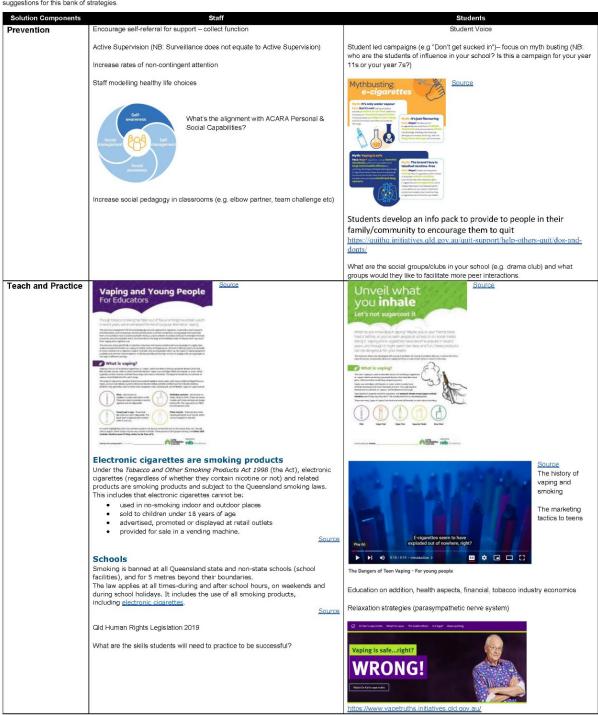
- Developed by Queensland Department of Education staff in the Metropolitan Region (Central Brisbane) as part of their Positive Behaviour for Learning framework

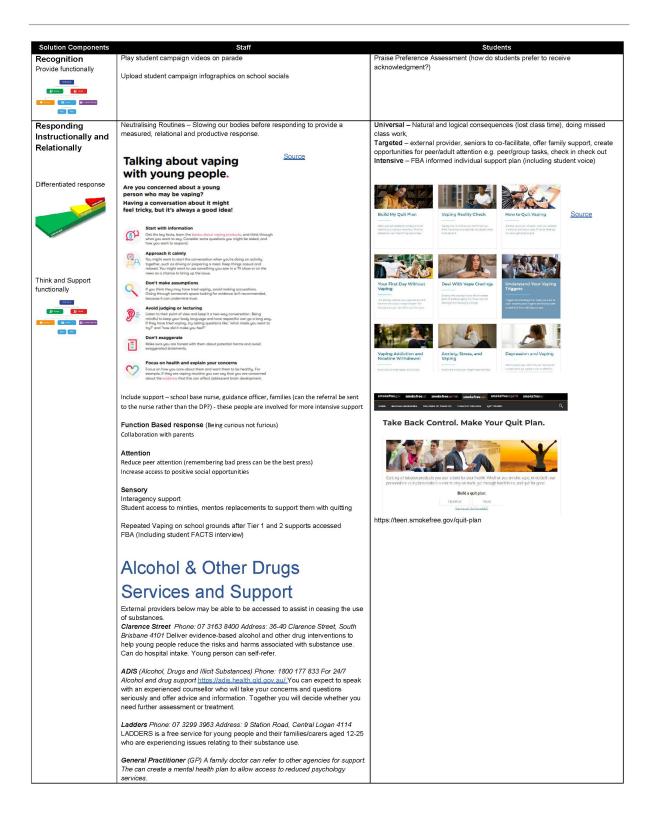


# Solution plan

Goal: Reduce vaping rates - primary function for majority of students = Obtain Peer Attention

This template can be drawn from for contextualised solution planning for your school. Thank you to the 24 participants from across Metropolitan PBL High Schools that have contributed ideas and suggestions for this bank of strategies.





# Appendix E – Case studies of targeted vaping prevention activities

The following presents 5 case studies of targeted vaping prevention activities:

- You and Me, Together Vape-Free<sup>1</sup> a set of teaching and learning resources
- MY Healthy Future<sup>2</sup>— an interactive online course designed as an alternative to suspension for children found vaping at school
- INDEPTH<sup>3</sup> a teacher-led course designed as an alternative to suspension
- SmokeSCREEN<sup>4</sup> a free video game aimed at preventing youth smoking and vaping
- This Is Quitting<sup>5</sup> a text messaging program that provides tailored advice to young people who want to stop vaping.

All of these prevention programs are from the United States (US). They were selected because:

- they have been developed by reputable public health experts, and/or
- there are scientific studies published in reputable journals that demonstrate their effectiveness in preventing vaping or helping people to quit.

#### You and Me, Together Vape-Free

*You and Me, Together Vape-Free*<sup>6</sup> is a set of teaching and learning resources designed for use in US schools. Launched in 2022, it forms part of the Tobacco Prevention Toolkit developed by Stanford REACH Lab.

Stanford REACH Lab comprises a group of researchers within Stanford University's School of Medicine who focus the developmental, cognitive, psychosocial, and cultural/social factors involved in adolescents' and young adults' health-related decision-making, perceptions of risk and vulnerability, health communication, and risk behaviour.<sup>7</sup>.

You and Me, Together Vape-Free provides a series of lessons that address key issues associated with vaping, appropriately adapted for different age groups. For elementary school students (5-10 years old) there are 2 lessons:

- Take Care of Your Body (what is in e-cigarettes and how they affect the body)
- Don't Be Fooled (marketing, environmental impacts, healthy ways to cope with stress).

For middle school (11-13 years old) and high school (14-18 years old) students there are 6 lessons, tailored to each age cohort:

- Full of Potential: Your Brain Nicotine-Free
- Healthy Body, Healthy You-th: Effects of E-cigarettes on The Body
- What a Waste! Impact of Cigarettes and E-cigarettes on The Environment
- Don't Be Played: How Tobacco Marketing Targets You-th
- Be Your Strength: Stress, Coping, and Wellness

-

https://med.stanford.edu/tobaccopreventiontoolkit/you-and-me-together-vape-free-curriculum.html.

https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

<sup>&</sup>lt;sup>3</sup> https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

https://www.smokescreengame.org/.

<sup>&</sup>lt;sup>5</sup> https://truthinitiative.org/thisisquitting.

<sup>6</sup> https://med.stanford.edu/tobaccopreventiontoolkit/you-and-me-together-vape-free-curriculum.html.

For more information on REACH Lab, see: https://med.stanford.edu/halpern-felsher-reach-lab.html.

Can't be Missed: Cannabis and You-th.

Each lesson includes classroom activities, online quiz games, and worksheets in addition to presentations, resources, and other materials. Figure E1 below is a snapshot from a high-school lesson.

Figure E1: Snapshot from You and Me, Together Vape-Free, lesson 4 (Don't Be Played), high school version



The course content is designed to be reinforced outside of the classroom via discussions with trusted adults and peers. To facilitate this, teachers are provided with a discussion guide to give to students. These guides provide open-ended questions and activities that students can use to open dialogue between themselves, their peers and adults.

There do not appear to be any published evaluations of the effectiveness of *You and Me, Together Vape-Free*. However, it has been endorsed and/or publicised by a wide range of US-based organisations that focus on public health and education, such as the California Healthy Kids Resource Center (an initiative supported by California's Department of Education).

#### **MY Healthy Future**

MY Healthy Future<sup>8</sup> is a self-paced online course, designed as an alternative to suspension for students found vaping on school grounds.

MY Healthy Future was also developed by Stanford REACH Lab, which developed You and Me, Together Vape-Free.

The course comprises 3 modules, which each include a combination of activities, games and videos:<sup>9</sup>

- Module 1 *Don't Miss Information* What goes in and what comes out of a vape?; What does vaping do to the body?; Why does addiction happen?
- Module 2 Choose My Motivator Choose your adventure; Lessons for your adventure

https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

• Module 3 – *Make My Momentum* – Be your medicine: stress, coping and healing; Optional: My quit date.

The course can be completed independently by students in 40-60 minutes. However, the developers provide detailed guidance for teachers to help them introduce the course to students, and follow up with students after they have completed it. <sup>10</sup> The website for the course explains:

...this course focuses on discussion and reflection, especially after completion. Thus, it is critical that within 3 days of completing the online course, there is a 15–30-minute follow-up with the students. <sup>11</sup>

The REACH Lab also provides free access to learning materials for *OUR Healthy Futures*, a course that includes similar content, but is designed to be taught in a group setting by a teaching or other appropriate facilitator.

#### **INDEPTH**

Intervention for Nicotine Dependence: Education, Prevention, Tobacco and Health (*INDEPTH*)<sup>12</sup> is a free teacher-led course designed as an alternative to suspension for students caught vaping or smoking at school. *INDEPTH* was developed by the American Lung Association in partnership with the Prevention Research Center of West Virginia University.

According to the American Lung Association's website, *INDEPTH* was designed to provide a supportive, rather than punitive means of responding to vaping and smoking in schools.<sup>13</sup>

INDEPTH has 2 components:

- a training course for facilitators (i.e. the people who will teach the course to students)
- a training course for students who have been found vaping on school grounds.

The training course for students comprises four, 50 minute sessions. These sessions are targeted toward youth and focus on vaping, tobacco use, nicotine dependence and how to establish healthy alternatives. The 4 sessions are:

- Getting the Facts: Breaks down the program for participants
- *Nicotine Dependence*: Explains the harmful effects of nicotine and tobacco products (including e-cigarettes)
- *Alternatives*: Helps teens understand their urges and identify healthy alternatives to replace tobacco use (or e-cigarettes).
- Past, Present, Future: Talks about next steps and how to avoid future tobacco-related problems.

In 2019, the American Lung Association piloted INDEPTH at 11 sites across the US, including middle schools, high schools, and an alternative school. An external evaluation found that:

• most students who participated in the pilot reported that INDEPTH influenced them to make a plan to stop using nicotine, vaping, and/or tobacco products

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See 'Procedures for the MY Healthy Future Online Course',
https://med.stanford.edu/content/dam/sm/tobaccopreventiontoolkit/documents/Curriuculms/HealthyFutures/MYHealthyFutureCourse/MY-Healthy-Futures-Course-Procedures.pdf.

https://med.stanford.edu/tobaccopreventiontoolkit/curriculum-decision-maker/HealthyFutures/MYHealthyFutureCourse.html.

https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

See https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

 at the end of the program, 60% of students who participated in the pilot stated they were willing to try to quit nicotine, vaping and/or tobacco products.<sup>14</sup>

Students who participated in the pilot commented:

- 'Enjoyed all of the facts'
- 'Showed me that the school cared'
- 'It was focused on the student'
- 'I wasn't afraid to speak up'
- 'Held me accountable'.15

*INDEPTH* is not a vaping/smoking cessation program. However, students who complete it can be referred to *Not on Tobacco (N-O-T)*, a voluntary youth-centred cessation program that addresses tobacco product use, including e-cigarettes.

#### **SmokeSCREEN**

SmokeSCREEN<sup>16</sup> is a free video game that aims to prevent smoking and vaping among adolescents. It was developed by the play2PREVENT Lab at the Yale Center for Health & Learning Games, in collaboration with the Yale and USC Tobacco Centers of Regulatory Science, 1st Playable Productions, and Schell Games.

According to the game website, *SmokeSCREEN* 'addresses the range of challenges that young teens face, with a dedicated focus on youth decision-making about smoking and vaping (conventional cigarettes, electronic cigarettes, flavoured tobacco products), and includes strategies for both smoking prevention and cessation'.<sup>17</sup> It is designed for children aged 10–16.

Throughout the game, players are placed in different situations and must decide if they want to be better friends with those they meet. To 'win' players must build their reputation, willpower, and knowledge while preventing their 'risk meter' from filling up by avoiding risky decisions - as illustrated in the screenshot in Figure E2. Players start the game by selecting one of 8 characters, and play through 7 storylines, each of which has a different focus.



Figure E2: Snapshot from SmokeSCREEN promotional video

See 'INDEPTH Pilot Evaluation Summary' and 'INDEPTH Pilot Evaluation Infographic' a https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

 $<sup>^{15}</sup>$  See 'INDEPTH Pilot Evaluation Infographic' at https://www.lung.org/quit-smoking/helping-teens-quit/indepth.

https://www.smokescreengame.org/.

See https://www.smokescreengame.org/.

Table E1: Storylines and key messages in SmokeSCREEN

Storyline	Key message
The New Kid	What is in e-cigarettes and why they are dangerous for young people
Free After School	How to avoid risky situations and respond to peer pressure
The B-Team	The impact of smoking and vaping on your body
Musical to My Ears	The danger of second-hand smoking, including second-hand vapour
Pushing Limits	Marketing tactics used by tobacco and vaping companies
Not My Flavor	Why companies use flavours and why they are dangerous
Final Project	How to help people who want to quit, where to get help if you want to quit

Source: SmokeSCREEN Teacher's Manual, available at https://www.smokescreengame.org/for-teachers.

Several published studies have found that *SmokeSCREEN* has the potential to discourage young people from vaping and encourage those who do to quit:

- A pilot study of 80 participants aged 11-14 found that brief exposure to the game changed players' perceptions of risk, and their beliefs about e-cigarettes and other smoking products.<sup>18</sup>
- A full-scale evaluation involving 560 participants aged 10-16 found that the game has a significant impact on young people's beliefs and knowledge about e-cigarettes and vaping.<sup>19</sup>

#### This Is Quitting

This Is Quitting<sup>20</sup> is a free, anonymous text messaging program that provides tailored advice to young people in America who want to stop vaping. It was developed by Truth Initiative, a non-profit organisation whose primary mission is to end tobacco use and nicotine addiction.

Launched in 2019, *This is Quitting* was developed using input from young people who have attempted to, or successfully, stopped vaping. Targeted at people aged between 13 and 24, the service provides users with advice tailored to their age and product usage.<sup>21</sup>

According to Truth Initiative, the messages sent by *This Is Quitting* 'show the real side of quitting, both the good and the bad, to help young people feel motivated, inspired and supported throughout their quitting process'.<sup>22</sup>

The program has proved popular with youth in America: to date, it has provided advice and support to more than 570,000 young people.<sup>23</sup>

This is Quitting works as follows:

- users enrol in the program by texting a dedicated number
- users receive an initial message that asks for their age and product usage so that they are able to receive relevant messages

Pentz, MA, Hieftje, KD, Pendergrass, TM, Brito, SA. Liu, M, Arora, T, Tindle, HA, Krishnan-Sarin, S, Fiellin, LE, 'A videogame intervention for tobacco product use prevention in adolescents', *Addictive Behaviors*, 91, April 2019, pp 188-192, https://doi.org/10.1016/j.addbeh.2018.11.016.

Hieftje KD, Fernandes, CF, Lin, IH, Fiellin, LE, 'Effectiveness of a web-based tobacco product use prevention videogame intervention on young adolescents' beliefs and knowledge', *Substance Abuse*, 2021, 42(1), pp 47-53, doi: 10.1080/08897077.2019.1691128.

https://truthinitiative.org/thisisquitting.

<sup>&</sup>lt;sup>21</sup> Truth Initiative, *This is Quitting,* https://truthinitiative.org/thisisquitting.

<sup>&</sup>lt;sup>22</sup> Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.

<sup>&</sup>lt;sup>23</sup> Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.

- users receive one age-appropriate message per day tailored to their enrolment date or quit date, which can be set and reset via text message
- those who are not ready to quit receive at least 4 weeks of messages focused on building skills and confidence
- users with a quit date receive one week of messages prior to that date and at least 8 weeks of messages after their quit date
- throughout the program, users can text COPE, STRESS, SLIP or MORE to receive instant support
- upon completion of the program, users receive periodic text messages from Truth Initiative and may continue to use supportive keywords for as long as they like.<sup>24</sup>



This is Quitting is similar to QuitTxt, which is available in Australia. However, This Is Quitting has been developed specifically for young people who vape. The messages it sends read like they have been sent by a supportive and non-judgmental friend; they are written in the first person or presented as quotes from other users. This makes them more engaging and appealing to young people – as illustrated by the examples below.

Sample message from QuitTxt:

Your first weekend is coming. Prepare your strategies to cope with social situations. Avoid your smoker friends on the weekend.

Sample message from This Is Quitting:

You GOT this. You may want to avoid people, places or things that make you want to use your vape today (if that's possible!). Text COPE or STRESS if you need.

According to research supported by Truth Initiative, and published in reputable peer reviewed journals, *This is Quitting* is effective in helping young people to stop vaping. For example:

- preliminary data from the first 5 weeks of the program showed that more than half of participants — 60.8% — reported that they had reduced or stopped using e-cigarettes after using the program for 2 weeks. After 3 months, almost 25% of users had quit vaping entirely.<sup>25</sup>
- a randomised clinical trial involving almost 2,600 young people who used e-cigarettes found that after 7 months, 24.1% of those who received supportive messages and advice from *This Is Quitting* successfully quit, compared to 18.6% of those who did not receive such messages.<sup>26</sup>

Truth Initiative, *This is Quitting*, https://truthinitiative.org/thisisquitting.

Graham, AL, Jacobs, MA, Amato, MS, 'Engagement and 3-Month Outcomes From a Digital E-Cigarette Cessation Program in a Cohort of 27 000 Teens and Young Adults', *Nicotine & Tobacco Research*, 22(5), 2020, pp 859–860, https://doi.org/10.1093/ntr/ntz097.

Graham AL, Amato, MS, Cha, S, Jacobs, MA, Bottcher, MM, Papandonatos, GD, 'Effectiveness of a Vaping Cessation Text Message Program Among Young Adult e-Cigarette Users: A Randomized Clinical Trial' *JAMA Internal Medicine*, 2021, 181 (7), pp 923–930, doi:10.1001/jamainternmed.2021.1793.

#### Statement of Reservation

Vaping: An inquiry into reducing rates of e-cigarette use in Queensland

This statement explains my areas of divergence from the recommendations presented by members of the Parliamentary Health and Environment Committee (the Committee). While there are many recommendations which I support in our attempts to reduce the rates of ecigarette use in Queensland, such as recovery and management programs; there are a number of recommendations which I believe will be harmful to these attempts.

I thank the other members of the Committee for their robust discussion and contribution, and the staff of the Committee's Secretariat for their assistance in conducting the public hearings and briefings, collating the witness statements and evidence, and assistance with writing the report.

Guided by my personal values of individual liberty, limited government intervention, and the pursuit of policies rooted in both historical lessons and practical realities, I feel compelled to give an alternate view to the outcomes of the report that balance the individual liberty and personal choice of all Queenslanders, while attempting to address a significant public health challenge.

# **Regulation Parity: Vaping and Tobacco Products**

Fundamentally I believe that freedom of choice and of the individual are foundational building blocks of a free and just society. In examining Recommendation 8, which recommends that the Queensland Government support measures such as halting the importation of non-prescription e-cigarettes and banning single-use e-cigarettes, we see the curtailing of an individual's choice to make an informed decision in favour of a "government knows best" approach of telling us how to live out our lives.

While the concept of banning all single use, disposable e-cigarettes and ending the sale of such products in retail settings may be seen as an ideal solution, such stringent bans often birth more problems than solutions, removing the ability of the government to regulate product safety and market activity.

Illegal & illicit e-cigarette sales in Queensland and Australia are out of control. Millions and millions of unchecked, unsafe and unregulated e-cigarettes are finding their way across our borders and into our homes and schools each and every month.

More significantly, the very individuals such policies aim to protect can find themselves at heightened risk. History offers us a cautionary tale in this respect. Prohibitions on substances, as seen with alcohol in the United States of America during the 1920s and, more recently, the ongoing global War on Drugs, often lead to the rise of black markets and illicit activities. The black market in Queensland is thriving, over 90% of all purportedly nicotine free e-cigarettes, seized and tested have been found to contain substantial and even dangerously high amounts of nicotine and other toxins, well above what can be considered safe or reasonable.

If e-cigarette import bans cannot be effectively implemented and illicit sales cannot be controlled then logically the alternate approach may be to consider a regulated framework

similarly to tobacco products. Not only does this respect the autonomy of our adult citizenry, but it also offers more controlled, transparent, and safer avenues for consumption.

Vaping products and tobacco products could be regulated in the same manner for several compelling reasons. Firstly, both products contain nicotine, a highly addictive substance that can lead to long-term dependency and associated health risks. This commonality in substance content justifies similar regulatory scrutiny. Secondly, early studies have shown that while ecigarettes might be less harmful than traditional cigarettes, they are not entirely risk-free, with potential harms to respiratory and cardiovascular health. This underscores the need for consistent consumer protection measures. Thirdly, treating both products similarly ensures a level playing field in the market, preventing any potential shift of consumers from one product to the other based on regulatory advantages. Lastly, a unified regulatory approach simplifies public health messaging, allowing for clearer communication about the risks of both products, fostering better public understanding and adherence to guidelines.

Recent changes to tobacco legislation have introduced new laws and tougher penalties designed to discourage illicit and illegal product sales while introducing licensing requirements for retailers and more rigour in respect of retail sales staff. It may be more effective to allow for the legal sale of vaping products, echoing similar regulations for tobacco products, especially through licensed tobacconists and/or licensed retailers.

#### Safeguarding our Youth

Protecting the next generation from potential harm remains a cornerstone of policy development and community responsibility. It is not just about setting up barriers, but about instilling knowledge, values, and resilience in young people to ensure they make informed choices. With the increasing popularity of vaping, especially among younger demographics, it is paramount that our policies mirror this understanding.

Recommendations 6 and 7 propose the necessity of devising guidelines for schools. While the sentiment is admirable, one can't overlook the current challenges our educators face. Teachers are the backbone of our education system, continually adapting to curriculum changes, technological shifts, societal nuances and more recently suggestions that they also manage the appropriate use of mobile devices.

While some schools are managing disciplinary issues and vaping restrictions quite effectively, many others are struggling. Management of detentions and suspensions impacts considerably on staff resources and teaching outcomes. In addition to the provision of guidelines and interactive educational courses, there is also a need to engage parents and the broader school community in addressing these challenges.

There shouldn't be a one-size-fits-all approach. Some schools and regions where there are significant issues with discipline or vaping, may need additional resources or specialist intervention and training. History has shown time and again that policies, even with the best intentions, can sometimes bring about undue challenges and unreasonable and additional work responsibilities, especially if not thoughtfully crafted.

#### **Border Force**

As we assess the implications of Recommendation 8, the matter of border control, particularly related to the prohibition on importations, emerges as a pivotal concern. The sheer volume of trade, both licit and illicit, that Australian Border Force manages on a daily basis is immense.

Strict import restrictions have already given way to the emergence of a black market for vaping products in Queensland and Australia. The implications of such an outcome are far-reaching: from the sale of subpar or even dangerous products to users, to loss of potential revenue that could have been harnessed for public health campaigns, and the inevitable drain on law enforcement resources.

Government agencies already play a significant role in compliance and while having already seized significant quantities of illicit e-cigarette devices I don't believe Border Force nor the Department of Health have the resources, scope of powers or personnel to adequately stem the flow, or to manage the associated issues and problems.

By banning the sale and supply of products from legal avenues, we diminish government's ability to oversee, regulate, and ensure that safe standards are maintained.

More than likely this can only lead to the proliferation of unsafe products but also make it significantly harder to track and address issues related to e-cigarette usage. Most alarmingly, our most vulnerable populations could find themselves at an increased risk, turning to unverified sources of supply and potentially jeopardising their health.

#### **Environment**

I support the intent of Recommendation 14 which seeks to provide for the appropriate disposal of used vaping products. E-cigarettes are essentially comprised of plastic, electronic circuitry, toxic chemicals and a battery. Any recycling and disposal scheme should consider all vaping products. While easy removal of batteries is certainly important in terms of recycling, we also need to ensure that the design be child-safe and not represent any risk to babies and toddlers.

#### Reducing the Instance of Vaping

I firmly support the Committee's non-prohibitive recommendations that target the reduction of vaping incidents, especially those focusing on public health campaigns and limiting access to children. A methodical approach, grounded in public awareness and safety, is essential. It prioritises our community's well-being while respecting individual freedoms, ensuring that vaping remains regulated but not entirely restricted. The key is to strike a balance – encouraging responsible use while upholding our commitment to public health.

#### Conclusion

While I resonate with numerous recommendations aimed at mitigating e-cigarette use in Queensland, certain suggestions may inadvertently hamper these endeavours. My enduring commitment to values such as personal freedom, restrained government intervention, and evidence-based policy formulation, urges me to present an alternative perspective. This

perspective seeks to harmoniously blend individual liberty and personal choice with the pressing need to address this public health challenge, while ensuring the well-being of all Queenslanders.

**Rob Molhoek MP** 

State Member for Southport Deputy Chair Health & Environment Committee Queensland Parliament