



**Lung
Foundation
Australia**

Vaping – an inquiry into reducing rates of e-cigarette use in Queensland

Lung Foundation Australia
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Level 2, 11 Finchley Street, Milton QLD 4064

PO Box 1949, Milton QLD 4064

ABN: 36 051 131 901

1800 654 301

Lungfoundation.com.au

enquiries@lungfoundation.com.au

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Executive Summary

It is unacceptable that we continue to see high rates of youth vaping and yet governments are delaying action to protect their health. The increasing use of e-cigarettes is creating a new public health crisis and current public health legislation is failing to protect children and non-smokers from being exposed to toxic chemicals. The use of e-cigarettes is known to result in short term health impacts; however, the long-term health impacts remain unknown. Young people are becoming the next generation to become dependent on nicotine, with most vaping products widely available containing various amounts of this addictive substance. Many young people who vape do not know they are vaping nicotine and are unaware that they are becoming addicted until it is too late.

We welcome and strongly support the vaping reforms announced by Federal Health Minister Mark Butler MP on the 2nd of May 2023, particularly the ban on the importation of non-nicotine vaping products. Local manufacturing and sale of e-cigarettes remains a concern and the Queensland government needs to address these aspects to effectively reduce e-cigarette use.

The new reforms highlight the importance of tackling this public health issue and protecting all Australians from the harms of vaping. These federal reforms empower the Queensland Government (and all other state and territory governments) to take clear action that will protect the health of the community and reduce the burden on the health system and economy. It is now more vital than ever that the Queensland Government implements strong measures that support the new reforms made by the Federal Government to protect the health of Queenslanders. We highlight the release of the National Tobacco Strategy 2023-2030 and importantly, the need for Queensland to align with the strategy objective of preventing the uptake of e-cigarettes by young people and those who have never smoked.

Lung Foundation Australia and other leading public health organisations recommend:

- 1. The Queensland Government to amend relevant Queensland legislation to make it an offence to supply e-cigarette products (regardless of whether they contain nicotine) outside of the existing TGA prescription medical access model. Following the implementation of a ban on retail sale, monitoring and enforcement will need to be bolstered in combination with ongoing community education and support for those wanting to quit.**
- 2. Immediately intensifying the current compliance monitoring and enforcement of Queensland drugs and poisons laws (which prohibit the general retail sale of e-cigarette products containing nicotine), including product seizures.**
- 3. Prohibiting all forms of advertising, marketing, promotion and sponsorship in relation to e-cigarette products, components and liquids, and cooperative work between governments to take strong action against illegal marketing including online and via social media.**
- 4. Increasing investment in awareness – educational campaigns for target groups such as children and young people, as well as the communities supporting them. We note the importance of messaging to both youths and adults that does not create stigma around vaping.**
- 5. The Queensland Government to amend the *Electoral Act 1992* to include the banning of political donations from both the tobacco and vaping industry in line with Article 5.3 of the FCTC and the National Tobacco Strategy 2022-2030.**

Lung Foundation Australia have taken a strong role in vaping over the last few years, completing a roundtable with young people, creating the 'Unveil what you Inhale' campaign, supporting research and developing resources. However, all of this is not enough, and we need strong policy change to support the federal reforms and eliminate supply of non-nicotine vapes. We commend the Queensland Government for recent action to amend the Tobacco and Other Smoking Products Act 1998, and for the activities Queensland Health has completed to date. However, we stress more needs to be done and we need to see strong policy action by the Queensland Government now to protect our youth from significant health impacts.

Schools are continuing to highlight the need for more to be done as they struggle to manage vaping use by students. Despite efforts to educate youths and parents on the harms of vaping, vaping use is persistent and has become a social norm for young generations. Schools have implemented strong measures to discourage vaping, from installing vape detectors to locking bathrooms, however, students are often suspended and are missing out on vital education. Current measures to prevent vaping at school are ineffective, but we stress that this issue is much larger than education alone and the government must do more. Lung Foundation Australia are regularly contacted by parents and work closely with clinicians and consumers who express strong concern about these products and what it will mean for future generations. Ex-smokers understand the industry tactics used and do not want to see young people go down the same path as them with addiction and lung disease.

A recent YouGov survey by Lung Foundation Australia found 83% of Queenslanders think the government needs to do more to protect young people from the harms of vapes. Whilst we welcome the recent review undertaken by the Therapeutic Goods Association (TGA) regarding nicotine vaping products, we highlight that this will not solve the high prevalence of vaping occurring in the community. As we have witnessed with tobacco, it takes decades to reduce nicotine tobacco smoking, and we are observing the beginning of a similar public health crisis.

Children and non-smokers should not have access to vaping products, and they provide no benefit to the community. We must ensure vaping products are only accessible for smoking cessation via the current TGA model – nothing else. Lung Foundation Australia will continue to call for all Australian states and territories to prohibit the supply of non-nicotine vaping products, to support the ban on importations announced by the Federal Government, to support Queenslanders to quit, and ultimately do more to protect the health of the community. We need action now; Queensland shouldn't delay action any further.



Mark Brooke
Chief Executive Officer
Lung Foundation Australia

About Lung Foundation Australia

Lung Foundation Australia is Australia's only national charity and leading peak body dedicated to supporting people with a lung disease, including lung cancer. For over 31 years we have been a trusted, national touch point on matters of lung health for people living with lung disease, their families, carers, health professionals and the general community. There are over 30 different types of lung disease and together these impact one in three Australians. Our mission is to improve lung health and to reduce the impacts of lung disease on all Australians. We are working to ensure that lung health remains a community priority through activities including promoting lung health and early diagnosis and advocating for policy change and research investment.

We raise awareness about the symptoms and prevalence of lung disease, and we champion equitable access to treatment and care. As a patient-representative charity, we partner with people living with lung disease, health professionals, researchers, medical organisations, and the Australian community. Together, we can drive reform in the delivery of health services across the country and assist the more than seven million Australians impacted by lung disease and lung cancer. Lung Foundation Australia has offices across several Australian states. We are committed to achieving integration with state-based health systems so that the community has access to timely and accurate information and support.

Our work in vaping

E-cigarette Resources from Lung Foundation Australia

Lung Foundation Australia recognised a significant gap in education and resources for vaping and developed the 'Unveil what you inhale' resources in collaboration with young people. These resources aim to increase the understanding of the harms of e-cigarettes and equip young people, young adults, educators and parents and carers with the knowledge to guide positive healthy behaviours. In 2023, Lung Foundation Australia also developed an e-Learning module and has received positive feedback around the need for such education in school.

Unveil what you inhale

In 2021, Lung Foundation Australia developed a suite of educational resources for the campaign 'Unveil what you inhale' to bring attention to the harms and unknown risks of vaping.¹ These resources are designed by and for young Australians, educators and parents and carers, to arm you with accurate and evidenced-based information. In a pioneering study, funded by Lung Foundation Australia and Minderoo Foundation, researchers at Curtin University tested the chemicals and toxicity of 52 flavoured e-liquids, finding 100% of the e-liquids were inaccurately labelled and 21% contained nicotine, despite this being illegal in Australia.

Vaping eLearning modules for young people

In March 2023, Lung Foundation Australia launched eLearning for young people aiming to bring awareness to the harms of vaping, fill critical knowledge gaps around vapes and encourage participants to be vape-free advocates amongst their friends and community. Informed by the Roundtable and the emerging evidence of growing rates of youth vaping and increasing community concern, this eLearning aims to address the rapid rise in recreational use of vapes.

Terms of Reference

1. The current status in Queensland relating to the:

a) prevalence of e-cigarette use, particularly amongst children and young people;

Key points:

- Recent data has indicated that the prevalence of vaping in Australia continues to rise, with youth uptake of significant concern.
- The Health of Queenslanders 2023, Report of the Chief Health Officer Queensland, highlighted ongoing vaping use with 19.7% of Queensland adults having ever used an e-cigarette and concerning, 14.5% of adults aged 18 to 29 years currently vape.
- The New South Wales Health Population Survey found the rates of e-cigarette use has increased significantly, with ever use for 16–24-year-olds increasing from 21.4% in 2019-2020 to 32.7 in 2020-2021.
- Research from New South Wales found 32% of students surveyed (14-17 years old) reported being an ever-vaper.
- We know that vapes are linked with negative health outcomes and using both vapes and tobacco cigarettes at the same time for a prolonged period of time, exposes the user to the toxins in both cigarettes and e-cigarettes.
- E-cigarettes are designed to appeal to young people and are being sold in bright coloured packaging, in a range of flavours and are inexpensive.

Prevalence of vaping in Australia

Recent data has indicated that the prevalence of vaping in Australia continues to rise, with youth uptake of significant concern. In Australia, between 2016 and 2019 the proportion of people who had ever used e-cigarettes increased from 8.8% to 11.3% with a notable rise among youth and young adults.² Nearly 2 in 3 (64%) current smokers and 1 in 5 (20%) people who had never smoked aged 18–24 reported having tried e-cigarettes.³

Current data for Queensland regarding the prevalence of vaping for those under 18 years of age does not exist, however, the most recent data captured in 2017 identifies 15.6% of Queensland school children aged 12 to 17 years had ever used an e-cigarette.⁴ The Generation Vape study conducted by Cancer Council NSW found almost one-third of students sampled aged 14-17 years (32%, n=233) reported being an ever-vaper, of which more than half (54%) had never smoked prior to starting vaping. More than half of ever-vapers had used a vape that they knew contained nicotine (53%, n=123). "Flavourings and taste" were rated as the most important characteristic of vapes.⁵ Additionally, the New South Wales Health Population Survey found the rates of e-cigarette use has increased significantly, with ever use for 16–24-year-olds increasing from 21.4% in 2019-2020 to 32.7 in 2020-2021.⁶

The Health of Queenslanders 2023, Report of the Chief Health Officer Queensland, highlighted ongoing vaping use with 19.7% of Queensland adults having ever used an e-cigarette.⁷ Concerningly, 14.5% of adults aged 18 to 29 years currently vape and based on the trends from 2018 to 2022, current e-cigarette use has increased 40% over the time period.⁸ We are witnessing a significant rise of vaping products in Queensland, and it is noted the newer products that contain high concentrations of nicotine salt are increasing in popularity.⁹ Most vaping products available contain nicotine, driving vaping use and leaving many addicted and unable to stop vaping.

Generation Vape Research Project

E-cigarette and tobacco use among young adults aged 18-24 years in Australia:

Online survey of 2460 young adults aged 18-24 years in Australia and qualitative group discussions found:

- Vaping and smoking rates among young adults in Australia are far higher than previously estimated, with 33% of young adults current smokers and 38% current vapers.
- Majority of young adults see access to vapes as easy, with most using disposable devices (75%).
- Vaping is seen as a separate, socially acceptable behaviour compared to smoking, and perceived as normal and “not a big deal”.
- Current vapers (n=937) most often vape when socialising (72.1%), at a friends house (24.1%), home alone (17.7%), Feeling stressed/anxious (16.3%) and seeing other vape/smoke (15.5%).
- 25% of current vapers have tried to quit vaping before
- Young adults accept that vaping is likely to be harmful, but believe it is unlikely to be as harmful as smoking tobacco, however there is growing concern related to nicotine and addiction.

How parents impact their teenager's vaping and smoking behaviours:

- Evidence shows that parental smoking behaviour and attitudes can play a key role in influencing adolescent smoking and vaping behaviours.
- Risk of vaping and smoking uptake among 14-17-year-old teenagers was 52% ($p<0.001$) and 79% ($p<0.001$) higher, respectively, if their parent was an ever-vaper. Teenagers tend to regard vaping as being safer than their parents do.
- 2021/2022 survey of 3242 14–17-year-old teenage children:
 - 29% ever-vapers
 - 23% ever-smokers
- 2021/2022 survey of 3242 parents:
 - 18% current-vapers, 9% ex-vapers
 - 29% current smokers, 30% ex-smokers

Cancer Council NSW unpublished data from generation vape, reference available on request.

New research found that the current use prevalence for Australians aged 15-30 years was 14%, which was significantly higher than the results of the National Drug Study Household Survey which found 4.5% for 15–24-year-olds and 4.8% for 25–29-year-olds.¹⁰ Ever use was higher but aligned with the NSW generation vape data with 41% of 18-39 years having tried or used e-cigarettes.¹¹ E-cigarette users in the study mainly used nicotine e-cigarettes however, only some accessed e-cigarettes via a prescription.¹² Those under 18 years believed it was somewhat easy to get e-cigarettes online and in stores which affirms findings of other Australian studies which demonstrates youth are readily accessing e-cigarettes.¹³

Vaping by those who smoke

Vaping devices have been marketed as an alternative to smoking tobacco cigarettes however many who use vaping products continue to smoke cigarettes. The Health of Queenslanders 2023 further reports that 12.2% of daily smokers currently vape and 27.6% of those who are current smokers also currently vape.¹⁴ We know that vapes are linked with negative health outcomes and using both vapes and tobacco cigarettes at the same time for a prolonged period of time, exposes the user to the toxins in both cigarettes and e-cigarettes. Research from New South Wales found that the increase in e-cigarette use between 2016 and 2020 by young adults who smoke or have recently quit weakens claims that these products are designed for older smokers who have struggled to quit using other methods.¹⁵ Additionally, the prevalence of both ever vaping and current vaping from 2018 to 2022 has increased for every age group except for one where the current vaping rates remained the same.¹⁶

Social Media

E-cigarettes are designed to appeal to young people and are being sold in bright coloured packaging, in a range of flavours and are inexpensive.¹⁷ E-cigarette marketing and advertising is common on social media platforms and high-profile influencers are used to advertise these products to younger generations.¹⁸ E-cigarette companies have further sponsored music festivals, featured fashion and style as themes from promotion and maintained relationships with international motor sport.¹⁹ Anecdotal evidence has also demonstrated that young people are obtaining vaping products from social media platforms such as Facebook and Snapchat, as well as getting vapes delivered to their house. The ongoing marketing and advertising of e-cigarettes towards young generations is driving vaping use and are making vapes become socially normal in Australia. We cannot continue to allow tobacco companies to target young generations and lead a new generation of tobacco addiction.

b) risks of vaping harmful chemicals, including nicotine, to individuals, communities, and the health system; and

Key Points:

- E-cigarettes are harmful to health and risks include poisoning, acute nicotine toxicity including seizures, burns and injuries, lung injury, dual use with cigarette smoking and increased smoking uptake in non-smokers.
- In addition to nicotine, more than 200 chemicals have been associated with e-liquids.
- E-liquids contain a cocktail of chemicals including nicotine which can cause potential lethal side effects in small quantities,
- Increases in calls to poisons hotlines particularly for young children and hospitalisations due to vaping.
- Nicotine is harmful to the developing brain and may increase risk for future addiction to other drugs.
- Short-term exposure to passive vaping has been shown to irritate eyes, irritate airways and worsen respiratory conditions.
- Non-smokers who use e-cigarettes are three times more likely to go on to smoke combustible tobacco cigarettes.

Health impacts

A global systematic review on the health impacts of e-cigarettes by the Australian National University in 2022, identified health risks of e-cigarettes including: addiction; intentional and unintentional poisoning; acute nicotine toxicity, including seizures; burns and injuries; lung injury; indoor air pollution; environmental waste and fires; dual use with cigarette smoking; and increased smoking uptake in non-smokers.²⁰ Less direct evidence indicates adverse effects of e-cigarettes on cardiovascular health markers, including blood pressure and heart rate, lung function and adolescent brain development and function.²¹

In June 2022, The National Health and Medical Research Council (NHMRC) CEO statement on e-cigarettes outlined the national advice on e-cigarettes based on the most up to date scientific evidence.²² The statement included:

- 🌿 All e-cigarette users are exposed to chemicals and toxins that have the potential to cause harm. In addition to nicotine, more than 200 chemicals have been associated with e-liquids.
- 🌿 E-cigarettes containing nicotine are addictive and people who have never smoked are more likely to take up tobacco smoking.
- 🌿 E-cigarettes have not been proven to be a safe and effective smoking cessation tool. There are however proven safe, evidence-based treatments available to help smokers quit such as nicotine replacement therapy (NRT), pharmacotherapy and behavioural interventions. Speak with your doctor about the most appropriate option for you.
- 🌿 For former smokers, using an e-cigarette may increase the chance of smoking relapse.²³

There is some evidence that vaping can cause inflammation of the mouth which can lead to gum disease and other oral health problems.²⁴ A study published in December 2022 demonstrated that those who were vaping had a higher risk of developing caries.²⁵ Evidence also suggests the potential for nicotine e-cigarettes to lead to oral cavity cancer creating a heightened awareness on the short- and long-term health risks of vaping.²⁶

The escalating cases of EVALI (e-cigarette or vaping product use associated lung injury) in 2019, brought serious attention to the dangers of e-cigarette use.²⁷ The inflammatory response in the lungs caused by inhaling substances was strongly associated with Vitamin E acetate and THC.²⁸ By mid-February 2020, the Centers for Disease Control in the US reported more than 2,800 cases of lung injuries requiring hospitalisation and 68 deaths in the US.²⁹

Hospitalisations

It has recently been reported that more than 100 people have been admitted to hospital with vaping-related illnesses in recent years, staying on average more than six days.³⁰ Data from private health insurer indicated that vaping-related disorders were often closely linked with mental illnesses such as severe depression and anxiety.³¹ Private Healthcare Australia released this information which also found that the average age of people hospitalised was 55 years with chest and lung disorders accounted for one in every five hospitalisations.³² The youngest recorded was only two years old, suffering from an accidental exposure to vaping.³³

Poisonings in children

E-liquids contain a cocktail of chemicals including nicotine which can cause potential lethal side effects in small quantities. The Victorian Poisons Information Centre reported a 232% increase in calls about poisoning from e-cigarettes has been reported in the past four years, with more than 100 of the calls last year related to children under the age of four.³⁴ Additionally, other Australian states are experiencing similar increased with 171 calls to the NSW Poisons Information Centre regarding children aged 15 and under regarding vapes and e-cigarettes in 2021.³⁵ Similarly, The Queensland Poisons Information Centre noted a 486% increase in calls for children exposed to e-cigarettes and vaping products since 2020.³⁶

Nicotine

Vaping products often contain the addictive drug nicotine which when used by adolescents can harm the parts of the brain that control attention, learning, mood, and impulse control.³⁷ Nicotine is harmful to the developing brain (development occurs until around 25 years of age) and may increase risk for future addiction to other drugs.³⁸ Nicotine dependence can quickly occur and when a person discontinues use, they may experience nicotine withdrawal symptoms including irritability, restlessness, feeling anxious or depressed, trouble sleeping, problems concentrating and cravings for nicotine.³⁹ Youths may use vapes as a way to manage stress or anxiety causing nicotine dependence which can in turn be a source of stress.⁴⁰ A tobacco survey from the United States found the most cited reason for current use of vapes was "I am feeling anxious, stressed, or depressed" (43.4%).⁴¹

The Gold Coast Public Health Unit have sized nearly 11,000 disposable vapes since 2019 as a result of complaints from the community.⁴² Laboratory testing completed on 1518 of those vapes revealed 83 per cent of the vapes contained nicotine and the average quantity was 35,000 to 45,000 milligrams per kilogram.⁴³ A study funded by Lung Foundation Australia also highlighted the concerns of nicotine with 1 in 5 vapes tested containing nicotine.⁴⁴

Vaping is becoming increasingly common in Australia with the Generation Vape study by Cancer Council NSW finding more than half of ever-vapers had used a vape that they knew contained nicotine and a further 27% did not know whether they had used a vape containing nicotine or not.⁴⁵ The flavoured and affordable disposable devices often contain nicotine salts which have a lower pH, allowing higher levels of nicotine to be inhaled with less throat irritation than free-base nicotine.⁴⁶

The use of nicotine salts in vapes resulted in higher ratings of appeal, sweetness, and smoothness, whilst having lower reports of bitterness and harshness compared to free base nicotine.⁴⁷ These effects were more prominent among never-smokers and such research demonstrates that nicotine salt formulations can enhance appeal and sensory experience of vaping.⁴⁸

Vaping products not only contain nicotine but in unknown concentrations. It is said that 50mg of nicotine in one vape is equivalent to 50 cigarettes however the actual nicotine concentration users are exposed to vary widely and is dependent on how many puffs are taken.⁴⁹ Additionally, newer devices contain more puffs and a device which has 4,000 puffs and high nicotine concentrations can equate up to 20 packs of e-cigarettes nicotine equivalent.⁵⁰

E-cigarettes products available to the public are incorrectly labelled meaning Australians are consuming nicotine in unknown quantities. From 1 January to 30 September 2022, 93 out of 1,465 (6%) of new clients to the Victorian Quitline service reported wanting help to quit vaping.⁵¹ Reports of children as young as 13 years are seeking support due to nicotine addictions from e-cigarettes.⁵² Clearly, young people are becoming dependent on nicotine and may will require support and help to be able to reduce vaping use.

Passive Vaping

Additionally, breathing in secondhand vape or passive vaping may cause health harms, with research indicating secondhand nicotine vape exposure was associated with increased risk of bronchitis symptoms and shortness of breath among young adults.⁵³ Short-term exposure to passive vaping has been shown to irritate eyes, irritate airways and worsen respiratory conditions.⁵⁴ There is conclusive evidence that e-cigarette use results in increased airborne particulate matter in indoor environments.⁵⁵

Gateway to Smoking

Tobacco use remains the leading preventable cause of morbidity and mortality in Australia, responsible for 8.6% of the total burden of disease and injury in 2018.⁵⁶ Recent studies have demonstrated a link between vaping and smoking, with those who vape more likely to go on to smoke regular cigarettes.⁵⁷ There is evidence that non-smokers who use e-cigarettes are three times more likely to go on to smoke combustible tobacco cigarettes.⁵⁸ Whilst ever-vapers were 18 times more likely to be ever-smokers than those who had never vaped, and ever-smokers were seven times more likely to be ever-vapers than those who had never smoked.⁵⁹ Public health measures have resulted in significant declines in smoking rates over the past two decades, with the smoking rate decreasing to 11.2% in Australians aged 15 and over.⁶⁰ Vaping use has been increasing significantly in recent years and has the potential to increase smoking rates in Australia, impacting the years of hard work that has been done to reduce smoking and protect public health.

Whilst nicotine vaping products are accessible in Australia, there are increasing concern regarding dual use of tobacco and e-cigarette use. A study completed in New South Wales found that many respondents reported duals use of tobacco and e-cigarettes with 25% of users saying that they used e-cigarettes to reduce but not quit smoking and 8% using e-cigarettes where smoking was not allowed.⁶¹

Understanding what is in e-liquids

Key Points:

- Inhaling chemicals is not good for your lungs – your lungs were made to breathe clean air only.
- E-liquids contain a variety of chemicals, many of which are not tested for inhalation and have the potential to pose serious health harms to the community.
- We do not understand the full potential and impact of these chemicals to the human body once inhaled, but nor do we need to as what we do know is that vapes contain a range of different mixtures of chemicals that can cause harm.
- Vapes are mislabelled, with some studies reporting 100% of vapes tested contained ingredients not listed on the package, including nicotine.
- Vaping products are cleverly designed to make the experience for the user enjoyable with the addition of flavourings, flavour enhancers and nicotine salts.
- Caution must be taken and whilst vaping products are potentially less harmful than smoking, youths are unnecessarily being put in harms way and do not require vaping products as a smoking cessation tool.

E-liquids contain a cocktail of chemicals causing known and unknown health impacts. Research from The Australian National University found that e-liquids contain over 243 chemicals and the levels of chemicals inhaled by the user can vary greatly and is dependent on the e-liquid contents, puffing rate, type of device and the battery voltage or heating power.⁶²

Lung Foundation Australia and Curtin University

Lung Foundation Australia and Minderoo Foundation commissioned Curtin University in 2021 to test 52 flavoured e-liquids available for sale over the counter in Australia.⁶³ The results found:

- 🌿 100% of the e-liquids were inaccurately labelled.
- 🌿 100% contained chemicals with unknown effects on respiratory health.
- 🌿 21% contained nicotine despite this being illegal.
- 🌿 62% contained chemicals likely to be toxic if vaped repeatedly.⁶⁴

The testing found 62% of new e-liquids contained between 1 and 3 toxic chemicals at concentrations above the acute inhalation toxicity limits. The study concludes that 100% of the e-liquids tested contained one or more of 19 chemicals that do not have established safe inhalation toxicity levels. Many of the chemicals have been tested for ingestion toxicity however this does not mean a chemical is safe to inhale. The e-liquids were not accurately labelled with ingredient lists incomplete or missing entirely.

The study further found that propylene glycol and glycerol were the main ingredients by proportion in each e-liquid however, the values of each of these on the label did not match the content. Benzyl alcohol, a solvent/flavour enhanced was found 65% of the e-liquids and is a dermal sensitising agent and skin allergen the elicit severe reactions in some people. Nicotine was found in one in five e-liquids and is relatively common in 'nicotine-free' e-liquids and can cause health implications and addiction.

Flavouring chemicals were detected in the e-liquids including furfural, thymol, and 4-(4-methoxyphenyl)-2-butanone which were found infrequently or at very low levels. Other flavouring chemicals found frequently or at high concentrations were menthol, ethyl maltol, trans-cinnamaldehyde and ethyl vanillin. This is particularly concerning as these chemicals have known health implications.

Benzaldehyde

Benzaldehyde which is added to e-liquids for its almond-like flavour was found in 94% of the tested samples. It increases systemic nicotine exposure and blood nicotine concentrations in smokers, reduces phagocytosis and is an inhalation irritant. Additionally, benzaldehyde can react with propylene glycol in e-liquids creating aldehyde propylene glycol acetals that activate airway irritant receptors.

Nicotine

Nicotine was identified in 21% of the e-liquids sampled (1 in 5) with concentrations ranging from 145 µg/L to 3.25mg/L. The study only tested for freebase nicotine however, nicotine salts are becoming more common in e-liquids as they are able to increase nicotine content without causing the user to experience uncomfortable side effects such as a throat burn.

Menthol

Menthol is added to enhance the addictive properties of nicotine and inhibits nicotine metabolism. Menthol was found in 75% of the e-liquids at concentrations ranging from 4 µg/L to 200 mg/L. Despite menthol being present in most samples, only a few were labelled as being 'menthol' or 'ice flavoured.' On the other hand, one 'menthol' e-liquid contained no menthol and may have instead contained potentially carcinogenic compounds such as pulegone, or synthetic "coolants" such as *N*-ethyl-*p*-menthane-3-carboxamide (trade name WS-3).

Ethyl maltol

Ethyl maltol is used in e-liquids as a sweetener however the effects of heating and inhaling it are largely unknown. It has been found to increase free radical formation which induce oxidative stress which affect cell survival and proliferation, and inflammation. Iron and copper are potential present in e-liquids due to coil residue and can react with ethyl maltol producing toxic hydroxypyranone complexes.

trans-Cinnamaldehyde

trans-Cinnamaldehyde impairs innate immune cell function in the lung and suppresses bronchial airway epithelial cell ciliary motility and mitochondrial function. Additionally, it inhibits microsomal CYP2A6, impairs neutrophil, macrophage and natural killer cell function, and reduces oxidative burst when heated and inhaled.

Ethyl vanillin

Ethyl vanillin is widely used in foods, beverages, drugs and cosmetics due to its vanilla odour and flavour. When present in e-liquids it reduces oxidative burst and inhibits *in vitro* free radical formation. Similar to benzaldehyde, both *trans*-cinnamaldehyde and ethyl vanillin react with propylene glycol in e-liquids to produce aldehyde propylene glycol acetals that activate airway irritant receptors.

Additionally, the study identified 2-chlorophenol in many samples and similar chemical have been found as pesticide or herbicide residues or decomposition by-products in canola oil. This acutely toxic chemical used in disinfectants and insecticides notes a problem in the e-liquid manufacturing process.

Polycyclic Aromatic Hydrocarbons

Polycyclic aromatic hydrocarbons (PAHS) are produced during the thermal decomposition of organic material including tobacco. The lower temperature thermal decomposition in e-cigarettes produce an increased proportion of low molecular weight PAHs including acenaphthylene, fluorene, and anthracene. Most PAHs are known or suspected carcinogens with exposure to these causing a variety

of health impacts in humans. Once again, the impacts of PAHs when inhaled has not been thoroughly studied however, in this study PAHs were detected at very low levels.

Contaminants

Additionally, 2-Chlorophenol (a toxic contaminant) was found in 48% of the e-liquids at concentrations ranging from 1µg/L to 200µg/L. This is likely due to contamination in low grade glycerol being used in some of the e-liquids.

Other studies on the chemicals in vapes

Additional studies have been undertaken in Australia to understand the contents of vaping products, particularly as the devices continue to increase in popularity in young generations. All studies have shown that vaping liquids contain a diverse range of chemicals and many of them have unknown impacts from inhalation.

New South Wales Health

New South Wales Health have collated key chemicals found in vapes. These chemicals included acetone (which is found in nail polish remover), acrolein (found in herbicide), 2-chlorophenol (found in disinfectant/cleaning products/insecticide), pulegone (found in insecticide), rare earth elements, formaldehyde, heavy metals and particulate matter.⁶⁵

The Australian National University

A global systematic review was published in 2022 by the Australian National University.⁶⁶ The study ultimately found that the complex and highly variable array of chemicals can be broadly categorised as originating from e-liquids (e.g. nicotine, solvent carriers (propylene glycol, ethylene glycol and glycerol), formed by chemical reactions in the heating element (e.g. aldehydes, free radicals and reactive oxygen species and furans), and originating from the device (e.g. metals including aluminium, copper, iron, lead and tin).⁶⁷ There are currently thousands of e-cigarettes on the market with over 15,000 flavours identified for sale in 2017.⁶⁸

University of Wollongong

The University of Wollongong Australia have been investigating the chemical contents of e-cigarettes and in July 2022 reported that 90% of the e-liquid in vapes is propylene glycol and vegetable glycerine of varying ratios in each e-liquid, confirming previous work by Curtin University.⁶⁹ Propylene glycol enriches flavours however higher percentages will cause a more noticeable throat hit when vaping.⁷⁰ Vegetable glycerine is sweeter and is responsible for the generation of the vapour cloud, with higher percentages causing more visible and larger clouds.⁷¹ Flavourings used in vapes are food grade and approved for ingestion, however many have not been tested to ensure they are safe to inhale.⁷² Additionally, many vapes contain cooling agents to counteract the nicotine throat burn and make the experience less uncomfortable.⁷³ In October 2022, a joint investigation by the University of Wollongong Australia and the Daily Telegraph found the three most common vape brands sold in Australia contain significant levels of nicotine (around 20mg/ml), multiple artificial flavours and cooling agents.⁷⁴ The cooling agent WS23 can provide a cooling sensation to mask the traditional burn of nicotine and there is almost no information on potential inhalation or toxicity of that chemical.⁷⁵ In 2023, The University of Wollongong Australia are undertaking an analysis of the contents of e-liquids, however, have already found the two thirds of the 1000 vapes tested contained nicotine.⁷⁶

c) approaches being taken in Queensland schools and other settings relevant to children and young people to discourage uptake and use of e-cigarettes.

Key Points:

- One-third of principals reported suspending or expelling students at least monthly for e-cigarette possession or use.
- E-cigarette use was identified as an increasing problem in secondary schools by 93% and concern is high with 94% stating they are concerned about e-cigarette use by student.
- Queensland Teachers Union expressed high levels of concern reporting that vaping has become an issue across the state over the last three years.
- Schools are implementing strong measures in a desperate bid to stop students from vaping, including smoke detectors, locking bathrooms, removing bathroom doors and suspending students.
- Vaping is causing a significant burden on schools and interfering with the delivery of education.

Perceptions of school principals and teachers

The University of Melbourne surveyed over 200 secondary school principals and teachers across Australia regarding e-cigarettes.⁷⁷ The study found that nearly half of all school staff member surveyed have found an e-cigarette on school grounds at least monthly.⁷⁸ One-third of principals reported suspending or expelling students at least monthly for e-cigarette possession or use.⁷⁹ E-cigarette use was identified as an increasing problem in secondary schools by 93% and concern is high with 94% stating they are concerned about e-cigarette use by students.⁸⁰ School policies around vaping were uncommon with only 51% reporting that their school had a policy in place.⁸¹ Barriers around enforcing policies included the discreet appearance of e-cigarettes (83%) and difficulties in pinpointing from where the vapor or scent is coming (73%).⁸² The results demonstrate the increasing problems e-cigarettes are causing in school environments and the urgent need to develop policies in schools and at the government level to reduce youth vaping.⁸³

In March 2023 the Queensland Teachers Union expressed high levels of concern reporting that vaping has become an issue across the state over the last three years, despite attempts to educate students and parents about the dangers of vaping.⁸⁴

What are schools doing to combat vaping use?

Schools have resorted to new measures to reduce vaping at schools as a desperate bid to reduce vaping by students. Schools have implemented new vaping policies, smoke detectors, locked school bathrooms, removed bathroom doors and often suspend students due to vaping. Many schools have implemented smoke detectors, particularly within school bathrooms. The South Australian education Minister Blair Boyer stated the government support schools installing vape detection systems as vaping use continues to increase.⁸⁵ Schools are now needing to find between \$15,000 to \$20,000 to install vape detectors in a bid to combat vaping use at school.⁸⁶

However, stronger measures have been taken in many schools with some resulting to locking bathrooms to eliminate vaping during school hours.⁸⁷ A school in Melbourne required students to request an access card to use bathrooms following complaints of vaping at recess and lunchtime.⁸⁸ Schools are clearly struggling with how to manage the ongoing use of vapes by students. Earlier this year, a central Queensland Catholic College suspended more than 30 students following a video emerging of students vaping in a toilet block.⁸⁹ More recently, the NSW Education Department put out

a tender for 40,000 vape detectors to be placed in schools by 2024, however the ACT have stated they are not implementing vape detectors and that students are educated on the public health impacts of substances such as vapes in line with the Australian Curriculum.⁹⁰ Additionally, the West Australian Education Department is trialling a number of preventive measures to reduce student vaping including installing vape detectors.⁹¹

Vaping is causing a significant burden on schools and interfering with the quality of education that is being delivered. We must address this issue outside of the school grounds and the problem needs to stop before it gets through the school gates. Schools should not be required to implement such drastic measures to protect the health of young people and the government must do more as the actions taken by schools are not enough to address the root of the issue.

Generation Vape Research Project

Teacher's on Vaping – “The single most disruptive thing in our school”

School plays a critical role in a teenager's identity development and is a key setting for encouraging healthy behaviours among young people.

online cross-sectional survey was conducted with 931 secondary school teachers, principals and administrators across Australia in March and September 2022

- 12% of teachers were ever-vapers and 29% were ever-smokers.
- In Wave 2, 65.8% of teachers said preventing students vaping in schools was a 'very high' or 'high' priority, in Wave 3 this increased to 70.7% (p<0.014)
- According to teachers, students most commonly obtain their vapes through friends at school (55.4%), friends outside of school (63.5%), or through friends of friends, or siblings of friends (45.2%).
- Most teachers believe that vapes are easily accessible for young people, and that access laws are being ignored and not enforced.
- There was a significant increase in school communication about the harms of vaping 'once' and 'more than five times' (73.2% in W2 and 84.5% in W3)
- Despite this strong focus on resources development and education, access to and use of vapes by teenagers remains a large public health concern.

“...vapes have taken over, for sure”

“The public health messaging around smoking was lost so quickly. Kids find smoking ugly and smelly but CANNOT see the connection to vaping”

“It's probably the single most disruptive thing in our school at the moment”

Cancer Council NSW unpublished data from generation vape, reference available on request.

There is published evidence on school staff perceptions which additionally demonstrate the need to monitor and address student e-cigarette use in schools.¹

¹Pettigrew, S., Miller, M., Kannan, A., Raj, T.S., Jun, M. and Jones, A. (2022), School staff perceptions of the nature and consequences of students' use of e-cigarettes. Australian and New Zealand Journal of Public Health, 46: 676-681.

<https://doi.org/10.1111/1753-6405.13281>

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

E-cigarettes grew quickly in popularity, particularly in youths and thus many were unaware of the health impacts of e-cigarettes. Additionally, research on the toxicity of e-cigarette products is relatively new and more research is still needed to understand the health harms associated with vaping. Long-term health data is currently unavailable due to the novelty of the products; however, it is clear e-cigarettes are harmful to health and have the potential to cause serious long term health impacts.

Awareness, however, of the health impacts of e-cigarettes is growing in the community. Results of surveys of adults in Australia suggest high levels of awareness of harms caused by e-cigarettes. In September 2022, 79% of Queensland adults and 81% of Australian adults taking part in an online survey conducted by the Centre for Behavioural Research in Cancer agreed that nicotine vaping products are highly addictive.⁹² This was significantly higher than the proportion of Australian adults agreeing with this statement in the same month in 2021 (70%).⁹³ Additionally, an internet survey conducted in October to November in 2021 showed that fewer than half of young people aged 15 to 30 were aware that an e-cigarette could explode and cause injury.⁹⁴ However, while there are some gaps in knowledge, levels of awareness about addictiveness and health effects are high among young people (the group most likely to use e-cigarettes); 80% agree that they are bad for your health.⁹⁵

Research on the toxicity of e-cigarette products is relatively new and more research is needed to understand the health harms, especially long-term harms, associated with vaping. We note the work being done by states and territories in developing and implementing health campaigns on the harmful effects of e-cigarette use. E-cigarettes have been linked to health impacts including addiction; intentional and unintentional poisoning; acute nicotine toxicity, including seizures; burns and injuries; lung injury; indoor air pollution; environmental waste and fires; dual use with cigarette smoking; and increased smoking uptake in non-smokers. E-cigarettes have been marketed and advertised to be less harmful than traditional cigarettes, however these products are used widely even by those who do not smoke. Whilst there is public perception that they are less harmful than cigarettes, we truly do not understand the full health impacts of e-cigarettes yet due to a lag in research data. What we do know is that people shouldn't be breathing anything but air into their lungs, especially if they have, or are at risk of having, respiratory conditions. We note the important work being done by states and territories in developing and implementing health campaigns on the harmful effects of cigarette use.

Support for those who vape – Quitline

The rising use of e-cigarettes and the availability of nicotine vaping products has led to many young people becoming dependent on nicotine. The Queensland Quitline is responding to the changing needs of the population and has begun to ask about vaping habits and provide support for people worried about vaping or looking for assistance to quit vaping. All young people can access the Quitline service for support, information and encouragement in quitting e-cigarettes and smoking.

Since mid-August 2022, (16%) of clients having an initial quit planning call with Quitline, had vaped in the past 30 days. Of those, 22% are currently vaping but not smoking cigarettes and over 77% of them know they are vaping nicotine. Nearly a quarter of callers vaping are under 25 years and 9% are under 19 years of age. These numbers are likely low, as people may not recognise that Quitline can support people with nicotine addiction associated with e-cigarettes as well as traditional cigarettes.

b) accessibility and effectiveness of services and programs to prevent uptake and continuing use of e-cigarettes.

To date, there has been limited research on services and programs to prevent uptake and continuing use of e-cigarettes as they are an emerging public health problem. Despite the need for such services as a supplementary action including the need for specific support programs to help children, young people and adults quit vaping, the Government needs to immediately implement policy reform to effectively protect children and non-smokers from the harms of vaping.

We highlight the announcement of \$63million to support a public health information campaign to discourage Australians from taking up vaping and smoking and encourage more to quit⁹⁶. We further note the \$30m investment to support programs to help Australians quit including through enhanced nicotine cessation education and training among health practitioners.⁹⁷ These services need to be enhanced and effectively publicised as people and young children may not know where to get help to quit.

3. Consideration of waste management and environmental impacts of e-cigarette products.

By banning e-cigarettes, we can reduce and prevent more waste from impacting the environment. Novel products such as e-cigarettes are a new and different environmental concern with disposable e-cigarettes presenting the biggest problem.⁹⁸ E-cigarette waste appears to be even more damaging to the environment than cigarette butts presenting a challenge due to the plastic waste, electronic waste, and hazardous waste.⁹⁹ Additionally, the lithium-ion batteries can pose fire risks in recycling and waste facilities, whilst chemicals from the vapes can leach into water supplies and the environment.¹⁰⁰ Nicotine is considered a hazardous substance and as such many plastic pods cannot be recycled.¹⁰¹ Disposable e-cigarettes and pods are becoming increasingly popular and generate even more waste that cannot be disposed of safely or recycled.¹⁰² Western Australia Department of Water and Environmental Regulation have stated that there is no specific guidelines on how to dispose of vapes.¹⁰³ One of WA's licensed vape disposal companies are regularly contacted by schools, with many paying to ensure confiscated vape products are correctly disposed of, however due to the complexities of the devices it can cost up to \$10 per item.¹⁰⁴ We note the importance of the Draft Queensland E-Products Action Plan 2023-2033 which aims to address e-waste such as that created from e-cigarettes and provide solution oriented strategies to safeguard the Queensland environment.¹⁰⁵

Disposal of nicotine vaping products from prescription

The Pharmaceutical Society of Australia (PSA) provides the following advice to pharmacists about how they should advise patients who are dispensed nicotine vaping products from their pharmacies. Nicotine vaping products and vaping devices are hazardous waste and must be disposed of carefully.

Safe disposal of open systems: Advise patients to return any unused nicotine vaping products (and empty nicotine vaping product containers that may contain residual nicotine) to the pharmacy for appropriate disposal through the return of unwanted medicines (RUM) program. Advise patients to switch vaping devices 'off' and remove rechargeable batteries prior to disposing in the household rubbish. Rechargeable batteries can be disposed of according to local council recommendations.

Safe disposal of closed systems: Contact your local council for information about disposal of household quantities of closed system [single use] 'disposable' vaping devices. If the waste must be stored prior to disposal, advise patients to store it securely and out of reach of children.¹⁰⁶

Since the publication of the PSA's guidelines, it was reported that the Battery Stewardship Council has advised that its battery collection points are not able to accept single-use e-cigarettes with an encapsulated battery. If the e-cigarette contains a battery that can be safely removed from the device, the separated battery can be disposed of at a battery collection point.¹⁰⁷ Consequently, there is currently no safe way to dispose of single-use e-cigarettes. It seems unlikely that people would take their e-cigarette components to council recycling/waste management centres. In addition, many e-cigarette users in Australia obtain their e-cigarettes from sources other than pharmacies; non-nicotine e-cigarettes can be sold to adults aged 18+ in retail stores in most states/territories.¹⁰⁸ These products also create considerable litter, e-waste, and hazardous chemical waste in Australia.

4. A jurisdictional analysis of other e-cigarette use inquiries, legislative frameworks, policies and preventative activities (including their effectiveness in reducing e-cigarette use).

The ban on the importation of vaping products announced by the Federal Government on the 2nd of May 2023, will ensure non-nicotine vaping products do not enter the country. The new reforms including nicotine vapes only being sold in pharmacies as part of the smoking cessation model, highlight the importance of tackling this public health issue and protecting children and non-smokers from the harms of vaping. The new vaping reforms announced will pave the way to tackle the growing vaping crisis in Australia however, it must be acknowledged that more support will be needed for those who may be nicotine dependent.

“For the population of young people who are already dependent, we are ultimately concerned a stringent crackdown on vaping without clearly delineated remedial and supportive strategies runs a high risk of increased black-market trading of vaping products amongst young people, where these products will once again be unregulated. We urge the government to work hand-in-hand with harm minimisation efforts, ensuring that equitable, accessible and targeted support programs are in place before, or concurrent with the ban.”

Excerpt from Australian Medical Students Association (AMSA) Media Statement May 2023¹⁰⁹

National Strategies

We note the release of The National Tobacco Strategy and the Queensland Government commitment to aligning with the framework and implementation. Strengthening regulations on e-cigarettes and novel and emerging products is a key priority outlined in the NTS and we re-iterate the need for Queensland to implement additional measures to further restrict the availability and use of e-cigarettes in line with action 9.1. Following the announcements from the federal government on the ban on importation of non-nicotine vaping products, the Queensland Government must step up and support these reforms by prohibiting the supply of vaping products.

Additionally, reducing tobacco use and nicotine addiction is a key focus area of The National Preventive Health Strategy. The strategy outlines policy achievements by 2030 including the implementation of stronger regulation, monitoring and enforcement for novel and emerging products including e-cigarettes. The Queensland Government has expressed commitment to the National Preventive Health Strategy and play a key role in leading public health reforms and protecting the health of Queenslanders.

Current policy climate

On the 29th of March 2023, a motion was made in Tasmania by Independent Member Kristie Johnston MP to ban the sale or supply of e-cigarettes without a medication prescription.¹¹⁰ The House supported and passed the motion acknowledging that e-cigarettes are not safe and cause serious health issues.¹¹¹ The Premier of Tasmania additionally, supported the motion and noted that he will peruse the other Australian jurisdictions for a national approach on the control of e-cigarettes.¹¹² Further, the Northern Territory are undertaking an inquiry into vaping, highlighting the ongoing concern across Australia and the need for strengthened policy to effectively protect youths and non-smokers.

Western Australia Regulations

State governments can take strong policy action and we note that in Western Australia it is illegal to sell e-cigarette devices and their components. However, despite the sale of vaping products being illegal, it has been reported that not a single retailer has been fined in the last 12 months despite more than 24,000 vapes being seized and 3,000 letter being sent placing retailers on notice.¹¹³ With ongoing vaping use by students, Education Minister for WA, Tony Buti revealed this week that vape detection

devices would be trailed at ten public high schools in Perth and Regional WA.¹¹⁴ A ban on the sale of e-cigarettes aims to reduce access and thus uptake of vaping, however it is clear that bolstered enforcement and compliance measures are necessary to ensure this is achieved.

Article 5.3 FCTC

Australia signed the World Health Organization Framework Convention on Tobacco Control (FCTC) in 2003 and since then has achieved milestones in reducing tobacco use by strengthening regulatory control, creating awareness through health campaigns, and enhancing smoking cessation services. Despite this, we must do more to meet the articles outlined in the FCTC and protect the health of Queenslanders into the future. Article 5.3 of the WHO FCTC relates to protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry.¹¹⁵ Australia's obligations under Article 5.3 extend to new and emerging products, such as e-cigarettes and heated tobacco products, due to the increasing integration between their manufacturers and the tobacco industry.¹¹⁶ We note Australia supports the decision of the Sixth Conference of the Parties to the WHO FCTC, which invited parties to consider taking measures to: "protect tobacco-control activities from all commercial and other vested interests related to ENDS/ENNDS (i.e. e-cigarettes or electronic nicotine delivery systems/electronic non-nicotine delivery systems), including interests of the tobacco industry".¹¹⁷

Transnational tobacco companies commenced marketing and selling new products in response to the declining smoking prevalence and have shifted focus to 'reduced harm' alternatives to nicotine products.¹¹⁸ Tobacco companies now own many of the leading e-cigarette brands after major international companies have invested heavily in e-cigarettes in recent years.¹¹⁹ Queensland must uphold Article 5.3 and protect public health policies from commercial and other vested interests of the tobacco industry which now expands to e-cigarettes and related products.

Banning political donations from the tobacco industry

Australia is a signatory to the FCTC, which states that public policy should be free from influence from tobacco industry. Akin to other jurisdictions, the Queensland Government should amend the *Electoral Act 1992* to include the banning of political donations from both the tobacco and vaping industry. This is important as they are often interlinked, with Big Tobacco now owning vaping companies.

In the recent review of the *Electoral Act 1992*, we recommended amendments that would eliminate this detrimental loophole for unhealthy industry interference, but unfortunately these were not adopted. We note that Tasmania and NSW have particularly positive regulations for restricting this influence, and we would be happy to reshare our proposed changes to the *Electoral Act 1992*, as this can ensure that Queensland aligns with Article 5.3 and protects public health policies from commercial and other vested interests of the tobacco industry.

International e-cigarette policies

Internationally, Australia is the only country to have implemented a prescription model for vaping products as a regulation tactic. E-cigarettes use across the globe is increasing quickly, and many countries have been unable to prevent the use of e-cigarettes by non-smokers and children. A number of countries around the world have banned vaping products including China, Singapore and Thailand to protect public health.¹²⁰

New Zealand:

In New Zealand, the use of e-cigarettes has been promoted and encouraged as a tool to reduce high smoking rates. In New Zealand nicotine vaping products are available to anyone aged 18 years and over with no prescription required. The latest data from the New Zealand Ministry of Health showed that 8.3% of New Zealand adults vape (up from 6.2% in the previous year) which is more than the annual smoking rate of 8% (down from 9.4% in the previous year).¹²¹ Increases in vaping was particularly high in younger generations with the number of year 10 students vaping daily increased from 3.1% in 2019 to 9.6% in 2021.¹²² This is highly concerning as it is clear that young children are not using vaping products for smoking cessation. In response to growing concerns by parents, teachers and schools, Asthma and Respiratory Foundation in partnership with the Secondary Principals' Association of NZ conducted a survey in 2021 to understand the habits of secondary school students.¹²³ The large survey with over 19,000 students from years 9 to 13 were asked about their vaping and smoking habits.¹²⁴ The survey found 26% of students reported vaping and 15% reported smoking cigarettes in the past week.¹²⁵ Additionally, nearly 20% of students are vaping daily or several times a day and the majority are using high nicotine doses.¹²⁶ Over half of those who reported vaping were vaping more frequently and at higher nicotine doses than last year.¹²⁷ In January 2023, the Government started consultation to address the youth vaping rates and have proposed changes to restrict the sales of vapes to certain premises and reduce the level of nicotine content of e-cigarettes.

Letitia Harding - Chief Executive of Asthma and Respiratory Foundation New Zealand and recipient of the 2023 President's Award by the Thoracic Society of Australia and New Zealand's (TSANZ) for her advocacy and education around the dangers of vaping.

"The Foundation calls for all disposable vape products to be banned. Disposable vapes (between 400 and 600 puffs) are low in cost which makes them easily accessible to young people. They can contain up to 50mg of nicotine salts making them highly addictive. One use disposable e-cigarettes have been described as 'an easy gateway product to vaping' for our non-smoking youth. Removing this product would not negatively impact current smokers using vaping as a smoking cessation tool, as these users need a device that will last for the period of their quit smoking cessation programme (weeks or months) with intense wrap around behavioural support services, rather than a short-term product."

Sharon Pihema - Māori Community Liaison from Asthma and Respiratory Foundation New Zealand

"Tobacco has devastated indigenous populations across the globe. Generations of indigenous people have had their lives cut short by the impacts of tobacco and cigarette smoking. Tobacco was normalised in our homes and communities. Regulation and legislation has helped rectify this in line with our goals for a Smokefree Aotearoa 2025. Sadly, we are now seeing the same patterns with vaping except this time it's with our rangatahi (younger generation) and many of them are becoming addicted to vaping without ever having smoked a cigarette. The same tactics are being used by the industry to glamourise vaping and appeal to younger audiences. We are already seeing higher uptakes of youth vaping in Māori compared to non-Māori. We are seeing children as young as 11 and 12 being excluded from school because of vaping. No child should lose their education because of vaping but that is the power of addiction, social pressure and the normalised culture we have created around vaping. We need to do better."

United Kingdom

In the United Kingdom nicotine and non-nicotine vaping products are a consumer product such as in New Zealand with vaping products are widely accessible and minimal regulations around maximum nicotine content, packaging, and maximum volumes of refills.¹²⁸ The government have gone against the precautionary approach and instead are encouraging adult smokers to switch to vaping products. However, the ASH-Youth Survey 2022 found that 11–18-year-olds in England are using vapes increasingly, with vaping prevalence increasing from 4.8% in 2020 to 8.6% in 2022.¹²⁹ The vice-president of the Royal College of Paediatricians and Child Health has noted that vaping is becoming an epidemic among teenagers in the UK. As of April 11, the UK Government have opened a consultation to identify opportunities to reduce the number of children accessing and using vaping products, noting a significant rise in vaping by youths.¹³⁰ E-cigarettes should not be accessible by those who do not smoke or by children, and their role as a smoking cessation product should not place the wider public at risk of harm.

Conclusion

The vaping crisis unfolding in Queensland requires urgent action by the Queensland Government. Lung Foundation Australia and other leading public health organisations recommend:

- 1. The Queensland Government to amend relevant Queensland legislation to make it an offence to supply e-cigarette products (regardless of whether they contain nicotine) outside of the existing TGA prescription medical access model. Following the implementation of a ban on retail sale, monitoring and enforcement will need to be bolstered in combination with ongoing community education and support for those wanting to quit.**
- 2. Immediately intensifying the current compliance monitoring and enforcement of Queensland drugs and poisons laws (which prohibit the general retail sale of e-cigarette products containing nicotine), including product seizures.**
- 3. Prohibiting all forms of advertising, marketing, promotion and sponsorship in relation to e-cigarette products, components and liquids, and cooperative work between governments to take strong action against illegal marketing including online and via social media.**
- 4. Increasing investment in awareness – educational campaigns for target groups such as children and young people, as well as the communities supporting them. We note the importance of messaging to both youths and adults that does not create stigma around vaping.**
- 5. The Queensland Government to amend the *Electoral Act 1992* to include the banning of political donations from both the tobacco and vaping industry in line with Article 5.3 of the FCTC and the National Tobacco Strategy 2022-2030.**

Support for government action

Lung Foundation Australia completed a YouGov survey in 2022, receiving over 1000 responses nationwide. Results found 83% of Queenslanders think more needs to be done to protect children from vaping and 75% of Queenslanders are concerned about the potential dangers of vaping. Young Australians are also highly concerned with 80% of those aged 18-24 years agreeing the government needs to do more to protect children from e-cigarettes.

In December 2022, a survey by Lung Foundation Australia with over 550 responses found 96% of respondents were extremely or moderately concerned about youths accessing vaping products and almost half reported having a friend or family member who vapes. Additionally, 84% said it was extremely important for the government to take urgent action on vaping products.

In 2023, Cancer Council Australia released a new report re-iterating support for policy action to limit e-cigarette availability and use by the public with almost nine in ten Australian adults supporting government action to stop a new generation of Australians becoming addicted to nicotine.¹³¹ Additionally, those aged 18-24 years strongly agree that e-cigarettes are highly addictive, e-cigarettes should be regulated to stop a new generation of Australians from becoming addicted, advertising of e-cigarettes in and around shops should not be allowed and vaping should not be allowed on public transport, in pubs, restaurants or other indoor venues.¹³²

E-cigarette use is continuing to increase, particularly in youths despite action being taken by State Governments and Non-Government organisations to support reducing vaping uptake and continuation of vaping. School-based education has been implemented across the Nation and yet teachers are still reporting ongoing vaping use, disrupting learning for students and requiring serious action including suspensions of students. E-cigarette use has increased quickly in recent years and public health education and programs are unable to keep up.

Increased enforcement and monitoring have been key actions for NSW Health, with thousands of e-cigarettes being seized from tobacco retailers due to breaching laws around nicotine content.

Despite this, vaping products continue to be sold to children and nicotine and non-nicotine vape use continues to remain an issue in NSW. Likewise, the TGA have issued significant fines for non-compliance with advertising laws.

Current policies, legislative frameworks and preventive activities are not sufficient in addressing the uptake and continuing use of vaping products in Australia. Youths and non-smokers in Australia are continuing to be targeted by tobacco industries and a new generation are becoming dependent on nicotine. The current situation in Australia is ineffective and to support the new reforms, Queensland must ban the supply of all vaping products outside the prescription model under the TGA. This model was employed to protect youths and non-smokers whilst allowing those who smoke to access vaping products as a smoking cessation tool only. Despite this, there is a strong market of non-nicotine and nicotine vaping products being sold, creating a new public health crisis. We know that vaping products are not risk free and we are allowing residents to access harmful products. Queensland is in danger of undoing the decades of public health work and achievements made in reducing smoking rates and ultimately reducing death and disease.

If you would like to discuss our submission further, please contact Paige Preston, Senior Manager, Policy Advocacy and Prevention at Lung Foundation Australia at Paigep@lungfoundation.com.au.

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