



The Thoracic Society of Australia and New Zealand's response to the Senate Community Affairs Legislation Committee inquiry into the Therapeutic Goods and Other Legislation Amendment (Vaping Reforms) Bill 2024

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Introduction

The Thoracic Society of Australia and New Zealand (TSANZ) is a health promotion charity whose mission is to lead, support and enable all health workers and researchers who aim to prevent, cure, and relieve disability caused by lung disease. The TSANZ is the only peak body in Australia that represents all health professionals working in all fields of respiratory health.

TSANZ has over 1,800 members and is the only health peak body representing a range of professions (medical specialists, scientists, researchers, academics, nurses, physiotherapists, students, and others) across various disciplines within the respiratory/sleep medicine field in Australia and New Zealand. The TSANZ is a leading advocate and provider of evidence-based policy for the prevention and management of respiratory conditions in Australia and New Zealand, undertakes professional education and training, and is responsible for significant research administration.

As the leaders in lung health, we promote the:

- Highest quality and standards of patient care.
- Development and application of knowledge about respiratory health and disease.
- Highest quality air standards including a tobacco smoke free society and effective regulation of novel nicotine delivery systems.
- Collaboration between all national organisations whose objects are to improve the wellbeing of individuals with lung disease and to promote better lung health for the community.
- Professional and collegiate needs of the Membership.

The TSANZ is submitting a response to the Senate Community Affairs Legislation Committee inquiry in support of the Therapeutic Goods and Other Legislation Amendment (Vaping Reforms) Bill 2024 and will continue to advocate for evidence-based practice and policy to improve respiratory health for all.

Consultation Topic

The Senate Community Affairs Legislation Committee has called for submissions to its inquiry into the Government's Therapeutic Goods and Other Legislation Amendment (Vaping Reforms) Bill 2024. The

Bill was introduced to parliament on the 21st of March and the second reading debate occurred on the 26th and 27th of March 2024. The Bill was referred to the Committee on the 27th of March 2024.

The TSANZ response

The Thoracic Society welcomes the introduction of the Therapeutic Goods and Other Legislation Amendment (Vaping Reforms) Bill 2024 to Parliament. This Bill is the final piece towards the strong regulatory environment necessary to protect Australian lungs from tobacco and other products such as e-cigarettes and similarly harmful future innovations. This process towards comprehensive vaping reforms was initiated by the previous coalition government under Minister Hunt and is being continued with the leadership of Minister Butler.

Australia has historically been a world leader in tobacco control measures and holds a wealth of expertise and experience in implementing evidence-based policy. Nicotine is one of the most highly addictive drugs in the world. The development of dependence is strongly influenced by factors such as availability, price, social pressures, and regulations, as well as certain pharmacologic characteristics. Nicotine is classified as a poison in Australia at both federal and state levels. **The government controls policy levers making them responsible for whether we allow a new generation of nicotine-addicted Australians.** Strict regulation of nicotine products makes sense.

Decision makers need to separate tobacco regulations tied with historical choices from these modern vaping reforms. Regulatory neutrality does not take into account that tobacco was originally sold as a health and wellbeing product, and by the time the ill-health effects were known, tobacco was entrenched in society. Currently, tobacco is regulated as a consumer product; but, as perspectives shift and governments examine the evidence, they can exercise their power to change the path of nicotine addiction and alleviate the burden placed on the health system due to tobacco products. On 17th of April 2024 the United Kingdom Government took the step to pass its Smokefree Generation Bill, banning the sale of cigarettes to anyone born in 2009 or later (1). **We can make similarly bold moves here. Australia now has an opportunity to influence global policy and circumvent nicotine taking hold again, this time through strictly regulating access to e-cigarettes and limiting vaping in Australia.**

E-cigarettes are proven to cause real harm in otherwise healthy people. Studies show that e-cigarette users are inhaling a mixture of irritative, toxic and carcinogenic compounds and the potential of vaping to cause acute and severe lung injury syndromes has been demonstrated (2). The main constituents of the vapour that create the plumes are vegetable glycerin and propylene glycol. Inhalation of propylene glycol damage small airway epithelial cells in humans, as well as causing DNA damage and cell death. When propylene glycol (and glycerine) is heated, depending on the specific product, it can form aldehydes such as formaldehyde and propionaldehyde, which are known carcinogens (3). Acute and chronic risks to health including poor oral health, lung damage, cancer, and breathlessness can later follow.

Health Impacts

- **Poor oral health** has been seen in people who use e-cigarettes. When the components of the vaping solutions are broken down and metabolised in the mouth, they alter the oral microbiome, both accelerating and increasing the risk and rate of tooth decay (4, 5).
- **Respiratory symptoms are more frequent** in people who vape but can improve once they quit. These symptoms include cough, wheeze, and shortness of breath and increased airway resistance (6).
- **Lung damage** occurs through exposure to the e-cigarette aerosol. The inhaled vapour is detrimental to the airway surface, causing inflammation and impairing local immune responses (7).

- New research published in *Cancer Research* in March this year reveals that **people who have never smoked but use e-cigarettes for a year or more, have similar cell level changes, usually seen in smokers' years before lung cancer develops** (8). Concerningly, this suggests that the carcinogenic changes within cells caused by vaping are the same as those caused by tobacco cigarettes but with potential to develop much earlier.

We need to protect young Australians. *The majority of young Australians (under 25) who currently use e-cigarettes were never smokers – so the question is how do we stop this population being the next generation of tobacco-addicted victims?* (9, 10). Nicotine is highly addictive and can harm **adolescent brain development**, which continues into the early to mid-20s. Using nicotine in adolescence may also increase risk for future addiction to other drugs and has been associated with mental health symptoms such as **depression** (11, 12). Research shows a strong association between vaping and future smoking behaviours. **Young people who vape are three times more likely to take up smoking cigarettes.** The use of both conventional tobacco products and e-cigarettes (dual users) is not safe and can lead to worse health than exclusive smoking of conventional cigarettes (13). There is a need to reassess the assumption that e-cigarette use provides substantial harm reduction across all cigarette-caused diseases, particularly accounting for dual use (14).

Ensuring access to e-cigarettes through a strictly regulated pathway in Australia means those who need to vape, can. The prescription access is appropriate as there is risk with using e-cigarettes, the concentration and pattern of use should be considered by each user, and there is potential for misuse of the product. **Clinical management of e-cigarette use will mean effective smoking cessation.** For e-cigarettes to be an effective smoking cessation aid they must be used in partnership with healthcare professionals (used within a prescription) and be accompanied by behavioural support. All studies showing benefit of e-cigarettes have been in tightly controlled trials where e-cigarettes have been effectively prescribed to the participants in conjunction with behavioural change therapy/counselling. An unregulated consumer model will not emulate the results of the clinical trials and therefore the health benefits will not be realised. We already know that over the counter nicotine replacement therapy (OTC NRT) is only as effective as the 'cold turkey' cessation method because it does not come bundled with behavioural support (15). The delivery model of any 'medicine' in this context is crucial to maximise benefit, whether it be NRT gum, Champix, or e-cigarettes.

For Australia to allow e-cigarettes to be a consumer product will result in facilitated addiction of children, young people, and young adults to something that will harm them, potentially fatally.

Regulating e-cigarette access through prescription is the best option to protect Australian lungs – this is why the Therapeutic Goods and Other Legislation Amendment (Vaping Reforms) Bill 2024 must be supported by the Committee. We urge the Committee and Senators to support this package to protect Australians. By prioritizing public health and implementing evidence-based policies, Australia can lead the way in addressing the challenges posed by vaping. It is imperative that we act decisively to protect the well-being of current and future generations.

Concluding remarks

The TSANZ appreciates the commitment demonstrated by the Committee to the lung health of all Australians and their recognition of the population level harm caused by e-cigarettes.

As a leading health promotion charity for lung health professionals in Australia and New Zealand, our membership includes world leading clinicians, multidisciplinary respiratory health professionals, researchers, scientists and academics. We welcome the opportunity to engage with you further on this topic. The Thoracic Society can be contacted at: advocacy@thoracic.org.au.

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