

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

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Dear Committee Secretary,

Re: Vaping – An Inquiry into Reducing Rates of E-Cigarette Use in Queensland

The Australian College of Nursing (ACN) would like to thank the Health and Environment Committee for the opportunity to provide feedback on the **Vaping – An Inquiry into Reducing Rates of E-Cigarette Use in Queensland**. ACN commends the Queensland Government's commitment to understanding the emerging issue of vaping and e-cigarette use and would like to take this opportunity to formally acknowledge the recent steps taken by the Australian government to address this emerging issue.

ACN holds significant concern for the implications of these products in relation to chronic disease and multimorbidity especially for younger demographics who do not yet have the capacity to make informed healthcare decisions. Introducing bans on recreational vaping are a significant step forward in ensuring this vulnerable demographic is unable to access vaping products. However, ACN believes that the criminalisation of these products may lead to unintended consequences including potential increases in youth crime. For this reason, ACN believes that to successfully transition people away from vaping and empower them to make informed health decisions, access to wrap-around support services including multidisciplinary health teams is imperative.

As a national leader of the nursing profession, ACN advocates for access and health equity for all people through expert-informed, and person-centred care across the lifespan (for further details, please refer to ACN's Person-Centred Care – Position Statement).¹ Patient-centred care and autonomy for healthcare consumers are at the forefront of ACN's strategic intent. Community-based healthcare models including multidisciplinary healthcare professionals are well placed in not only addressing the health and education aspects of reliance on vaping products, but they are also able to start conversations with consumers and are vital in understanding the true root causes of this addiction.

¹ Australian College of Nursing (2019), 'Person-Centred Care', ACN, Canberra.

<https://www.acn.edu.au/wp-content/uploads/position-statement-person-centred-care.pdf>

If you have further enquiries regarding this matter, please do not hesitate to contact Dr Carolyn Stapleton, Director of Policy and Advocacy, at [REDACTED]

Yours sincerely

[REDACTED]

Neil Haynes FCA, FACN (Hon)
Chief Operating Officer
Australian College of Nursing

3 May 2023

VAPING – AN INQUIRY INTO REDUCING RATES OF E-CIGARETTE USE IN QUEENSLAND

**THE AUSTRALIAN COLLEGE OF NURSING RESPONSE TO
HEALTH AND ENVIRONMENT COMMITTEE (MAY 2023)**

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Acknowledgement

The Australian College of Nursing (ACN) prides itself on being an inclusive organisation that supports equity for all people. ACN is the national professional leader for the nursing profession and as such supports social models of health care that address the needs of individuals and communities while considering the social, economic, and environmental factors impacting their health.

Executive summary

The Australian College of Nursing (ACN) would like to thank the Health and Environment Committee for the opportunity to provide feedback on the **Vaping – An Inquiry into Reducing Rates of E-Cigarette Use in Queensland**.

Vaping has been one of the main emerging public health issues in children and young adults. School aged students are accessing nicotine vaping products (NVPs) in increasing numbers. Health experts and authorities are trying to ascertain the long-term health consequences for people using these products from a young age¹. The promoted idea that vaping is a safe or less harmful replacement to smoking or as an aide to smoking cessation² has led to its harmful health outcomes.

In terms of electronic cigarettes (e-cigarettes), there are two types of users: active smokers who want to quit traditional cigarettes and recreational smokers.³ E-cigarettes with nicotine have been found to be modestly effective at helping people quit smoking, compared with other nicotine replacement therapies (NRTs).⁴ Studies, however, have shown that vaping poses significant health risks, including addiction, lung damage, and cardiovascular diseases.⁵

Of concern are the packaging and flavourings designed to attract young people to the products. Decals and pastel colours attract the eye and berry and lolly flavours enforce the products' apparent benign impact on the user's health. Nicotine and numerous other additives and chemicals are typically found in vape liquids with the unpredictability of the components being an issue.⁶ There are reports that the vapes themselves are disguised as everyday objects that children use, in particular, highlighters, demonstrating the insidious nature of the marketing strategies aimed at targeting young people.⁷ The

¹ Better Health Channel. (n.d.). Smoking and vaping – how to discourage your children. Department of Health, Victoria State Government. <https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-how-to-discourage-your-children>

² National Academies of Sciences, Engineering, and Medicine (2018) *Public health consequences of e-cigarettes*. Washington, DC. doi: 10.17226/24952

³ Hamberger, E. S., & Halpern-Felsher, B. (2020). Vaping in adolescents: epidemiology and respiratory harm. *Current opinion in pediatrics*, 32(3), 378–383. <https://doi.org/10.1097/MOP.0000000000000896>

⁴ Hajek, P., Phillips-Waller, A., Przulj, D., Pesola, F., Smith, K. M., Bisal, N., Li, J., Parrott, S., Sasieni, P., Dawkins, L., Ross, L., Goniewicz, M., Wu, Q., & McRobbie, H. J. (2019). E-cigarettes compared with nicotine replacement therapy within the UK Stop Smoking Services: the TEC RCT. *Health technology assessment (Winchester, England)*, 23(43), 1–82. <https://doi.org/10.3310/hta23430>

⁵ Dinardo, P., & Rome, E. S. (2019). Vaping: The new wave of nicotine addiction. *Cleveland Clinic journal of medicine*, 86(12), 789–798. <https://doi.org/10.3949/ccjm.86a.19118>

⁶ Blaha, M.J.(2023). Vape Flavors and Vape Juice: What You Need to Know. John Hopkins Medicine. <https://www.hopkinsmedicine.org/health/wellness-and-prevention/vape-flavors-and-vape-juice-what-you-need-to-know>

⁷ Department of Health and Aged Care. (2023). *Minister for Health and Aged Care – National Press Club – Q&A transcript – 2 May 2023*. Australian Government, Canberra.

Government must consider why this demographic is taking up vaping and driving the use of e-cigarettes. Studies in the United States have linked the increase in the use of e-cigarettes and vaping products to an emerging mental health crisis, coupled with anxieties due to the COVID-19 pandemic.⁸

The ingredients in these products can be very harmful and it is important to raise awareness among the community of these risks and for the community to make informed choices about their use. ACN strongly believes that person-centred care is a critical component of a functional healthcare system.⁹ An important component of person-centred care is having adequate access to healthcare resources to make autonomous and informed decisions regarding healthcare interventions.

A further concern is the impact on the environment posed by the e-cigarettes themselves. As e-cigarettes become more popular, the environmental threats they pose increase - plastics, chemicals, electronics and other hazardous waste. As banning the devices is a long-term project, services to collect and safely dispose of and recycle the waste are essential.¹⁰

As the largest healthcare profession in Australia,¹¹ nurses have a unique insight into not only the care experience of people in Australia but also the healthcare workforce. ACN continues to advocate for equitable access to health care for all members of the Australian community. Nurses can educate and enable all members of the community to have the confidence to take ownership of their health and help to build health resilience in their communities. In the current climate of an increasing health burden related to chronic conditions and multi-morbidity, the nurse's role as a culturally attuned promoter of health, as well as provider, is invaluable.¹²

Summary of ACN's Recommendations

ACN recommends the Queensland Government:

- Work with all states, territories, and federal authorities to drive and create a nationwide set of regulations to manage the import, sale and use of an e-cigarette
- Where e-cigarettes are recommended to help prevent smoking, restrict the availability of e-cigarettes (with nicotine) by mandating they must be prescribed by a clinician and dispensed by a pharmacist
- Ban single-use e-cigarettes to minimise waste – particularly from plastics and batteries
- Work to reduce the environmental harms of e-cigarette packaging and equipment by implementing collection and disposal services
- Regulate e-cigarettes so that all available over-the-counter e-cigarettes imported into Australia are free from nicotine and any other potentially harmful chemicals
- Regulate that e-cigarette are free from fancy and gimmick packaging and ensure neutral flavours

⁸ Truth Initiative (2021) Colliding Crises: Youth Mental Health and Nicotine Use. Truth Initiative, Washington. <https://truthinitiative.org/research-resources/emerging-tobacco-products/colliding-crises-youth-mental-health-and-nicotine-use>

⁹ Australian College of Nursing (ACN). (2019). *Person-Centred Care*, ACN, Canberra.

¹⁰ Erdiaw-Kwasie, M. O., Abunyewah, M.(2023). [E-cigarettes pose a 'triple threat' to the environment, says Clean Up Australia waste report](#). Australian Geographic, February 28, 2023.

¹¹ Australian Institute of Health and Welfare (AIHW). (2022). *Health Workforce*, AIHW, Australian Government.

¹² Australian College of Nursing (ACN). (2019). *The role of nurses in chronic disease prevention and management in rural and remote areas*, ACN, Canberra.

- Investigate the drivers for young people to take up vaping particularly the claims that children require e-cigarettes to manage stress and anxiety
- Plan and implement support services for young people wanting to quit
- Plan and implement programs to identify and support young people who are experiencing stress and anxiety in life generally and in school environments specifically.
- Support more research into the uptake of vaping and any potential correlation to COVID
- Fund research into the harms of vaping, with emphasis on the impacts on young children
- Investigate the implications of longer-term vaping in chronic disease
- Provide \$250,000 of funding to educate the workforce
- Develop and distribute better information on the harms of vaping using all media outlets

ACN's Response to the Inquiry into Reducing Rates of E-Cigarette Use in Queensland

Introduction

ACN members raised concerns regarding the vaping epidemic in young people along with the potential health risk associated with the use of e-cigarettes or vaping devices. Some of the potential health consequences include lung damage, nicotine addiction, exposure to harmful chemicals and risk of fire or explosions that may be caused by device malfunction.

In undertaking the inquiry, ACN considered the following terms of reference:

- 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
- 2) Opportunities to increase:
 - a) awareness of the harmful effects of e-cigarette use (with and without nicotine) on an individual's health, 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-cigarettes
- 4) A jurisdictional analysis of other e-cigarette uses inquiries, legislative frameworks, policies, and preventative activities (including their effectiveness in reducing e-cigarette use).

1. The current status in Queensland relating to the:

a. prevalence of e-cigarette use, particularly among children and young people

Australia's Chief Medical Officer Paul Kelly stated that the use of e-cigarettes is the next-biggest health issue after COVID-19.¹³ Queensland's parents and teachers are alarmed by the increase in the use of vaping by children and young people.¹⁴ Concerns have been raised about the potential health risk associated with vaping, as well as the impact it may have on smoking rates.¹⁵ Based on trends from 2018 to 2022, current e-cigarette use increased by 40% over the period.¹⁶ Between 2020 and 2021, the number of calls to Australian Poisons Information Centres that were related to e-cigarettes more than doubled. Toddlers and adults are the targets of the majority of poisonings.¹⁷

There is strong evidence that using e-cigarettes with nicotine enhances dependence on e-cigarettes. According to results from cross-sectional research, reliance on nicotine-containing e-cigarettes may encourage users to access later generation/more powerful devices. According to the 2019 National Drug Strategy household survey, the proportion of e-cigarette usage rose from 8.8% to 11.3%.¹⁸

How e-cigarettes are being marketed is a significant concern globally and is likely to be a factor driving the uptake of the products.¹⁹ The use of colours and flavours seemed to be deceptively attractive along with the packaging and shapes of the device. Several studies have found that e-cigarette flavours like candy or fruit may be more appealing to young people due to their sweet taste.²⁰ Compared to teens and young adults who have never smoked, e-cigarette users reported significantly higher thoughts of trying cigarettes and higher intentions of smoking in the next six months than those who had never used e-cigarettes.²¹ Strong evidence to support the causal relationship was discovered by the

¹³ Department of Health and Aged Care (2022) Chief Medical Officer Professor Paul Kelly and Professor Anne Kelso's press conference on 23 June 2022. Interview Transcript. Australian Government Canberra [Online]<https://www.dailytelegraph.com.au/journalists/catie-mcleod> <https://www.health.gov.au/news/chief-medical-officer-professor-paul-kelly-and-professor-anne-kelsos-press-conference-on-23-june-2022#:~:text=E%2Dcigarettes%2Deliver%2Dsubstances%2Ddirectly,'re%2Dlabelled%2Dnicotine%2Dfree>

¹⁴ Fedunik-Hofman, L (2020). The health risk of Vaping. Australian Academy of Science. [The health risks of vaping - Curious \(science.org.au\)](https://www.science.org.au/curious/science/the-health-risks-of-vaping)

¹⁵ Queensland Government (2023) [Electronic cigarettes](#). The health of Queenslanders: Report of Chief Health Officer Queensland

¹⁶ Queensland Government, The health of Queenslanders: Report of Chief Health Officer Queensland (2023). Electronic Cigarettes. <https://www.choreport.health.qld.gov.au/our-lifestyle/electronic-cigarettes#:~:text=In%202022%3A%201%2019.7%25%20Queensland%20adults%20had%20ever,e-cigarette%20use%20increased%2040%25%20over%20the%20time%20period>

¹⁷ National Health and Medical Research Council (NHMRC), (2022) 2022 CEO Statement on Electronic Cigarettes. Australian Government. <https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement>

¹⁸ National Health and Medical Research Council (NHMRC), (2022) 2022 CEO Statement on Electronic Cigarettes. Australian Government. <https://www.nhmrc.gov.au/health-advice/all-topics/electronic-cigarettes/ceo-statement>

¹⁹ AIHW (2020). National Drug Strategy 2876 Household Survey 2019. Australian Government.

<https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/data>

²⁰ Gilley, M., Beno, S. (2020) Vaping implications for children and youth. *Current Opinion in Pediatrics* 32(3):p 343-348, June 2020. https://journals.lww.com/co-pediatrics/Abstract/2020/06000/Vaping_implications_for_children_and_youth.3.aspx?context=LatestArticles.

²¹ Jongenelis M.I., Jardine E., Kameron C, et al. (2019) E-cigarette use is associated with susceptibility to tobacco use among Australian young adults. *Int J Drug Policy*. 74:266–73.

researchers, and the association persisted even when other characteristics, such as smoking susceptibility, peer pressure, and advertising exposure, were taken into account.²²

b. Risks of vaping harmful chemicals, including nicotine, to individuals, communities, and the health system

The e-cigarettes produce aerosols by heating a liquid containing flavourings, chemicals, and nicotine depending on the product. The liquids typically contain nicotine, artificial flavourings, and various chemicals, some of which are toxic.²³ The liquid is heated into an aerosol, or vapour, and inhaled into the user's lungs. Some vapes are designed to look like tobacco cigarettes, cigars, and pipes, while others resemble everyday items, such as pens and USBs.²⁴ Even though e-cigarettes do not contain tobacco many liquids still contain nicotine, which is highly addictive, as well as other chemicals.

These aerosols contain and emit many harmful compounds, including:

- Formaldehyde and acrolein, which can cause unalterable lung damage
- Propylene glycol, which is toxic to human cells
- Nicotine is highly addictive and can harm the still-developing adolescent brain, particularly in areas that control attention, learning, mood, and behavioural control.²⁵

Young people who vape nicotine are exposed to a toxic chemical that can harm adolescent brain development (the brain continues to develop until the age of 25) and cause nicotine dependence.²⁶ This exposure to vaping, nicotine, and chemicals negatively affects the area of the brain that regulates attention, learning, mood, and impulse control.²⁷

There are reports of patients who, through vaping, have rapidly progressed to acute respiratory failure requiring intubation and mechanical ventilation.²⁸ The cardiovascular, respiratory, immune, and reproductive systems are just a few of the physiological systems that are impacted adversely by nicotine. Nicotine can also impair lung and kidney function.²⁹ Smokers and vapers are more likely to

²² Lu, D. (2021) International research shows 'strong evidence' linking vaping to cigarette smoking. The Guardian [online] <https://www.theguardian.com/australia-news/2021/sep/09/international-research-shows-strong-evidence-linking-vaping-to-cigarette-smoking>

²³ Centers for Disease Control and Prevention. (2018). Smoking and tobacco use; electronic cigarettes.

²⁴ National Institute on Drug Abuse (NIDA.) (2020) Vaping Devices (Electronic Cigarettes) DrugFacts. <http://nida.nih.gov/publications/drugfacts/vaping-devices-electronic-cigarettes>

²⁵ Lung Foundation Australia (2023) E-cigarettes and vaping <https://lungfoundation.com.au/lung-health/protecting-your-lungs/e-cigarettes-and-vaping/#:~:text=Formaldehyde%20and%20acrolein%2C%20which%20can,learning%2C%20mood%20and%20behavioural%20control>

²⁶ Pepper J.K., MacMonegle A.J., Nonnemaker J.M..(2019) Adolescents' Use of Basic, Intermediate, and Advanced Device Types for Vaping. *Nicotine & Tobacco Research* 21(1):55-62.

²⁷ Wood, L., Greenhalgh, E.M., & Hanley-Jones, S.(2019) 5.4 Adolescence and brain maturation. In Scollo, MM and Winstanley, MH [editors]. *Tobacco in Australia: Facts and issues*. Melbourne: Cancer Council Victoria; Available from: <https://www.tobaccoinaustralia.org.au/chapter-5-uptake/5-4-adolescence-and-brain-maturation>

²⁸ Centre for Disease Control and Prevention (CDC). (2019). Severe pulmonary disease associated with use of e-cigarette products. <https://emergency.cdc.gov/han/han00421.asp>

²⁹ Marques, P., Piqueras, L., & Sanz, M.J. (2021). An updated overview of *e-cigarette* impact on human health. *Respir Res* 22, 151. <https://doi.org/10.1186/s12931-021-01737-5>

contract SARS-CoV-2 infections or experience negative consequences if they contract COVID-19, according to reports.³⁰

Recommendations

- Where e-cigarettes are recommended to help prevent smoking, restrict the availability of e-cigarette (with nicotine) by mandating they must be prescribed by a clinician and dispensed by a pharmacist
- Regulate e-cigarettes so that all available over-the-counter e-cigarettes imported into Australia are free from nicotine and any other potentially harmful chemicals
- Regulate that e-cigarette are free from fancy and gimmick packaging and use flavours that are neutral
- Investigate the drivers for young people to take up vaping particularly the claims that children require e-cigarettes to manage stress and anxiety.

³⁰ Majmundar A., Allem, J.P., Cruz T.B., Unger J.B.(2020) Public health concerns and unsubstantiated claims at the intersection of vaping and COVID-19. *Nicotine Tob Res.*;22(9):1667–8.

2. Opportunities to increase:

a. awareness of the harmful effects of e-cigarette use (with and without nicotine) on an individual's health, and the effectiveness of preventative activities

There is an increasing need to monitor public understanding of the complete and comparative harms of e-cigarettes to initiate appropriate educational campaigns to address knowledge deficits. This strategy would target social media platforms where vaping is promoted and discussed.^{31 32} These campaigns would help counter the discussions on social media and help inform the public about the dangers of the products.

The pandemic has led to a substantial increase in psychological distress (i.e., anxiety, depression, stress) hence a potential preference for e-cigarette use as a coping strategy for psychological distress among youth. Children who were experiencing mental health issues were found to be more likely to vape, however, the use of vapes as a coping mechanism was found to worsen these symptoms when experiencing withdrawals.³³

Educating parents, teachers, coaches, and other influencers of youth about the risks of e-cigarette use among youth and young adults can be used as a major preventive method to control the use of vaping.³⁴ Ensuring that healthcare professionals are also adequately educated about the dangers and risks of vaping to children and young adults is another major step in ensuring that emerging health issues are addressed and healthcare workers are equipped to lead informed care interventions. Providing more adequate resources for healthcare professionals to draw upon regarding vaping methods, products, and patterns of use, the recommended interventions and the effectiveness and safety of e-cigarettes to aid in quitting smoking could help fill in the gap between the system and the community.³⁵ Healthcare professionals are frequently asked many questions about e-cigarettes because they are a new product.³⁶ These frequently involve inquiries about the dangers of using e-cigarettes and whether these products can aid people in quitting smoking. As secure and successful cessation aids, no e-cigarettes have been approved.

ACN believes that addressing the rise in e-cigarettes must be dealt with in a way that does not target those young people who have taken up vaping, but rather as an issue that is managed by Australia-wide

³¹ Daniel Jr, E. S., Crawford Jackson, E. C., & Westerman, D. K. (2018). The influence of social media influencers: Understanding online vaping communities and parasocial interaction through the lens of Taylor's six-segment strategy wheel. *Journal of Interactive Advertising*, 18(2), 96-109.

³² Massey, Z. B., Brockenberry, L. O., & Harrell, P. T. (2021). Vaping, smartphones, and social media use among young adults: Snapchat is the platform of choice for young adult vapers. *Addictive behaviors*, 112, 106576. <https://doi.org/10.1016/j.addbeh.2020.106576>

³³ NSW Government (2022) Do you know what your kids are vaping? NSW Government – Education. <https://prod65.education.nsw.gov.au/news/latest-news/do-you-know-what-your-kids-are-vaping>.

³⁴ Elders, M. J. (1999). The call to action. *Child Abuse & Neglect*, 23(10), 1003-1009.

³⁵ Metcalf, M., Rossie, K., Stokes, K., & Tanner, B. (2022). Health care professionals' clinical skills to address vaping and e-cigarette use by patients: Needs and Interest Questionnaire Study. *JMIR Formative Research*, 6(4), e32242.

³⁶ Hunter, A., Yargawa, J., Notley, C., Ussher, M., Bobak, A., Murray, R. L., ... & Cooper, S. (2021). Healthcare professionals' beliefs, attitudes, knowledge, and behavior around vaping in pregnancy and postpartum: a qualitative study. *Nicotine and Tobacco Research*, 23(3), 471-478.

controls over the import and sale of e-cigarettes and their vaping liquids. For those young people who have become addicted to e-cigarettes and their ability to reduce the user's stress, two important actions must be taken. Research to recognise and understand the drivers of stress for young people which, in turn, will help develop a coordinated response to manage stress and anxiety effectively. Readily accessible support services must be in place to allow young people to escape the addiction to vaping. Banning all vapes and not providing support to manage withdrawals will only increase the purchase of vapes through social media sites and websites.³⁷

ACN believes in restorative justice and recommends support and care for young users rather than implementing any punitive actions that blame the users for an environment that has enabled young people to find alternative ways to manage their stress and calm their anxieties. All strategies to reduce the use of vapes must be approached through a restorative and healthcare-centred lens. ACN encourages the Queensland Government to consider integrated models of justice for young people who are using vaping products when considering measures to reduce the prevalence of these products. Through a justice, model layered with public health, socioecological, and restorative frameworks, true equity and measurable healthcare outcomes may be achieved.³⁸

Recommendations:

- Provide \$250,000 of funding to educate the workforce
- Fund research into the drivers of stress and anxiety in young people
- Plan and implement support services for young people wanting to quit
- Plan and implement programs to identify and support young people who are experiencing stress and anxiety in life generally and in school environments specifically.

³⁷ Cancer Council NSW (2022). New research finds Aussie teens find illegal vapes easy to access. <https://www.cancerCouncil.com.au/news/new-research-finds-aussie-teens-find-illegal-vapes-easy-to-access/>

³⁸ April, K., Schrader, S.W., Walker, T.E., Francis, R.M., Glynn, H., Gordon, D.M, (2023) Conceptualizing juvenile justice reform: Integrating the public health, social ecological, and restorative justice models. *Children and Youth Services Review* 148(106887). <https://doi.org/10.1016/j.childyouth.2023.106887>

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

To help with the implementation of effective interventions, we need to better understand any important distinctions between young vapers and non-vapers as well as the risk factors that contribute to casual, frequent, and long-term vaping. Reports that young people are accessing vaping as a means to reduce stress and anxiety are concerning. Understanding the drivers of stress and anxiety impacting young people is the first step towards reducing the use of young people's use of e-cigarettes.³⁹

Implementing comprehensive nicotine control, including legislation, public awareness campaigns, and monitoring and enforcement, must continue to be a top priority for public health.⁴⁰ The use of e-cigarettes is a rapidly evolving area of public health research and policy development.⁴¹

Implementing a comprehensive plan to address e-cigarettes that will prevent negative effects and carefully take the risks to children and young adults into account. This can be accomplished by including e-cigarettes in conventional cigarette smoking-related policies and initiatives at the national, state, local, and territorial levels. Conveying consistent and fact-based information regarding the dangers of using e-cigarettes and the impact of second-hand aerosol.⁴² As there are no specific programs designed to help the community quit vaping, programs such as Toolkits should be recommended. Further education campaigns to stop young people from taking up vaping could be developed based on the NSW Health model⁴³

Recommendations:

- Fund public engagement campaigns with target populations, including campaigns for use on social media platforms
- Provide resources and training for health professionals such as doctors, nurse practitioners, nurses, and pharmacists on the impacts and harms of vaping
- Plan and implement programs to identify and support young people who are experiencing stress and anxiety in life generally and in school environments specifically.

³⁹ Jha, V., & Kraguljac, A. (2021). Assessing the Social Influences, Self-Esteem, and Stress of High School Students Who Vape. *The Yale journal of biology and medicine*, 94(1), 95–106.

⁴⁰ Watts, C., Egger, S., Dessaix, A., Brooks, A., Jenkinson, E., Grogan, P., & Freeman, B. (2022). 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*.

⁴¹ Watts, C., Egger, S., Dessaix, A., Brooks, A., Jenkinson, E., Grogan, P., & Freeman, B. (2022). 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*.

⁴² Centers for Disease Control and Prevention (CDC) (2018). Smoking and tobacco use: Electronic Cigarettes. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm

⁴³ NSW Health (2022) Campaign to stop young people vaping. https://www.health.nsw.gov.au/news/Pages/20220316_07.aspx

3. Consideration of waste management and environmental impacts of E-cigarettes

ACN supports all actions that will lead to emissions reduction.^{44 45} This is Australia's contribution to a healthcare-driven global response to climate change. Nurses recognise the role they play in advocating for change that will benefit the environment⁴⁶ and as such, ACN advocates strongly for banning all one-use-only vaping devices that, at present, are difficult and dangerous to dispose of.

As vapes become more popular and as sales rise, so do the environmental threats they pose - plastic trash, electronic and other hazardous waste. The e-cigarette is a sophisticated electrical device made out of lithium-ion batteries, strong polymers, computer circuits, and heavy metals like lead or mercury. At present, there are few opportunities to recycle lithium-ion batteries in Australia.

Due to the complexity of the device, many vapes are dumped in landfills or are just left outside where they can release metals, battery acid, and nicotine into the environment.⁴⁷ While e-cigarettes continue to be sold, there must be systems in place in all jurisdictions to ensure they can be disposed of safely and effectively.⁴⁸

Recommendations:

- Ban single-use vaping devices to minimise waste, particularly from plastics and batteries
- Implement collection services to ensure waste from e-cigarettes is collected and disposed of safely.

⁴⁴ Australian College of Nursing (ACN). (2021). 'Ethical leadership in emissions reduction – Position Statement', ACN, Canberra.

⁴⁵ Australian College of Nursing (ACN), 2022. 'Position Statement: Reimagining the role of nursing in emissions reduction' - A Position Statement by ACN, ACN, Canberra.

⁴⁶ Butterfield, P., Leffers, J., & Vásquez, M. D. (2021). Nursing's pivotal role in global climate action. *BMJ*, 373.

⁴⁷ Janet Aitchison (2023). E-cigarettes are an environmental triple threat. Clean Up Australia <https://www.cleanup.org.au/e-cigarettes>

⁴⁸ Leaver, Kate (2023). Growing volume of vape waste a challenge with recycling costly and dangerous. ABC Radio Perth. <https://www.abc.net.au/news/2023-03-19/vape-disposal-waste-environment/102104946>

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

All levels of government must work together to ban the import of e-cigarettes, particularly those containing nicotine and other chemicals considered harmful to health. Australia has retained a substantially restrictive regulatory framework for NVPs. Most Australian jurisdictions allow the use and sale of nicotine-free vaping products under the same restrictions that apply to combustible cigarettes.⁴⁹ The regulation of e-cigarettes in Australia is currently a shared responsibility of both the Commonwealth and state and territory governments, through laws across tobacco control, therapeutic goods, poisons, and consumer protection.

The Australian Therapeutic Goods Administration (TGA) has not approved any nicotine vaping product as a safe and effective smoking cessation aid. As of 1 October 2021, Australians require a prescription to legally access nicotine vaping products as an unapproved medicine. The scheduling change closes a regulatory gap between Commonwealth and state and territory laws and is intended to enable current smokers to receive health advice on the use and risks associated with vaping and prevent uptake by non-smokers, especially young people.⁵⁰

The findings of this review suggest that point-of-sale communications about e-cigarettes in real-world and online pharmacies should be restricted to those permitted for tobacco products under Article 13 of the Framework Convention on Tobacco Control to prevent unintended consequences.⁵¹ Review results related to internet-related contacts (such as social media and websites) highlight the importance of developing effective strategies to prevent exposure to e-cigarette advertising in the online context.⁵²

Recommendations:

- Work with all states, territories, and federal authorities to drive and create an Australia-wide set of regulations to manage the import, sale and use of e-cigarettes
- Support more research into the uptake of vaping and any potential correlation to COVID
- Fund research into the harms of vaping, with emphasis on the impacts on young children.
- Plan and fund prevention programs driven by frontline workers such as nurses and teachers

⁴⁹ Gartner C.E., Bromberg M.(2018) One does not simply sell e-cigarettes in Australia: An overview of Australian e-cigarette regulations. In: Gruszczynski L., editor. *The Regulation of E-Cigarettes: International, European and National Challenges*. Edward Elgar Publishing; Cheltenham, UK.

⁵⁰ Therapeutic Goods Administration. (2021) Nicotine Vaping Laws are Changing. Australian Government Department of Health and Aged Care <https://www.tga.gov.au/blogs/tga-topics/nicotine-vaping-laws-are-changing>

⁵¹ World Health Organization. (n.d.) Banning tobacco advertising, promotion and sponsorship. <https://www.who.int/europe/activities/banning-tobacco-advertising-sponsorship-and-promotion>

⁵² McCausland, K., Maycock, B., Leaver, T., et al. (2019) The messages presented in electronic cigarette-related social media promotions and discussion: scoping review. *Journal of Medical Internet Research*. 21(2) doi: 2891 <http://dx.doi.org/10.2196/11953>

As non-nicotine vaping products are unregulated and have no proven therapeutic value, removing them from the market and prohibiting their sale would help control commercial access to e-cigarettes containing nicotine.⁵³ While education approaches are often used to reduce adverse health behaviours, unless the policy underpins a plan to reduce youth vaping, health education will not have a measurable impact.¹⁷

About ACN

The Australian College of Nursing (ACN) is the national voice of the nursing profession focused on policy, advocacy, and education to advance the status, recognition, and respect of nurses. We are committed to our intent of 'Shaping Health, Advancing Nursing' to enhance the health care of all Australians.

Our membership, events, and higher education services allow nurses at all levels to stay informed, connected, and inspired. We are excited to lead change and create a strong, collective voice for our profession by bringing together thousands of extraordinary nurses from across the country. ACN is also an Australian member of the International Council of Nurses headquartered in Geneva in collaboration with the Australian Nursing and Midwifery Federation (ANMF).

⁵³ Watts, C., Egger, S., Dessaix, A., Brooks, A., Jenkinson, E., Grogan, P., & Freeman, B. (2022). 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*.