

**Submission
No 40**

E-CIGARETTE REGULATION AND COMPLIANCE IN NEW SOUTH WALES

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SUBMISSION TO THE INQUIRY INTO E-CIGARETTE REGULATION AND COMPLIANCE IN NSW

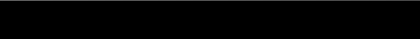
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ABOUT THE MATILDA CENTRE

[The Matilda Centre for Research in Mental Health and Substance Use \(the Matilda Centre\)](#) is a Flagship Centre at the University of Sydney that delivers research programs to prevent, treat and reduce substance use and mental disorders.

Our mission is to improve health and wellbeing through research conducted in collaboration with multi-disciplinary international experts, consumers, carers, policy makers, and other key stakeholders. We achieve this by:

- bringing together globally recognised national and international researchers with a shared commitment to the prevention, early intervention and treatment of mental and substance use disorders
- building the evidence base for a thriving and empowered youth and
- engaging with decision makers and lived experience to enact real change

With a focus on prevention, treatment and epidemiology, our research streams facilitate knowledge exchange and develop strategic partnerships with the aim of increasing the knowledge base around the effective prevention and treatment of mental and substance use disorders.

EXECUTIVE SUMMARY

This submission draws on the latest scientific evidence to respond to the three areas identified in the Inquiry's Terms of Reference:

- A. The current situation in NSW regarding:
 - i. the prevalence of e-cigarette use among children and young people
 - ii. health risks associated with e-cigarette products
 - iii. the impact of programs and services aimed at preventing uptake or continuing use of e-cigarettes
- B. NSW's current regulatory framework, in particular:
 - i. its effectiveness in reducing harm from e-cigarette use
 - ii. its effectiveness in preventing illegal supply
 - iii. challenges to enforcement and compliance and ways to overcome these
- C. How NSW can work with the Federal Government to implement reforms on e-cigarette products.

We highlight that **rates of e-cigarette use among Australian young people have increased in recent years**, with recent data showing 26% of 14-17-year-olds had tried e-cigarettes and the average age of first use was 14 [1]. Current (past 30-day) e-cigarette use ranged between 10-15% among 14-17-year-olds across studies [1, 2] and was approximately 17% among 16-24-year-olds [3]. **This warrants urgent attention given the significant known and emerging health risks and other related harms.** For example, there is conclusive clinical evidence that e-cigarette use can cause poisoning and inhalation toxicity (including seizures), dependence, and e-cigarette or vaping product use-associated lung injury (EVALI), along with growing evidence supporting associations between e-cigarette use and mental ill-health, headaches, coughs, nausea, dizziness, throat irritation, dental problems, and poor cardiovascular health [4-8]. There is also emerging evidence linking youth e-cigarette use with the initiation of tobacco cigarette smoking [9], putting young people at risk of the substantial short- and long-term harms and burden of disease that tobacco can cause [10]. Indeed, recent Australian data shows the prevalence of tobacco cigarette smoking is now, for the first time in decades, increasing among young people [2]. Beyond the health harms, we also highlight the various social, economic and environmental harms of e-cigarette use, including increased crime, educational impacts, costs to the Australian community, damage to relationships and increased environmental waste.

An important observation is the limited number of rigorous evaluations of programs and services aimed at preventing the uptake, or reducing the use, of e-cigarettes among young people. Randomised controlled trials (RCTs) offer the highest quality scientific evidence and are the gold standard approach for determining whether a program or service is effective. Examples of programs and services currently being implemented in NSW include the NSW Health and the NSW Department of Education the '*Get the Facts – Vaping Toolkit*' and '*Do you know what you are vaping?*' campaign, Western Sydney Local Health District's Prevention Education Research Unit (PERU) '*Unpacking vaping*' online course, and *Blurred Minds*, however these programs lack robust evidence of effectiveness. To our knowledge, there are only two Australian RCTs of youth e-cigarette interventions underway. This includes a school-based e-cigarette prevention program known as the *OurFutures Vaping Program* [11], and a text-message based intervention [12]. However, results on the impact on vaping are pending.

In our submission we emphasise that **NSW's current regulatory framework, and the Federal Government's proposed reforms, primarily focus on supply-reduction, yet demand-reduction strategies are of critical importance.** Previous research relating to other substance use demonstrates that a prohibitionist approach risks increasing crime, desirability, an explosive black market and driving youth towards other substances [13]. There is also emerging evidence for this in relation to e-cigarettes, with international studies linking e-cigarette flavour restrictions to

increases in tobacco cigarette sales [14]. Similarly, preliminary evidence shows that vape detection devices are both expensive [15] and limited in their efficacy [16], and that punitive disciplinary measures (e.g., detentions, suspensions and expulsions) can cause young people to further disengage from their education and exacerbate e-cigarette/tobacco use [17, 18]. Effective behavioural interventions that empower young people with knowledge and skills to make informed and positive health decisions are vital to ensure that fewer take up e-cigarette use (primary prevention); and, that those already using e-cigarettes reduce their use and seek help earlier, before dependency develops (secondary prevention).

We highlight the **strong potential of school-based preventive interventions to address e-cigarette use**, and specifically draw attention to the [OurFutures](#) prevention model which was developed by our team at the Matilda Centre with national and international experts in the field. This model is grounded in a social influence and harm-minimisation approach [19] and has been rigorously evaluated in 8 RCTs, yielding some of the largest and most sustained effect sizes reported for the prevention of substance use globally [20-23]. Notably, an independent review found *OurFutures* to be one of only two school-based alcohol and other drug education programs in Australia with a strong evidence base [24].

We have now capitalised on the effective *OurFutures* prevention model and applied it to e-cigarettes in the [OurFutures Vaping Program](#). The intervention is based on principles of effective tobacco and e-cigarette prevention programs and was co-designed with students and education experts. The program is being evaluated in the first, and currently only, RCT of a school-based e-cigarette prevention program in Australia (ACTRN12623000022662) [11]. The landmark trial includes 40 schools and >5,000 students across NSW, WA and QLD. Already delivered to >2,600 students, the intervention has demonstrated feasibility and acceptability, and results regarding the efficacy of the program at preventing, or reducing, e-cigarette use, along with improving secondary outcomes (e.g., tobacco smoking, knowledge about e-cigarettes/tobacco cigarettes, behavioural intentions, motives and attitudes related to e-cigarettes and mental health) will be available in 2024. We propose that, **if found to be effective, the *OurFutures Vaping Program* should be utilised in combination with the Government's supply-reduction strategies to curb e-cigarette use among young people.**

Finally, we offer support for the NSW Government's investment in detecting the sale of illegal vapes and support for young people who are addicted to e-cigarettes, however, we highlight that a key gap in this plan exists. That is, **investment in prevention** research and evidence-based interventions to future-proof Australia's youth. This is an efficient and economical approach, particularly if focused on the school context.

Based on this evidence, we outline four key recommendations and priorities for addressing e-cigarette use among young people in NSW:

- 1. We recommend e-cigarette prevention programs with robust evidence of effectiveness are invested in and made immediately available to all schools in NSW.*
- 2. We recommend support for targeted research among young people from regional/remote areas, lower socio-economic backgrounds, and those who are Aboriginal and Torres Strait Islander, to ensure prevention programs adequately address the unique needs of diverse communities.*
- 3. We recommend schools avoid: i) punitive disciplinary measures (e.g., suspensions and expulsions) against students caught using e-cigarettes; and, ii) implementing strategies, such as vape detectors, without evidence of effectiveness. Instead, students should be diverted to educative interventions and professional treatment programs.*
- 4. We recommend investment in a state-wide youth e-cigarette monitoring program to enable trends in e-cigarette use and related harms to be tracked and responded to efficiently and effectively.*

RESPONSE TO TERMS OF REFERENCE

A. The current situation in NSW regarding:

i. The prevalence of e-cigarette use among children and young people

Australian population surveys, including the National Drug Strategy Household Survey (NDSHS) and the Australian Secondary School Students Alcohol and Drug (ASSAD) survey, experienced disruptions to data collection during the COVID-19 pandemic period. As such, the latest results from the 2022 NDSHS and ASSAD survey will not be available until 2024. The last NDSHS in 2019 found that 10% of 14-17 year olds and 20% of 18-24 year olds reported having tried e-cigarettes [25]. The last ASSAD survey in 2017 found that approximately 14% of 12-17 year olds had tried an e-cigarette, of which 32% had used an e-cigarette within the past month [26].

More recent, albeit non-representative, data collected from >4200 students aged 14-17 across New South Wales (NSW), Western Australia (WA) and Queensland (QLD) between July-December 2022 found 26% had used e-cigarettes, with the mean age of first use being 14 [1]. E-cigarette use in the prior 12-months was reported by 20% of respondents, current use (preceding 30 days) by 10%, and current regular use (preceding 30 days and at least weekly frequency) by 6%. This study also explored the sociodemographic characteristics of the e-cigarette users, finding that the prevalence of past 12-month use was higher for boys and non-binary young people, than for girls. The prevalence of current regular use was higher for non-binary participants and those who preferred not to report their gender, compared to girls. However, rates of e-cigarette use did not significantly differ by socio-economic status or geographical remoteness.

Other population survey data, drawn from five capital cities (Sydney, Melbourne, Brisbane, Perth and Adelaide), has explored trends in current (past month) e-cigarette use over time [2]. Sharp increases in the prevalence of current e-cigarette use were observed among young people in recent years. Specifically, between 2020 and January-March 2023, the rate of e-cigarette use among 14-17-year-olds increased from 2% to 15%, and among 18-24-year-olds, from 6% to 20%. Notably, despite consistently low rates of tobacco cigarette smoking among youth in recent decades [2, 25], this study also showed smoking prevalence has trended upwards among 14-17-year-olds since 2020, with 13% of 14-17-year-olds reporting current smoking in January-March 2023 [2]. Dual use of e-cigarettes and tobacco cigarettes was also most common among this age group.

Finally, data from a NSW Population Health Survey (SAPHaRI) conducted in 2022 [3] estimated that approximately 18% of those aged 16 or over had ever-used an e-cigarette. Additionally, in comparison to other age groups, those aged 16-24 demonstrated the highest current (17%) and ever-use (43%) of e-cigarettes, both of which significantly increased from previous years (11% current use and 33% ever-use in 2020/2021).

Overall, this evidence indicates that e-cigarette use among young people in NSW has increased in recent years and warrants urgent attention.

ii. Health risks associated with e-cigarette products

A recent umbrella and systematic review of e-cigarette health outcomes highlighted a range of adverse effects [4]. Conclusive evidence showed nicotine e-cigarette use can cause poisoning and inhalation toxicity (including seizures), dependence, and e-cigarette or vaping product use-associated lung injury (EVALI). Evidence was also found for adverse impacts on cardiovascular

health (including heart rate and blood pressure) as well as minor events such as headaches, coughs, nausea, dizziness, and throat irritation. Other reviews have shown that e-cigarette users are at greater risk of periodontal and peri-implant disease, along with oral cancer [5].

There is also emerging evidence suggesting e-cigarette use adversely impacts the mental health of young people. For example, recent reviews have found adolescent e-cigarette use to be associated with depressive and anxiety symptoms, perceived stress, suicidality, disordered eating, conduct disorder, ADHD, and impulsivity [7, 8]. Among young adults, e-cigarette use has been associated with internalising and externalising problems, depression, increased perceptions of stress, and sensation seeking [8]. Preliminary evidence also suggests there may be an association between second-hand exposure to e-cigarette emissions and mental health problems [27]. Specifically, the odds of severe internalising mental health problems were equivalent between second-hand e-cigarette emission and second-hand tobacco smoke, both of which were significantly greater than unexposed nonusers. However, much of the existing evidence linking e-cigarette use and mental health relies on cross-sectional studies and more research is needed to understand the directionality of these relationships and establish causality.

Importantly, given e-cigarette use is a relatively recent phenomenon, many of the long-term health effects are still yet to be known. Of particular concern is the finding that young people who use e-cigarettes are 2-3 times more likely to take up tobacco smoking, compared to those who don't use e-cigarettes [9]. This puts them at risk of the substantial short- and long-term harms and burden of disease that tobacco can cause. Indeed, despite our world-leading success in tobacco control, tobacco remains the leading preventable cause of death and disability in Australia [10]. This burden is now set to rise as tobacco smoking increases among young people for the first time in decades [2].

iii. The impact of programs and services aimed at preventing uptake or continuing use of e-cigarettes

The gold standard approach for determining whether a program or service is effective at preventing the uptake, or reducing the use, of e-cigarettes are randomised controlled trials (RCT). RCTs offer the highest quality scientific evidence as they control for the influence of extraneous variables. Without conducting an RCT, there cannot be certainty that any change in the outcome is due to exposure to the intervention. Unfortunately, very few youth e-cigarette prevention or cessation programs and services have been subject to this level of evaluation worldwide [28, 29]. To our knowledge, there are only two RCTs of youth e-cigarette interventions underway in Australia [11, 12], however, findings are not yet available.

Examples of youth e-cigarette prevention programs and services being used in NSW include:

- The NSW Health and the NSW Department of Education released the 'Get the Facts – Vaping Toolkit' and 'Do you know what you are vaping?' campaign. This campaign was developed in a bid to dispel misinformation about e-cigarettes and provide educational resources for young people, parents and carers, teachers and schools, and health professionals. The campaign is targeted towards secondary students and aims to help them understand the dangers of e-cigarette use, particularly in relation to healthy brain development. The campaign is evidence-based and has been developed in consultation with young people, parents, creative partners, education partners and healthcare organisations. However, to our knowledge, there is no data available to indicate the efficacy or impact of either the toolkit or campaign.
- Western Sydney Local Health District's Prevention Education Research Unit (PERU)

'Unpacking vaping' online course. This course is designed to increase students' awareness and knowledge of e-cigarette use; however, to our knowledge, there has not been a rigorous evaluation of the program undertaken to provide evidence of effectiveness.

- Blurred Minds. This is a curriculum aligned program that uses games, videos, quizzes and in-class activities to educate students, with the aim of preventing e-cigarette use. To our knowledge, there has not been a rigorous evaluation of the program undertaken to provide evidence of effectiveness.

B. NSW's current regulatory framework

On 1st October 2021, e-cigarettes and e-liquids containing nicotine were classified as a prescription-only medicine in Australia, available to individuals over the age of 18 via community pharmacies or online via the Therapeutic Goods Administration (TGA) personal importation scheme. In NSW, e-cigarettes that do not contain nicotine remain legal for retailers to sell to individuals over the age of 18; however, it is illegal to sell e-cigarettes (regardless of nicotine content) or e-cigarette accessories to individuals under the age of 18. It is also illegal to display, advertise or promote e-cigarettes, or to use e-cigarettes in smoke-free areas.

On 2nd May 2023, the Federal Government announced a suite of proposed reforms, however the date of implementation is still yet to be known. The reforms include:

- Banning single-use disposable e-cigarettes
- E-cigarettes to only be available in pharmacies (i.e., no retail stores)
- Pharmaceutical-style/plain packaging
- Restrictions on flavours
- Quality standards, including being free of TGA-listed dangerous chemicals and limits on nicotine concentrations
- Increased border control to detect illegal imports of non-prescription e-cigarettes
- Authorisation for all GPs to provide scripts for patients to obtain e-cigarettes for smoking cessation
- Investment in education and support programs

In tandem with the Federal Government's announcement, the NSW Education Minister announced a plan to secure and install 40,000 vape and THC detectors in NSW public school bathrooms.

On 25 September 2023, the NSW Government committed \$6.8M to a crackdown on the sale of illegal vapes and increased support for young people who are addicted to e-cigarettes.

i. its effectiveness in reducing harm from e-cigarette use

The current regulatory approach has by and large failed its objective to prevent e-cigarette use and associated harms among young people. In addition to the known and emerging physical and mental health harms outlined in Section A(ii), it is also important to acknowledge the various social, economic and environmental harms of e-cigarette use, such as:

- Increased crime – Growing rates of e-cigarette use and nicotine dependence among youth results in more young people engaging in illegal activity to obtain e-cigarettes, more retailers illegally selling e-cigarettes, and increased risk of young people turning towards other substance use [9, 13, 30-34].

- Educational impacts – E-cigarette use has been linked with poorer academic achievement [35]. Additionally, schools often adopt punitive disciplinary measures, such as detentions, suspensions and expulsions, against students caught using e-cigarettes. This can cause young people to further disengage from their education and exacerbate use [17, 18].
- Economic impacts – It is estimated the tobacco costs the Australian community \$137B annually [36], a cost that will rise as dual smoking and e-cigarette use becomes more common among youth.
- Damage to relationships – E-cigarette use may lead to loss of trust or judgement from peers, siblings, parents or coworkers [37, 38].
- Damage to the environment – E-cigarettes lead to plastic waste from the device, electronic waste from the batteries, and hazardous chemical waste from the e-liquid [39].

Whilst the new reforms aim to address and reduce these harms, the effectiveness is yet to be known. In fact, previous evidence in relation to other substances suggests a prohibitionist approach risks increasing crime, desirability, an explosive black market and driving youth towards other substances [13]. There is also emerging international evidence [14] that suggests that restricting e-cigarette flavours is associated with an increase in tobacco cigarette sales, putting young people at risk of the substantial tobacco harms and burden of disease. Similarly, preliminary evidence shows that vape detection devices are both expensive [15] and limited in their efficacy due to the discrete nature of vaping [16]. This suggests that we should not rely on prohibitionist and supply-reduction approaches. Responses must aim to reduce uptake among young people with effective behavioural interventions.

ii. its effectiveness in preventing illegal supply

Despite the announced reforms and increasing monitoring of, and penalties for, illegal e-cigarette sales [40], e-cigarette retailers are thriving and continuing to open new stores, particularly in areas frequented by young people [31, 32]. Young people report easy access to e-cigarettes via peers, under the counter sales at convenience stores and tobacconists, and illegal online purchases [30]. In fact, regardless of age, most e-cigarette users access nicotine e-cigarettes through illicit (i.e., non-prescription) sources [41], meaning there are limited to no quality control standards, amplifying risk of harm.

iii. challenges to enforcement and compliance and ways to overcome these

A key challenge to enforcement and compliance under the current regulations is the large-scale importation of e-cigarettes. Imported from countries such as China, the current restrictions are circumvented by excluding nicotine from the listed ingredients. Despite this, chemical testing has shown that the vast majority of these e-cigarettes do contain nicotine, often at potent levels [42, 43]. Even with the announced reforms including a tightening of border control and ban on all disposable e-cigarettes, the sheer volume of e-cigarettes being imported, and move towards stealth designs (e.g., e-cigarettes made to appear like highlighters, USBs and concealed within clothing) [44, 45], means illicit e-cigarettes are bound to slip through.

Other challenges include difficulty accessing e-cigarettes via the prescription-only model, meaning that route is rarely used [41]. This issue is similarly targeted within the new reforms, which aim to make it easier to obtain a prescription for therapeutic use. However, most young people are not using e-cigarettes for smoking cessation. Instead, primary motives include curiosity, the attractive flavours, peer use, and the false belief that e-cigarettes offer mental health benefits [25, 46, 47]. The prescription-only model may therefore remain rarely used among this group, and the reforms

may inadvertently fuel a black market of flavoured e-cigarettes that will still appeal to young people. Moreover, much of this appeal is generated through the promotion of e-cigarettes on social media [48], another strategy employed to circumvent current advertising restrictions, or illegal advertising on/around e-cigarette retailers [49].

Given the likelihood of continued challenges to enforcement and compliance of the new reforms, which largely focus on supply-reduction, simultaneously implementing demand-reduction strategies will be critical. By empowering young people with knowledge and resistance skills to make informed and positive health decisions, we can ensure that fewer take up e-cigarette use (primary prevention); and, that those already using e-cigarettes reduce their use and seek help earlier, before dependency develops (secondary prevention).

Schools are an ideal setting to deliver such prevention initiatives as they provide the greatest opportunity to reach large numbers of young people, via mandatory drug education [50], and allow intervention prior to the onset of harmful use [26]. Yet, the current evidence base is limited, with only a few effective school-based drug prevention programs available worldwide, most of which only show modest and short-term effects [51] and a lack of rigorously evaluated programs specifically targeting e-cigarettes [28]. Moreover, evidence suggests that less than one in four teachers implement an alcohol and other drug prevention program with evidence of effectiveness [52, 53], highlighting the need to guide schools and communities in identifying and delivering evidence-based prevention initiatives.

An innovative approach to preventing e-cigarette use:

Our team at the Matilda Centre for Research in Mental Health and Substance Use have led the development and rigorous evaluation of the [OurFutures](#) prevention model (formerly 'Climate Schools') in 8 randomised controlled trials (the gold-standard of evidence), including 240 schools and >21,000 students across Australia. The innovative model is based on a social influence and harm-minimisation approach to prevention [19], utilising online cartoon storyboards and interactive activities to engage and educate students. The world-first program of research spans 21 years, >20 institutions and >60 researchers globally, and has yielded some of the largest and most sustained effect sizes reported for the prevention of substance use. Within Australia, an independent review found OurFutures to be one of only two school-based alcohol and other drug education programs with a strong evidence base [15]. Specifically, *OurFutures* has been shown to be more effective than health education as usual in reducing alcohol consumption, binge drinking, cannabis use, MDMA use, harms from substance use, intentions to use substances and increasing knowledge about substance use up to 3 years following the intervention [20-22]. Notably, reductions in harmful alcohol use have also been observed up to age 20 (7 years post-intervention) [23].

Capitalising on this success, we applied the effective *OurFutures* prevention model to e-cigarettes via the [OurFutures Vaping Program](#). The program includes 4x40min lessons, simultaneously targeting e-cigarettes and tobacco cigarettes, via a web-based cartoon component (approx. 20mins; Fig. 1) and class activities (e.g., quizzes, discussions, role plays). After rigorous peer review, funding was awarded by the Medical Research Future Fund (MRFF; APP2023130) to evaluate the efficacy and cost-effectiveness of the intervention. This is the first, and currently only RCT of a school-based e-cigarette prevention program in Australia, and the landmark trial is presently underway in 40 schools and >5,000 students across NSW, WA and QLD (ACTRN12623000022662) [11]. To date, the intervention has been delivered to >2,600 students and has been well-received by both students and teachers, demonstrating feasibility and



Figure 1. *OurFutures: Vaping cartoon*

acceptability. Results regarding the effect of the intervention on e-cigarette use, as well as secondary outcomes including tobacco cigarette use, knowledge about e-cigarettes/tobacco cigarettes, intentions to use e-cigarettes/tobacco cigarettes, motives and attitudes relating to e-cigarettes, self-efficacy to resist peer pressure and refuse e-cigarettes, mental health, quality of life, and resource utilisation will be available in 2024. If found to be effective, this program serves as one example of a school-based e-cigarette prevention initiative that should be utilised in combination with the supply-reduction strategies to curb e-cigarette use among young people.

C. How NSW can work with the Federal Government to implement reforms on e-cigarette products

The NSW Government's investment in detecting the sale of illegal vapes and support for young people who are addicted to e-cigarettes represents an important step in facilitating the Federal reforms. However, a key gap in this plan remains. That is, **investment in prevention**. It is well established that prevention is more cost-effective than treatment, with school-based alcohol and other drug prevention offering an estimated \$18 return per \$1 invested [54]. An efficient and economical approach is therefore to future-proof Australia's youth through a coordinated e-cigarette control plan that includes investment in school-based e-cigarette prevention research and evidence-based interventions.

As such, our key recommendations and priorities for addressing e-cigarette use among young people in NSW include:

Recommendation 1: We recommend e-cigarette prevention programs with robust evidence of effectiveness are invested in and made immediately available to all schools in NSW.

These programs should be added to the Student Wellbeing Programs Catalogue in a timely manner, with linked funding to support implementation in schools across NSW.

While the RCTs required to generate the highest quality evidence can take time, there is one RCT of a school-based e-cigarette preventive interventions already underway in Australia (The OurFutures Vaping Trial [11]). In the interim, schools can access evidence-based resources related to the prevention of e-cigarette use among young people via the [Positive Choices](#) portal. The *Positive Choices* portal helps educators to easily identify the level of evidence behind the resources using an [Evidence Rating System](#). Resources with the strongest level of evidence, including support via multiple RCTs and/or a systematic review, are signified by a 'Platinum Medal'. More broadly, 360edge offer packages to schools encompassing needs analyses, school policy reviews and evidence-based advice and support as part of their [Schools of Substance program](#).

Recommendation 2: We recommend support for targeted research among young people from regional/remote areas, lower socio-economic backgrounds, and those who are Aboriginal and Torres Strait Islander, to ensure prevention programs adequately address the unique needs of diverse communities.

Young people from regional/remote areas, lower socio-economic backgrounds, and those who are Aboriginal and Torres Strait Islander, face unique barriers to health (e.g., more limited access to health services). This has resulted in disparities in health outcomes in the past, including higher rates of cigarette smoking and risky alcohol use. Moreover, these young people are often underrepresented in health research, contributing to inequity. It is therefore imperative that students from diverse backgrounds have equal opportunities to contribute to, and benefit from, health research.

We recommend support for rigorous evaluations of the efficacy and effectiveness of existing e-cigarette prevention programs among diverse communities, as well as the development of tailored interventions, should existing programs present limited efficacy/effectiveness. Such tailored interventions should be: i) co-designed with young people from these diverse communities; ii) built on principles of effective tobacco and other substance use prevention; and, iii) aligned with the health education curriculum.

Recommendation 3: We recommend schools avoid: i) punitive disciplinary measures (e.g., suspensions and expulsions) against students caught using e-cigarettes; and, ii) implementing strategies, such as vape detectors, without evidence of effectiveness. Instead, students should be diverted to educative interventions and professional treatment programs.

This includes the new digital platform, enhancements to the iCanQuit platform and an online learning module for youth services across the state funded by the NSW Government's \$2.5M investment over the next 12-months, as well as investment in preventive education initiatives.

Recommendation 4: We recommend investment in a state-wide youth e-cigarette monitoring program.

Conducting regular, representative, and detailed surveys among young people will allow trends in e-cigarette use and related harms to be monitored and responded to efficiently and effectively. This includes capturing the comprehensive, longitudinal data required to better understand the directionality and potential causality of relationships between e-cigarette use, mental health and other substance use, along with information about emerging e-cigarette technologies and e-liquids to inform prevention/treatment programs and supply-reduction strategies.

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