



FINAL REPORT
of the
SELECT COMMITTEE ON E-CIGARETTES
FEBRUARY 2016

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1. EXECUTIVE SUMMARY

The Parliamentary Select Committee was established pursuant to a resolution passed in the House of Assembly of the South Australian Parliament on the 17 June 2015 to inquire into and examine possible legislative recommendations on electronic cigarettes, (also known as e-cigarettes, personalised vaporisers, vaporisers, hookah pens, electronic nicotine delivery systems (ENDS) or electronic non-nicotine delivery systems (ENNDS) amongst other names). The committee was formed to investigate any potential legislative and regulatory controls that should be applied to the advertising, sale and use of e-cigarettes.

Electronic cigarettes, which will also be referred to in this report as e-cigarettes and personal vaporisers, are a rapidly evolving technology whereby a user inhales a heated vapour which may contain propylene glycol, vegetal glycerine, food flavouring and sometimes nicotine (called e-liquid or e-juice) through a battery operated device. These devices are available in a diverse range of shapes and sizes, some are customisable, and/or reusable and others are disposable.

The committee invited submissions over a six week period between 11 July 2015 and 21 August 2015 both in writing and online via <https://www.parliament.sa.gov.au/>. The committee was advertised locally in *The Advertiser* and nationally in *The Australian* on 11 July 2015 as well as through Twitter. A wide range of witnesses were invited before the committee with eleven people representing nine organisations presenting. With this evidence and the scientific literature the committee has found a range of attitudes in the community. However, consistent across these otherwise diverse views was the belief of the importance of public and individual health. Although submitters and witnesses disagreed on how best to achieve the maximal public health benefit, this concern was paramount in almost all submissions.

The committee acknowledges that there is support for e-cigarettes internationally, particularly among public health organisations and groups in the United States and the United Kingdom. However, the World Health Organisation has encouraged a precautionary approach to e-cigarettes in response to the lack of evidence of safety of the products and the potential for undermining of tobacco control efforts. It is noteworthy that smoking prevalence in Australia has decreased to the lowest recorded rate¹ (12.8%) and the lowest take up rate ever recorded amongst our teenagers; only 5.1% of Australians aged 12 to 17 are current smokers².

The committee has viewed and used the evidence provided to produce what we believe to be recommendations to achieve the best potential public health outcome. We are aware that e-cigarettes are still a new product to the market and that much is still unknown about the short, and in particular, long term health outcomes associated with exposure to e-cigarettes, components and associated aerosols.

¹ Australian Institute of Health and Welfare (2014), National Drug Strategy Household Survey detailed report 2013. Available from: <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129549848> accessed 1/2/16

² Centre for Behavioural Research in Cancer, Cancer Council Victoria, (October 2015), Australian secondary school students' use of tobacco in 2014. Available from: [http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/BCBF6B2C638E1202CA257ACD0020E35C/\\$File/Tobacco%20Report%202014.PDF](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/BCBF6B2C638E1202CA257ACD0020E35C/$File/Tobacco%20Report%202014.PDF) accessed 1/2/16

In light of this, the committee has formulated twenty recommendations covering all perceivable issues associated with e-cigarette use, exposure, sale and promotion. These recommendations aim to:

- Protect children and non-smokers from second hand e-cigarette vapour
- Limit use of e-cigarettes to adults for the purposes of tobacco smoking cessation
- Limit point of sale of e-cigarette products
- Minimise appeal of e-cigarette devices and flavours to non-smokers and children
- Limit relapse into tobacco use by e-cigarette users and promote cessation of e-cigarette devices
- Minimise accidents and/or harm-promoting misuse associated with e-cigarettes devices and peripherals
- Encourage research into the health effects of e-cigarettes and their components, particularly in potentially vulnerable populations

Smoking continues to be a leading cause of preventable death in Australia. These recommendations support existing tobacco controls but are open to the potential benefits that e-cigarettes could contribute to reducing the tobacco smoking rate. The committee encourages product developers to pursue Therapeutic Goods Administration approvals to demonstrate product safety and efficacy. This precautionary approach is based on the continual emerging scientific evidence and lack of scientific consensus as to the safety of e-cigarettes. The regulations recommended in this report do not constitute a ban on e-cigarettes or their components and peripherals. These recommendations, while recognising the possible role that e-cigarettes may play as a smoking cessation device for some adult smokers, address the issues associated with the product in the interests of public health.

2. INTRODUCTION BY THE CHAIR

Electronic cigarettes are battery operated devices that vaporise liquid into a fine aerosol, which is inhaled into the lungs. The devices are designed to simulate the look and feel of smoking. Smoking tobacco remains a leading cause of premature death in Australia. According to the Oxford Medical Companion, cited in the World Health Organisation Report on the Global Tobacco Epidemic 2008³, tobacco cigarettes are the only legal consumer product that, when used entirely as intended, will kill half of users. Considerable efforts have been made over the last several decades to minimise the harms associated with smoking, but cessation remains the only way to remove the risks associated with this behaviour. Unfortunately, due to the addictive properties of nicotine in tobacco, many smokers find it extremely difficult to quit smoking despite the knowledge that it may ultimately lead to their death and also harm those around them.

E-cigarettes are often marketed as healthier alternatives to conventional tobacco cigarettes; however, conclusive evidence on the health risks or benefits of these systems is not likely to be available for years or even decades. A 2014 World Health Organisation report recommended that e-cigarettes should be regulated to protect public health and ensure that the public has reliable information about risks and benefits.

It is important that we understand the health risks associated with e-cigarettes to individuals and the community, as well as the potential for their use in reducing smoking prevalence. Currently, due to lack of law governing these products, people may, for example, vape on the bus or in a workplace, whereas laws have been in place for decades preventing people from smoking in these very same spaces.

E-cigarettes could play a role in supporting smokers to quit, but it is vital that this does not harm health or impede existing tobacco control efforts. Tobacco smoking in South Australia is currently at the lowest rate we have seen. In 2014 only 12.8% of the population identified as daily smokers, and for the first time less than 10% (9.9%) of young people (age 15 to 29 years) identified as daily smokers. Australia's tobacco smoking rate is amongst the lowest in the world, with South Australia representative of this.

With this in mind, the committee's aim was to view the evidence regarding e-cigarettes bearing in mind the necessity to:

- minimise potential health risks to e-cigarette users and non-users
- impede the promotion to, and uptake of e-cigarettes by non-smokers, pregnant women and youth
- prohibit unproven health claims being made about e-cigarettes
- protect existing tobacco control efforts from commercial and other vested interests of the tobacco industry

³ World Health Organization. (2008). WHO report on the global tobacco epidemic, available from: www.who.int/tobacco/mpower/mpower_report_tobacco_crisis_2008.pdf accessed 14/11/2015

The committee received 142 submissions from interested persons and organisations across the State with several interstate and international submissions. Two site visits to ‘vape shops’ enabled the committee to engage more fully with the e-cigarette community and better understand the motivations and processes involved in deciding to use e-cigarettes. Eleven witnesses presented to the committee representing the government, business sector, research and academic bodies, public health organisations, medical community and the e-cigarette and tobacco industries.

I thank all who took time to forward submissions and to appear before the committee giving evidence. I would also like to take this opportunity to thank my fellow committee members for their time and diligence as well as the support staff for their commitment to the inquiry.

The committee considers that regulating e-cigarettes offers the community protection from the unknown potential harms associated with e-cigarettes and facilitates and enables informed consumer (current adult smokers) choice. With this in mind, and the extensive and diverse input, the committee is of the view that the recommendations presented within this paper are based on a robust, valid and constructive framework.

Annabel Digance, MP

Chair

24 February 2015

3. ESTABLISHMENT OF THE COMMITTEE

3.1. Appointment of the Committee

On 17 June 2015 the House of Assembly passed a resolution, on the motion of Ms Digance, Member for Elder, for the appointment of a select committee to inquire into E-cigarettes and to examine possible legislative framework.

3.2. Membership

The Membership of the Select Committee prescribed by the resolution of the House of Assembly was as follows –

Ms A. Digance MP	Member for Elder	Chair
Ms N. Cook MP	Member for Fisher	
Mr C. Picton MP	Member for Kaurua	
Mr D. Speirs MP	Member for Bright	
Mr V. Tarzia MP	Member for Hartley	

Ms Digance was elected Chair of the Select Committee. Mr Shannon Riggs (Parliamentary Officer) was assigned as Secretary. Research Officer, Dr Helen Popple, was appointed by the Committee on 2 July 2015.

3.3. Terms of Reference

The Select Committee's terms of reference, as agreed by the House of Assembly, were:

That this House establish a Select Committee to investigate and report on E-cigarettes and any legislative and regulatory controls that should be applied to the advertising, sale and use of personal vaporisers; and in particular –

- (a) the potential for personal vaporisers to reduce tobacco smoking prevalence and harms;
- (b) the potential risks of these products to individual and population health from vapour emissions, poisoning and the reduced impact of tobacco control measures;

- (c) make recommendations on approaches to the regulation of personal vaporisers under the *Tobacco Products Regulation Act 1997*, including addressing the following areas –
 - i. availability and supply;
 - ii. sales to minors;
 - iii. advertising and promotion;
 - iv. use in smoke-free areas;
 - v. product safety and quality control; and
- (d) any other relevant matters.

The motion called on the Select Committee to report on 18 November 2015.

3.4. Disclosure of Evidence

Pursuant to Standing Order 339 the House ordered that the Select Committee have power to authorise the disclosure or publication, as it sees fit, of any evidence presented to the committee prior to such evidence being reported to the House.

3.5. Conduct of Inquiry

The Select Committee received 142 written submissions from individuals and organisations. A full list of those providing written submissions is attached as Appendix 3.

Oral evidence was heard from eleven witnesses. A list of those who appeared before the Select Committee to give evidence is attached as Appendix 4.

A list of papers received by the Select Committee, either as part of formal presentations to the committee or in response to questions put by the committee is attached in Appendix 5.

On 2 July 2015 the Select Committee resolved that all evidence received be published on the internet and made public, providing that, previous to this, witnesses had an opportunity to correct the Hansard record of their evidence. Transcripts and submissions can be found at <http://www.parliament.sa.gov.au> (look under the 'Committees' menu for 'E-cigarettes').

The Select Committee met on 5 occasions to receive oral evidence, to consider written submissions and/or deliberate on the Select Committee's reports. The procedural meetings of the Select Committee and hearings were held in Adelaide.

Throughout the life of the Select Committee, evidence has been provided by interested parties, including individuals, business owners, peak body organisations, professional associations and government agencies. All submissions, oral and written, have provided a valuable and diverse source of evidence for which the Select Committee is appreciative. The Select Committee also

accepted invitations to visit two vape stores to gain a better understanding of point of sale of e-cigarette products.

The Select Committee would like to thank all those people who gave their time and shared their expertise and experience with the Select Committee, enabling an understanding of the industry's issues and challenges.

4. SUMMARY LIST OF RECOMMENDATIONS

The Select Committee makes twenty recommendations with the intention to:

- Maximise protection of public health
- Sustain downward trend in tobacco smoking prevalence
- Support tobacco control measures
- Promote responsible business practice
- Promote rigorous and ongoing research

These recommendations are broadly categorised into seven groups:

- Sale
- Use
- Promotion
- Product safety and quality control
- Enforcement
- Research
- Taxation

Sale

Recommendation 1: Prohibit sale of e-cigarettes and peripherals to minors, under 18 years of age, in line with the *Tobacco Products Regulation Act 1997*

Recommendation 2: Prohibit sale of e-cigarette devices that may specifically appeal to minors, for example, devices that have child-like aspects such as diamantes and cartoon characters

Recommendation 3: Prohibit sale of e-cigarette peripherals that may specifically appeal to minors, such as sweet and confectionery flavoured e-liquids (regardless of cessation potential in adults)

Recommendation 4: Require a licence to sell e-cigarettes and/or components – this licence may not be held in conjunction with a licence to sell tobacco products or any other products

Recommendation 5: Prohibit indirect sales (such as sales online or by telephone) in line with the *Tobacco Products Regulation Act 1997*

Use

Recommendation 6: Prohibit use in areas that are smoke-free under the *Tobacco Products Regulation Act 1997*

Promotion

Recommendation 7: Prohibit advertising and promotion of e-cigarettes, e-liquid and peripheral componentry in line with the *Tobacco Products Regulation Act 1997*

Recommendation 8: Prohibit specials and pricing promotions of e-cigarettes and peripherals in line with the *Tobacco Products Regulation Act 1997*

Recommendation 9: Permit businesses to provide signage and promotion of their store, but not products in line with the *Tobacco Products Regulation Act 1997*

Recommendation 10: Liquid for use in e-cigarettes mandated to be labelled as *e-liquid*

Product Safety and Quality Control

Recommendation 11: Require child-proof caps and tamper-evident packaging of e-liquid

Recommendation 12: Require health warnings to be visible on e-cigarette device and e-liquid packaging

Recommendation 13: Require ingredients to be clearly listed on e-liquid packaging

Enforcement

Recommendation 14: SA Health and SA Police to be given the power and remit to ensure compliance with regulations according to the *Tobacco Products Regulation Act 1997* and any new framework to cover e-cigarettes

Recommendation 15: State Government through SA Health to enforce regulation regarding nicotine

Recommendation 16: State Government to appeal to Federal Government for more stringent enforcement of regulation regarding nicotine importation, sale and possession to prevent its recreational use across Australia

Research

Recommendation 17: Support further research into the short and long term effects of vaporised nicotine, propylene glycol and vegetal glycerine

Recommendation 18: Support further research into the safety of e-liquid flavours for inhalation

Recommendation 19: Support further research into the specific effects of e-cigarettes on pregnant women and foetuses, infants and children, young people, people with respiratory illness and chronic illness, and the general population

Taxation

Recommendation 20: State Government to consider taxation of e-cigarettes and peripheral products

5. RECOMMENDATIONS AND RATIONALE

The Select Committee makes twenty recommendations with the intention to:

- Maximise protection of the community in the interests of public health
- Sustain the downward trend in tobacco smoking prevalence
- Support tobacco control measures
- Promote responsible business practice
- Promote rigorous and much needed research

These recommendations can be broadly categorised into seven groups: sale, use, promotion, product safety, enforcement, research and taxation.

SALE RESTRICTIONS

RECOMMENDATION 1: Prohibit sale of e-cigarettes and peripherals to minors, under 18 years of age, in line with the *Tobacco Products Regulation Act 1997*

The aim of this recommendation is to protect the health of children. Infant, child and adolescent brains are particularly affected by nicotine^{4,5,6,7}. Effects on younger people may have more profound impacts as maturation of the neural circuitry is not complete and the associated plasticity of the brain makes it more vulnerable to drug-induced alteration^{8,9}. Young people are more likely to develop stronger nicotine dependency than those who start later in life due to the addictive properties of nicotine affecting their immature brain¹⁰. Aside from nicotine, the potential effects of other chemicals in e-liquid upon children are unestablished and as such it appears reasonable to adopt a precautionary approach to protect young peoples' health.

It has been illegal to sell tobacco products to minors for decades; pre-dating the *Tobacco Products Regulation Act 1997*. This was amongst the earliest restrictions placed upon tobacco products.

⁴ Rogers, J. M. (2008). Tobacco and pregnancy: overview of exposures and effects. *Birth Defects Research Part C: Embryo Today: Reviews*, 84(1), 1-15.

⁵ Prokhorov, A. V., Winickoff, J. P., Ahluwalia, J. S., Ossip-Klein, D., Tanski, S., Lando, H. A., & Ford, K. H. (2006). Youth tobacco use: a global perspective for child health care clinicians. *Pediatrics*, 118(3), e890-e903.

⁶ Kum-Nji, P., Meloy, L., & Herrod, H. G. (2006). Environmental tobacco smoke exposure: prevalence and mechanisms of causation of infections in children. *Pediatrics*, 117(5), 1745-1754.

⁷ Mathers, M., Toumbourou, J. W., Catalano, R. F., Williams, J., & Patton, G. C. (2006). Consequences of youth tobacco use: a review of prospective behavioural studies. *Addiction*, 101(7), 948-958.

⁸ Dwyer, J. B., McQuown, S. C., & Leslie, F. M. (2009). The dynamic effects of nicotine on the developing brain. *Pharmacology & Therapeutics*, 122(2), 125-139.

⁹ Ernst, M., Moolchan, E. T., & Robinson, M. L. (2001). Behavioral and neural consequences of prenatal exposure to nicotine. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(6), 630-641.

¹⁰ Mermelstein, R. (2003). Teen smoking cessation. *Tobacco Control*, 12(suppl 1), i25-i34.

Some research has suggested that young people who use e-cigarettes may be more likely to progress into using tobacco products^{11,12}. Prohibiting e-cigarette sales to young people is likely to prevent substantial uptake of e-cigarette use within this population. Evidence received by the committee showed across the board support for this recommendation.

For these reasons the committee recommends prohibiting sale of e-cigarettes to minors in line with the *Tobacco Products Regulation Act 1997*.

RECOMMENDATION 2: Prohibit sale of e-cigarette devices that may specifically appeal to minors, for example, devices that have child-like aspects such as diamantes and cartoon characters

The effects of e-cigarette vapour are still unknown¹³. In particular, the specific effects on children and young people are unclear. For this reason the committee recommends a precautionary approach to protect public health. Devices that may particularly appeal to children due to use of youth culture icons or cartoons from music, film, television, or other celebrity, glitter and diamante or other child-like embellishments should be prohibited on e-cigarette devices and peripherals. There is no evidence to suggest that these device embellishments add to the device's ability to aid smoking cessation.

The recommendation of the committee is that devices that include cartoon figures, youth culture icons, diamantes and other child-like embellishments be prohibited from sale in South Australia.

RECOMMENDATION 3: Prohibit sale of e-cigarette peripherals that may specifically appeal to minors, such as sweet and confectionery flavoured e-liquids (regardless of cessation potential in adults)

The wide range of e-cigarette liquid flavours on offer is promoted as an attraction for smokers to try e-cigarettes and may contribute to the motivation to quit tobacco¹⁴. A study in 2014 found more than 7760 e-liquid flavours available for consumers to buy online with more than 240 new flavour options entering the market each month¹⁵. Some of these flavours mimic confectionery and candy

¹¹ Chapman, S. L. C., & Wu, L. T. (2014). E-cigarette prevalence and correlates of use among adolescents versus adults: a review and comparison. *Journal of Psychiatric Research*, 54, 43-54

¹² Riker, C. A., Lee, K., Darville, A., & Hahn, E. J. (2012). E-cigarettes: promise or peril? *Nursing Clinics of North America*, 47(1), 159-171.

¹³ Williams, R. J., & Knight, R. (2015). Insights in Public Health Electronic Cigarettes: Marketing to Hawai'i's Adolescents. *Hawai'i Journal of Medicine & Public Health*, 74(2), 66.

¹⁴ Farsalinos, K. E., Romagna, G., Tsiapras, D., Kyrzopoulos, S., Spyrou, A., & Voudris, V. (2013). Impact of flavour variability on electronic cigarette use experience: an internet survey. *International Journal of Environmental Research and Public Health*, 10(12), 7272-7282

¹⁵ Zhu, S. H., Sun, J. Y., Bonnevie, E., Cummins, S. E., Gamst, A., Yin, L., & Lee, M. (2014). Four hundred and sixty brands of e-cigarettes and counting: implications for product regulation. *Tobacco Control*, 23(suppl 3), iii3-iii9.

flavours¹⁶ which are traditionally marketed towards children. While some research suggests that confectionery flavoured e-liquids do not appeal to children, others dispute this^{17,18}. As such there is debate as to whether flavoured e-liquids also motivate children (both those who already smoke and non-smokers) to try e-cigarettes and maintain using them^{19,20,21,22}. Flavoured tobacco products were generally found to appeal to youth^{23,24}. Currently, only menthol flavour and tobacco cigarettes are legally available for sale to those over 18 years of age in South Australia.

Due to the contested nature of the science and the potential for risk to children from the uptake of e-cigarette use, the committee recommends e-liquids that would traditionally be marketed to children as confectionery products, and sweet, candy flavours be prohibited. A range of flavours would still be permitted as long as these were proven to be safe for inhalation and not designed to appeal to children in their original form (i.e. mojito vs. mojito flavour – mojitos cocktails are not marketed to appeal to children, as such mojito flavour e-liquid would be permitted. Chocolate vs. chocolate flavour e-liquid – chocolate may be marketed to appeal to children; as such chocolate flavour e-liquid would not be permitted).

RECOMMENDATION 4: Require a licence to sell e-cigarettes and/or components – this licence may not be held in conjunction with a licence to sell tobacco products or any other products

Stores that comply with regulations should not be prevented from conducting business. To aid compliance and monitor growth of the industry the committee recommends that stores wishing to sell electronic cigarettes and peripherals require a licence in order to conduct business.

For a retailer to be eligible for this licence they must demonstrate they are a standalone, specialist e-cigarette store. The purpose of this restriction is to encourage e-cigarette users to not revert to use of tobacco cigarettes due to the ease of purchasing both products at one point of sale. Ideally the

¹⁶ Tierney, P. A., Karpinski, C. D., Brown, J. E., Luo, W., & Pankow, J. F. (2015). Flavour chemicals in electronic cigarette fluids. *Tobacco Control*.

¹⁷ Etter, J. F., & Bullen, C. (2011). Electronic cigarette: users profile, utilization, satisfaction and perceived efficacy. *Addiction*, 106(11), 2017-2028.

¹⁸ Shiffman, S., Sembower, M. A., Pillitteri, J. L., Gerlach, K. K., & Gitchell, J. G. (2015). The impact of flavor descriptors on nonsmoking teens' and adult smokers' interest in electronic cigarettes. *Nicotine & Tobacco Research*.

¹⁹ E-cigarettes and youth: an examination of the public health and policy concerns over increased rates of youth use and exposure to e-cigarettes. Chicago, IL, USA: Respiratory Health Association, 2013.

²⁰ E-cigarettes [Fact Sheet]. Elk Grove Village, IL, USA: American Academy of Pediatrics, 2014. http://www2.aap.org/richmondcenter/pdfs/ECigarette_handout.pdf accessed 15/11/2015

²¹ Richtel, M. (2014). E-cigarette makers are in an arms race for exotic vapor flavors. *New York Times*, 15.

²² Wills, T. A., Knight, R., Sargent, J. D., Williams, R. J., & Pegano, I. (2014). Variables Discriminating Electronic Cigarette Use and Dual Use in a Diverse Sample of Adolescents. *Pediatrics*.

²³ Choi, K., Fabian, L., Mottey, N., Corbett, A., & Forster, J. (2012). Young adults' favorable perceptions of snus, dissolvable tobacco products, and electronic cigarettes: findings from a focus group study. *American Journal of Public Health*, 102(11), 2088-2093.

²⁴ Villanti, A. C., Richardson, A., Vallone, D. M., & Rath, J. M. (2013). Flavored tobacco product use among US young adults. *American Journal of Preventive Medicine*, 44(4), 388-391.

committee would like tobacco products to be limited to speciality tobacconists with the same conditions.

The committee recommends that as e-cigarette stores would be standalone stores not selling any other products and only accessible to adults, they should not be prevented from displaying products for sale (in the way that tobacco products are required to be) but such displays must not be visible from outside the store. Point of sale displays would not be banned under this recommendation.

RECOMMENDATION 5: Prohibit indirect sales (such as sales online or by telephone) in line with the *Tobacco Products Regulation Act 1997*

When selling through indirect means (such as online or telephone sales) it is not possible to verify the purchaser's age and as such the retailer risks contravening Recommendation 1, prohibiting sales to minors. Tobacco products are currently banned for indirect sale.

Therefore, the committee recommends that e-cigarette and peripheral sales by indirect means (such as online or telephone sales) are banned in line with the *Tobacco Products Regulation Act 1997*.

The committee also recommends that e-cigarettes be banned for sale through vending machines and/or by way of 'pop up' shops.

USE RESTRICTIONS

RECOMMENDATION 6: Prohibit use in areas that are smoke-free under the Tobacco Products Regulation Act 1997

While e-cigarettes *may* be safer than tobacco products for smokers, the health effects of first, second and third hand vapour are as yet unclear. Some studies report findings which indicate that second-hand vapour has limited or no effect on bystanders²⁵, while others find potential for risk²⁶, especially to pregnant women and children²⁷. Scientific literature has shown inconsistent and inconclusive findings²⁸. It will be many years before the long-term effects of second hand vapour exposure will be known. Foetuses, infants, children and adolescence are most likely to be negatively affected by emissions of e-cigarettes²⁹. These vulnerable populations are particularly deserving of consistent public health protection as they may not otherwise be able to simply avoid e-cigarette vapour exposure.

Exposure to e-cigarettes by young people may increase the social acceptability of smoking-like behaviours in this age-group leading to renormalisation of these behaviours³⁰. By limiting vaping to existing smoking areas, visibility of e-cigarettes may be reduced with knock-on effect of reduced potential uptake of e-cigarettes and preservation of public health³¹. It is noteworthy that in South Australia we are now experiencing the lowest smoking take up rates ever by our youth; only 9.9% of 15 to 29 year olds smoke daily, this must be supported³².

Products may currently be marketed to consumers as a practical and fashionable way to circumvent existing smoke-free laws^{33,34}. This complicates the enforcement of smoke-free policy and is likely to

²⁵ McAuley, T. R., Hopke, P. K., Zhao, J., & Babaian, S. (2012). Comparison of the effects of e-cigarette vapor and cigarette smoke on indoor air quality. *Inhalation Toxicology*, 24(12), 850-857.

²⁶ Schripp, T., Markewitz, D., Uhde, E., & Salthammer, T. (2013). Does e-cigarette consumption cause passive vaping? *Indoor Air*, 23(1), 25-31.

²⁷ Czogala, J., Goniewicz, M. L., Fidelus, B., Zielinska-Danch, W., Travers, M. J., & Sobczak, A. (2014). Secondhand exposure to vapors from electronic cigarettes. *Nicotine & Tobacco Research*, 16(6), 655-662.

²⁸ Schraufnagel, D. E., Blasi, F., Drummond, M. B., Lam, D. C., Latif, E., Rosen, M. J., & Van Zyl-Smit, R. (2014). Electronic cigarettes. A position statement of the forum of international respiratory societies. *American Journal of Respiratory and Critical Care Medicine*, 190(6), 611-618.

²⁹ Dwyer, J. B., McQuown, S. C., & Leslie, F. M. (2009). The dynamic effects of nicotine on the developing brain. *Pharmacology & Therapeutics*, 122(2), 125-139.

³⁰ Eureka Strategic Research. Youth tobacco prevention research project. Undertaken for the Australian Government Department of Health and Ageing. Canberra: Department of Health and Ageing, 2005. Available from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-pub-tobacco-literature-cnt.htm>

³¹ Smart R and Stoduto G. Interventions by students in friends' alcohol, tobacco, and drug use. *Journal of Drug Education*, 1997;27:213-22. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/9366127>

³² Dono, J., Bowden, J. and Miller, C., (April 2015) Key Smoking Statistics for SA – 2014, South Australian Health and Medical Research Institute.

³³ Ayers, J. W., Ribisl, K. M., & Brownstein, J. S. (2011). Tracking the rise in popularity of electronic nicotine delivery systems (electronic cigarettes) using search query surveillance. *American Journal of Preventive Medicine*, 40(4), 448-453.

³⁴ Rooke, C., & Amos, A. (2014). News media representations of electronic cigarettes: an analysis of newspaper coverage in the UK and Scotland. *Tobacco Control*, 23(6), 507-512.

become more challenging with the expansion of an unregulated e-cigarette market. The hospitality sector has called for simplification of the rules by managing e-cigarettes as tobacco products.

It is acknowledged by the committee that confining e-cigarette users to smoking areas exposes these non-cigarette users to cigarette smoke. However, evidence suggests that most e-cigarette users are ex-smokers or most likely, dual users (users of tobacco and e-cigarettes)³⁵ as such this recommendation still acts to protect public health. The committee would encourage premises to provide space for e-cigarette users, although this would not be compulsory.

E-cigarette stores provide users with an environment to learn about e-cigarette devices and peripherals and receive information about their safe use. Adults who enter e-cigarette stores are aware of the products available in store and would be capable of leaving if uncomfortable.

As such the committee recommends that in e-cigarette shops (standalone stores, selling no other products, licenced, not selling products to minors or products that would appeal to minors) retailers and customers are exempted from regulation which would limit e-cigarette use in smoke-free areas under the *Tobacco Products Regulation Act 1997*.

The committee recommends that e-cigarette use be prohibited in smoke-free areas such as in public indoor areas and workplaces, around children's play equipment, in cars where minors are present, and all other areas prescribed by the *Tobacco Products Regulation Act 1997*. The committee recommends that (nicotine-free) e-cigarette use is permitted within e-cigarette stores for the purpose of customer trial.

³⁵ McNeill, A., Brose, L. S., Calder, R., Hitchman, S. C., Hajek, P., & McRobbie, H. (2015). E-cigarettes: an evidence update. A report commissioned by Public Health England. *Public Health England*.

PROMOTION RESTRICTIONS

RECOMMENDATION 7: Prohibit advertising and promotion of e-cigarettes, e-liquid and peripheral componentry in line with the *Tobacco Products Regulation Act 1997*

Advertising and promotion of goods and services are used by business to increase consumer awareness and grow sales. Marketing strategies to promote e-cigarettes internationally utilise youth culture and glamour to increase product appeal, at times imitating historical tobacco advertising³⁶. Exposure to tobacco marketing is related to initiation and progression to smoking among young people³⁷, it may be extrapolated that the same processes could occur in the e-cigarette market if it remains unregulated^{38,39,40}. Currently, the scientific evidence regarding the safety of e-cigarettes to adult populations is unclear^{41,42}. Similarly to tobacco, it will be years before the long-term implications of e-cigarette use are known⁴³. Internationally, e-cigarettes have been promoted for dual-use with tobacco and for use in smoke-free areas which may undermine tobacco control efforts and lead to a renormalisation of smoking⁴⁴. Encouraging wholesale growth of the e-cigarette market in light of the lack of evidence of their safety, especially to non-smokers, could arguably be irresponsible. However, there is potential for current heavy tobacco smokers to benefit from reduction of, or abstinence from, tobacco use and substitution through use of e-cigarettes^{45,46}. The committee, in line with the World Health Organisation, urges that complete tobacco and e-cigarette cessation remains the best option for positive health outcomes⁴⁷.

³⁶ de Andrade, M., Hastings, G., & Angus, K. (2013). Promotion of electronic cigarettes: tobacco marketing reinvented? *British Medical Journal*, 347.

³⁷ Audrain-McGovern, J., Rodriguez, D., Patel, V., Faith, M. S., Rodgers, K., & Cuevas, J. (2006). How do psychological factors influence adolescent smoking progression? The evidence for indirect effects through tobacco advertising receptivity. *Pediatrics*, 117(4), 1216-1225.

³⁸ Ganz, O., Cantrell, J., Moon-Howard, J., Aidala, A., Kirchner, T. R., & Vallone, D. (2015). Electronic cigarette advertising at the point-of-sale: a gap in tobacco control research. *Tobacco Control*, 24(e1), e110-e112.

³⁹ Tavernise S. Rise is seen in students who use e-cigarettes. *New York Times*. 2013: Sep 5 2013.

⁴⁰ Williams, R. J., & Knight, R. (2015). Insights in Public Health Electronic Cigarettes: Marketing to Hawai 'i's Adolescents. *Hawai'i Journal of Medicine & Public Health*, 74(2), 66.

⁴¹ Callahan-Lyon, P. (2014). Electronic cigarettes: human health effects. *Tobacco Control*, 23 (suppl 2), ii36-ii40.

⁴² Odum, L. E., O'Dell, K. A., & Schepers, J. S. (2012). Electronic Cigarettes Do They Have a Role in Smoking Cessation? *Journal of Pharmacy Practice*, 25(6), 611-614.

⁴³ Musk, A. W., & De Klerk, N. H. (2003). History of tobacco and health. *Respirology*, 8(3), 286-290.

⁴⁴ Cataldo, J. K., Petersen, A. B., Hunter, M., Wang, J., & Sheon, N. (2015). E-cigarette Marketing and Older Smokers: Road to Renormalization. *American Journal of Health Behavior*, 39(3), 361-371.

⁴⁵ Polosa, R., Caponnetto, P., Morjaria, J. B., Papale, G., Campagna, D., & Russo, C. (2011). Effect of an electronic nicotine delivery device (e-Cigarette) on smoking reduction and cessation: a prospective 6-month pilot study. *BMC Public Health*, 11(1), 786.

⁴⁶ Siegel, M. B., Tanwar, K. L., & Wood, K. S. (2011). Electronic cigarettes as a smoking-cessation tool: results from an online survey. *American Journal of Preventive Medicine*, 40(4), 472-475.

⁴⁷ World Health Organization - FCTC Conference of the Parties to the WHO Convention on Tobacco Control. Electronic nicotine delivery systems, Report by WHO – FCTC/COP/6/10 1 September 2014. Accessed 11/11/2015. Available from: http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf?ua=1

The committee recommend advertising and promotion of e-cigarettes and related components such as peripheral devices and e-liquids not be permitted, as under the *Tobacco Products Regulation Act 1997*.

RECOMMENDATION 8: Prohibit specials and pricing promotions of e-cigarettes and peripherals in line with the *Tobacco Products Regulation Act 1997*

The role of special prices and promotions is to encourage purchase of items for sale⁴⁸, due to insufficient and potentially negative scientific evidence regarding the safety of e-cigarettes, encouraging growth of this industry is not advised by organisations such as the World Health Organisation⁴⁹. With regard to tobacco products, research has found that promotional pricing can be a particular factor in attracting adolescents to try or buy products⁵⁰. Banning of promotional pricing strategies is known to effect tobacco sales⁵¹.

Consistent with the aim to limit the marketing of e-cigarettes to tobacco smokers intending to quit tobacco use only, and promote public health, the committee recommends these forms of marketing are prohibited in line with the *Tobacco Products Regulation Act 1997*.

RECOMMENDATION 9: Permit businesses to provide signage and promotion of their store, but not products in line with the *Tobacco Products Regulation Act 1997*

The committee acknowledges that shops may provide a knowledgeable environment for customers to learn how a product works and options available for the best cessation outcome. In light of this the committee recommends that licenced stores be permitted in South Australia. The committee recommends that businesses be permitted to provide signage of their business on their own premises. Signage of the shop should only promote the name of the business with no added advertising or description. Signage should be limited to positioning in relation to the retail premises. Products within the retail outlet should not be visible from the street or footpath.

In line with limitations on tobacco retailers and products, e-cigarette retailers may be permitted to promote their store online in order to develop consumer awareness of their existence and location. No marketing, pricing or promotion of products sold at their store may be present. Website name and content must in no way promote or glamorise e-cigarette or tobacco use.

⁴⁸ de Andrade, M., Hastings, G., & Angus, K. (2013). Promotion of electronic cigarettes: tobacco marketing reinvented? *British Medical Journal*, 347.

⁴⁹ World Health Organization - FCTC Conference of the Parties to the WHO Convention on Tobacco Control. Electronic nicotine delivery systems, Report by WHO – FCTC/COP/6/10 1 September 2014. Accessed 11/11/2015. Available from: http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf?ua=1

⁵⁰ Paynter, J., & Edwards, R. (2009). The impact of tobacco promotion at the point of sale: a systematic review. *Nicotine & Tobacco Research*, 11(1), 25-35.

⁵¹ Pierce, J. P., Gilpin, E. A., Emery, S. L., White, M. M., Rosbrook, B., & Berry, C. C. (1998). Has the California tobacco control program reduced smoking? *Journal of the American Medical Association*, 280(10), 893-899.

The aim of this recommendation is to ensure that smokers are aware of e-cigarettes and have means to generate adequate knowledge to assess whether these products would be beneficial to their cessation attempt while protecting non-smokers and children from potential glamorisation or normalisation of e-cigarette use by preventing promotion of products and peripherals.

RECOMMENDATION 10: Liquid for use in e-cigarettes mandated to be labelled as *e-liquid*

Currently there are a broad and diverse range of names and labels attributed to e-cigarette products. Products are prohibited from making cessation claims unless approved by the Therapeutic Goods Administration; contravention of this is in breach of the *Therapeutic Goods Act 1989*. However, some products are labelled to subtly infer benefits to health which are not yet established. E-liquid is also promoted as e-juice. The term *juice* suggests a fresh, health-promoting product. The Food Standards Code dictates that where a product contains flavourings, sugar or preservatives it must be called a *juice drink*⁵². As e-liquids do not contain any fruit juice component and do not have fresh or health promoting contents the committee believes it is misleading to use the term juice in relation to e-cigarettes. The committee therefore recommends that the well-known, established and more neutral term *e-liquid* is used to describe these products.

⁵² 100% Fruit Juice and Fruit Drinks, available from: <http://australianbeverages.org/products/juice-fruit-drinks/> accessed 15/11/2015

PRODUCT SAFETY AND QUALITY CONTROL REQUIREMENTS

RECOMMENDATION 11: Require child-proof caps and tamper-evident packaging of e-liquid

Nicotine is a Schedule 7 poison under the Federal Poisons Standard. This classification is due to toxicity and potential for harm caused by contact with it⁵³. The introduction of child safety caps in 1970, led to a 40% reduction in the number of drug-related poisonings⁵⁴. It is now standard and accepted practice when managing risks associated with poisonous or toxic substances to require leak-proof containers and to protect children and animals against accident exposure through the use of safety mechanisms such as child-proof caps and tamper-evident packaging^{55,56}.

Poison centres and Accident and Emergency departments in the United Kingdom⁵⁷ and the United States⁵⁸ have reportedly received increased numbers of calls regarding nicotine exposure which some have linked to the growing availability and use of e-cigarettes⁵⁹. In Australia the e-cigarette market is less developed than in those countries with lower prevalence. Observing more developed markets and associated emerging issues allows Australia to adopt a preventative rather than reactionary approach to e-cigarettes to maximise public health.

Consistent with this, the committee recommends that all e-liquid containers require child-proof and tamper-evident packaging. The aim of this recommendation is to minimise the risk of accidents and poisonings.

⁵³ Bam, T. S., Bellew, W., Berezhnova, I., Jackson-Morris, A., Jones, A., Latif, E., & Wisotzky, M. (2014). Position statement on electronic cigarettes or electronic nicotine delivery systems. *International Journal of Tuberculosis and Lung Disease*, 18(1), 5-7.

⁵⁴ Ozdemir, R., Bayrakci, B., Teksam, O., Yalçin, B., & Kale, G. (2012). Thirty-three-year experience on childhood poisoning. *Turkish Journal of Pediatrics*, 54(3), 251-9.

⁵⁵ Arena, J. M. (1959). Safety closure caps: Safety measure for prevention of accidental drug poisoning in children. *Journal of the American Medical Association*, 169(11), 1187-1188.

⁵⁶ McIntire, M. S., Angle, C. R., Sathees, K., & Lee, P. S. (1977). Safety packaging--what does the public think? *American Journal of Public Health*, 67(2), 169-171.

⁵⁷ National Poisons Information Service – Electronic Cigarettes, available from: <http://www.npis.org/ecigarettes.html> accessed 15/11/2015

⁵⁸ Notes from the field: Calls to Poison Centres for Exposure to Electronic Cigarettes – United States, September 2010- February 2014, available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6313a4.htm> accessed 15/11/2015

⁵⁹ Gupta, S., Gandhi, A., & Manikonda, R. (2014). Accidental nicotine liquid ingestion: emerging paediatric problem. *Archives of Disease in Childhood*

RECOMMENDATION 12: Require health warnings to be visible on e-cigarette device and e-liquid packaging

E-cigarette vapour is not yet proven to be safe for users, bystanders or third-hand exposure^{60,61,62}. Further, nicotine has been found to be present in e-cigarettes and e-liquids labelled or sold as nicotine-free. Nicotine is a Schedule 7 poison according to Federal Poison Standards, it can cause significant harm when abused or accidentally accessed by children. Standard practice when managing risks associated with poisonous or toxic substances is to label products as toxic and use mechanisms to make access more difficult.

Even where an e-cigarette or e-liquid does not contain nicotine there is insufficient scientific evidence on the effects of using e-cigarettes on human health to regard them as safe. This has prompted organisations such as the World Health Organisation, the Forum of International Respiratory Societies, Cancer Council Australia, the Heart Foundation, Australia and the National Health and Medical Research Council^{63,64,65} to release statements indicating that e-cigarettes are not proven as effective cessation aids for smokers and may carry unforeseen risks for users and bystanders.

As such the committee recommends visible warnings be present on e-cigarette devices, packs and e-liquids. The content of these warnings would alert the consumer to the possible hazardous effects of the product and only to use as intended by the manufacturer. The intention is to make consumers aware that the product safety is unknown and that although in comparison to smoking tobacco there may be less associated harm, e-cigarettes should be used with caution. These warnings could read:

“Electronic cigarettes should be used with caution. Effects on human health are unknown.”

Labelling in this way may ensure that users are aware of the potential risks they take in choosing to use e-cigarettes. The committee also recommends that the Quitline or other smoking cessation support service contact details are present on e-cigarette and e-liquid packaging.

⁶⁰ Czogala, J., Goniewicz, M. L., Fidelus, B., Zielinska-Danch, W., Travers, M. J., & Sobczak, A. (2014). Secondhand exposure to vapors from electronic cigarettes. *Nicotine & Tobacco Research*, 16(6), 655-662.

⁶¹ Gostin, L. O., & Glasner, A. Y. (2014). E-cigarettes, vaping, and youth. *The Journal of the American Medical Association*, 312(6), 595-596.

⁶² Williams, M., Villarreal, A., Bozhilov, K., Lin, S., & Talbot, P. (2013). Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol. *PLOS One*: DOI: 10.1371/journal.pone.0057987

⁶³ Position statement – Electronic Cigarettes, Cancer Council and Heart Foundation, available at: http://wiki.cancer.org.au/policy/Position_statement_-_Electronic_cigarettes#_ga=1.169017441.1363662750.1447106241 accessed 11/11/2015

⁶⁴ Schraufnagel, D. E., Blasi, F., Drummond, M. B., Lam, D. C., Latif, E., Rosen, M. J., & Van Zyl-Smit, R. (2014). Electronic cigarettes. A position statement of the forum of international respiratory societies. *American Journal of Respiratory and Critical Care Medicine*, 190(6), 611-618.

⁶⁵ NHMRC CEO Statement: Electronic Cigarettes (e-cigarettes), (March 2015), available at: https://www.nhmrc.gov.au/files/nhmrc/publications/attachments/ds13_nhmrc_ceo_statement_ecigarettes.pdf accessed 11/11/2015

Where possible, abstinence from all forms of nicotine, tobacco or e-cigarette vapour is the most positive pathway for health⁶⁶.

RECOMMENDATION 13: Require ingredients to be clearly listed on e-liquid packaging

The committee is concerned with the lack of transparency in and by the e-cigarette industry as to the contents and origin of e-liquid. The committee recommends improved communication of the contents of e-liquid and their potential effects. The European Union Tobacco Products Directive revisions⁶⁷ which come into effect in 2016 require e-cigarette and e-liquid manufacturers to state product ingredients in weighted order. Maintaining consistency with this standard will promote transparency and consistency across jurisdictions, allowing consumers access to more informed choices and the associated potential effects on their health. It may improve industry standards as manufacturers and producers can be held more accountable for their product. As such the committee recommends that producers be required to label products with an ingredients list in weighted order of content as well as country of origin and country of packaging.

⁶⁶ World Health Organization - FCTC Conference of the Parties to the WHO Convention on Tobacco Control. Electronic nicotine delivery systems, Report by WHO – FCTC/COP/6/10 1 September 2014. Available from: http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf?ua=1 accessed 11/11/2015.

⁶⁷ European Union Commission, Questions & Answers: New rules for tobacco products, (26 February 2014), available from: http://europa.eu/rapid/press-release_MEMO-14-134_en.htm accessed 17/11/2015

ENFORCEMENT

RECOMMENDATION 14: SA Health and SA Police to be given the power and remit to ensure compliance with regulations according to the *Tobacco Products Regulation Act 1997* and any new framework to cover e-cigarettes

New regulations will need to be enforced and compliance assured. Giving SA Health and SA Police the power and remit to enforce regulations regarding e-cigarettes is the least administratively burdensome means of achieving change, it minimises the cost to the tax payer and simplifies processes for industry. Officers are already trained and have the remit to ensure compliance with the *Tobacco Products Regulation Act 1997* to ensure no e-cigarette resembles a tobacco product and that retailers do not sell to minors, through conducting controlled purchase operations. Individuals in breach of the Act may be issued with a \$75 expiation fee, up to a maximum fine of \$200. Businesses in breach of the *Tobacco Products Regulation Act 1997* (such as for selling to a minor) can receive a much larger fine. New regulations that are extensions of the *Tobacco Products Regulations Act 1997* to cover e-cigarettes, such as prohibiting use in smoke-free areas, represent a direct translation of this existing legislation across to e-cigarettes. Other recommendations may require a specific regulatory framework with associated penalties and expiations; this would also require training for officers to ensure standardised enforcement.

The committee recommends that SA Health and SA Police are given powers and remit to enforce revised regulations under the *Tobacco Products Regulations Act 1997*. Where regulations do not follow this Act, the committee recommend the development of a specific regulatory framework with associated penalties and expiations.

RECOMMENDATION 15: State Government through SA Health to enforce regulation regarding nicotine

Nicotine is a Schedule 7 poison under the Federal Therapeutic Goods Administration. However, in discussion with witnesses, and on the site visits, it was apparent that nicotine is widely used. Although SA Health currently holds the remit to enforce legislation regarding the sale and possession of nicotine the committee is not aware of enforcement of these powers. The committee recommends that SA Health exercise its right under legislation and be given the resources and requirement to conduct appropriate operations into the sale of nicotine and products possibly containing nicotine.

In order for consumers to make informed choices about their use of e-cigarettes they need to be confident about the ingredients included in their product choice. Internationally, e-cigarettes that contain nicotine have been shown to vary significantly from the levels indicated by the

manufacturer⁶⁸. In Australia, a New South Wales study demonstrated that e-cigarettes, purported not to contain nicotine, contained high levels of nicotine in 70% of products sampled⁶⁹. While labelling of a product is an important aspect of consumer safety, government can also act responsibly in mitigating risk to the consumer.

As such the committee recommends that SA Health be given the resources and requirement to conduct product testing on e-cigarette devices and peripherals to prevent the sale, and therefore accidental exposure to nicotine, by e-cigarette users.

RECOMMENDATION 16: State Government to appeal to Federal Government for more stringent enforcement of regulation regarding nicotine importation, sale and possession to prevent its recreational use across Australia

Nicotine may have profound detrimental effects upon the developing brain of young people^{70,71,72,73}. In adults the main contribution of nicotine to smoking related harm is its highly addictive nature. This means that despite the harm caused by other chemical and particulate components of tobacco smoke many people continue until they eventually die. Nicotine is arguably a facilitator of the harmful effects of other chemicals inhaled in conjunction with it. Nicotine may then play a role in furthering disease as a tumour promoter^{74,75}. Nicotine is also known to be a gateway chemical for other drugs, affecting the addictive tendencies of illegal drugs such as cocaine^{76,77,78}. The chemicals in e-cigarette aerosol (or vapour) are still under scientific review, the addition of an addictive agent to these creates potential for increased harm. The World Health Organisation Framework Convention on Tobacco Control, of which Australia is a signatory, regards recreational use of

⁶⁸ Pagano, T., Di Francesco, A. G., Smith, S. B., George, J., Wink, G., Rahman, I., & Robinson, R. J. (2015). Determination of Nicotine Content and Delivery in Disposable Electronic Cigarettes Available in the USA by Gas Chromatography-Mass Spectrometry. *Nicotine & Tobacco Research*.

⁶⁹ New South Wales Department of Health. *NSW Health Alert - Warning on e-liquids*. Sydney: NSW Government; 2013

⁷⁰ Rogers, J. M. (2008). Tobacco and pregnancy: overview of exposures and effects. *Birth Defects Research Part C: Embryo Today: Reviews*, 84(1), 1-15.

⁷¹ Prokhorov, A. V., Winickoff, J. P., Ahluwalia, J. S., Ossip-Klein, D., Tanski, S., Lando, H. A., & Ford, K. H. (2006). Youth tobacco use: a global perspective for child health care clinicians. *Pediatrics*, 118(3), e890-e903.

⁷² Kum-Nji, P., Meloy, L., & Herrod, H. G. (2006). Environmental tobacco smoke exposure: prevalence and mechanisms of causation of infections in children. *Pediatrics*, 117(5), 1745-1754.

⁷³ Mathers, M., Toumbourou, J. W., Catalano, R. F., Williams, J., & Patton, G. C. (2006). Consequences of youth tobacco use: a review of prospective behavioural studies. *Addiction*, 101(7), 948-958.

⁷⁴ Maneckjee, R., & Minna, J. D. (1994). Opioids Induce While Nicotine Suppresses Apoptosis in Human Lung Cancer Cells.

⁷⁵ Wright, S. C., Zhong, J., Zheng, H., & Larrick, J. W. (1993). Nicotine inhibition of apoptosis suggests a role in tumor promotion. *The FASEB Journal*, 7(11), 1045-1051.

⁷⁶ Kandel, E. R., & Kandel, D. B. (2014). A molecular basis for nicotine as a gateway drug. *New England Journal of Medicine*, 371(10), 932-943

⁷⁷ McQuown, S. C., Dao, J. M., Belluzzi, J. D., & Leslie, F. M. (2009). Age-dependent effects of low-dose nicotine treatment on cocaine-induced behavioral plasticity in rats. *Psychopharmacology*, 207(1), 143-152.

⁷⁸ McQuown, S. C., Belluzzi, J. D., & Leslie, F. M. (2007). Low dose nicotine treatment during early adolescence increases subsequent cocaine reward. *Neurotoxicology and Teratology*, 29(1), 66-73.

nicotine as distinct from public health and smoking cessation aims⁷⁹. The use of nicotine as a recreational product in e-cigarettes may be concerning given the multiplicity of perspectives regarding the safety of other components of e-cigarettes, the cocktail of chemicals included in e-liquid and heating and inhalation of these.

Currently, Border Control and Federal agencies closely monitor importation of tobacco. Penalties for undisclosed importation, excessive importation and other breaches of Federal Law are strictly enforced.

In light of insufficient scientific evidence and lack of consensus regarding the safety of e-cigarettes and liquid nicotine, the committee recommends that the State Government appeals to the Australian Government for more stringent enforcement of existing Federal regulation regarding the importation, purchasing, sale, possession and use of nicotine.

⁷⁹ World Health Organization - FCTC Conference of the Parties to the WHO Convention on Tobacco Control. Electronic nicotine delivery systems, Report by WHO – FCTC/COP/6/10 1 September 2014. Accessed 11/11/2015. Available from: http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf?ua=1

RESEARCH

From the development of this report and in statements from witnesses it is clear to committee that there is a significant lack of rigorous scientific, peer-reviewed research into e-cigarettes. In response to this the committee recommends that where possible South Australia supports research into e-cigarettes.

RECOMMENDATION 17: Support further research into the short and long term effects of vaporised nicotine, propylene glycol and vegetal glycerine

The committee recommends further research into the short and long term health effects of vaporised nicotine, propylene glycol and vegetal glycerine, being the main constituent components of e-cigarettes. Real-world (or simulated real-world) studies into the effects of e-cigarettes during use by smokers and non-smokers would be beneficial to observe the potential outcomes of e-cigarette use on individuals' health.

The current lack of clarity about the reality of e-cigarette safety is a challenging aspect of decision making for relatively new product and emerging market. For consumers the lack of clear evidence makes personal decision making difficult. As such, the committee recommends rigorous scientific research into the potential effects of e-cigarettes upon human health, both at individual and population health levels.

RECOMMENDATION 18: Support further research into the safety of e-liquid flavours for inhalation

Flavourings used in e-liquid are designed for use in foods and absorption through ingestion^{80,81}. A study in 2014 found over 7760 different e-liquid flavours for sale online⁸². There is very little scientific examination of the effects of heating and inhaling the aerosols produced by food flavourings, but emerging findings suggest that some of these flavourings could be significantly damaging to health⁸³. Moreover, each flavouring is likely to hold a differential burden of risk for the user⁸⁴. None are proven to be safe through official government therapeutic tests. A study of a wide range of flavours and effects of heat and vaporisation would give policymakers more evidence to

⁸⁰ Tierney, P. A., Karpinski, C. D., Brown, J. E., Luo, W., & Pankow, J. F. (2015). Flavour chemicals in electronic cigarette fluids. *Tobacco Control*.

⁸¹ Farsalinos, K. E., Kistler, K. A., Gillman, G., & Voudris, V. (2015). Evaluation of electronic cigarette liquids and aerosol for the presence of selected inhalation toxins. *Nicotine & Tobacco Research*, 17(2), 168-174.

⁸² Zhu, S. H., Sun, J. Y., Bonnevie, E., Cummins, S. E., Gamst, A., Yin, L., & Lee, M. (2014). Four hundred and sixty brands of e-cigarettes and counting: implications for product regulation. *Tobacco Control*, 23(suppl 3), iii3-iii9.

⁸³ Lee, S., Tarran, R., & Rowell, T. R. (2015). Select E-Cigarette Flavors Alter Calcium Signaling, Cell Viability And Proliferation In Lung Epithelia. *American Journal of Respiratory and Critical Care Medicine*, 191, A2896.

⁸⁴ Ibid.

engage with in order to maximise public health benefit. Moreover, studies of this type may assist e-cigarette users with more informed choices.

Where manufacturers believe they can prove flavoured e-liquid to be safe and beneficial for smoking cessation, the committee encourages them to pursue approval through the mechanism of the Therapeutic Goods Administration.

The committee recommends that more research is required to understand the short and long term effects of food flavourings on human airway systems and other organs in first-, second- and third-hand e-cigarette vapour.

RECOMMENDATION 19: Support further research into the specific effects of e-cigarettes on pregnant women and fetuses, infants and children, young people, people with respiratory illness and chronic illness, and the general population

The committee recommends further research into the specific health effects upon a range of populations including pregnant women and fetuses, infants and children, young people, people with existing respiratory conditions as well as the broader general population. Some of these populations may be particularly vulnerable to harm posed by e-cigarettes, therefore research would be beneficial.

The committee recommends further research into the social aspects of e-cigarette use and the potentially developing sub-culture. Research into how people understand and relate to e-cigarette use in light of smoking cessation and identity would assist policymakers understanding of the potential public health and population effects of e-cigarettes.

TAXATION

RECOMMENDATION 20: State Government to consider taxation of e-cigarettes and peripheral products

As yet, scientific evidence regarding the burden of diseases attributable to e-cigarettes and their peripheral products is inconclusive. The committee recommends that the State government remains vigilant to the growth of the e-cigarette market and outcomes of scientific research to ensure that State services are able to accommodate any subsequent effects on public services.

As part of a strategy to manage potential public service costs associated with increased e-cigarette prevalence, the committee recommends that the Government should consider taxation to compensate for increased burden on public services.

6. PUBLIC SUBMISSIONS IN RESPONSE TO TERMS OF REFERENCE

The committee received a total of 142 written submissions from the general public, business sector, public health organisations, researchers and Government; a breakdown of these is shown below. The diversity of submissions underpins the resultant recommendations being based on the views of a broad and reasonably representative demographic of South Australians. Over 70% of submissions took the form of one page structured letters, while the remaining 30% varied from extensive reports and peer reviewed articles to letters of personal experience. Not all of the submissions addressed each of the terms of reference, many focused on specific aspects of the committee's remit. A full list of submitters can be found in Appendix 3.

6.1. Submitter profiles

Type	Number
Individual	118
Academic/Research	6
Public Health Organisation	5
Tobacco Industry	3
Commercial Store	3
Peak Organisation	2
State Government	2
Interest/ Consumer Group	2
Trade Association	1
Total	142

Within these groupings a wide range of opinions and evidence was expressed. The committee received emotive and detailed accounts of personal journeys and experience, lengthy and detailed scientific reports and brief notes on specific issues of concern and/or support for electronic cigarette regulation. As such these simple groupings do not expose the profound depth of knowledge available to the committee through the submissions. A more detailed description of the content of the submissions is shown in the following tables under the terms of reference headings. It is noted that the presence of an issue in these tables does not signify committee support or otherwise, only that it was raised within the written submissions.

PUBLIC RESPONSE TO TERMS OF REFERENCE

6.2. (a) Potential for personal vaporisers to reduce smoking prevalence and harms	
Smoking Cessation	105
Assist quitting (individual level)	95
Reduce smoking prevalence (population level)	7
Use of nicotine to aid in smoking cessation	3
Reduce tobacco harms	46
Experience better health	18
Less harmful than tobacco smoking	15
Less harmful for bystanders	3
Improved quality of life	1
Unknown risks associated with Personal Vaporisers	7

In response to *term of reference (a) Potential for personal vaporisers to reduce tobacco smoking prevalence and harms*; submitters largely discussed their experience with using e-cigarette devices to aid personal tobacco smoking cessation or reduction in their use of tobacco. More than 80% of submitters mentioned their personal use of e-cigarette devices. Other submissions, often from organisations rather than individuals, discussed the potential for e-cigarettes to reduce tobacco related harms at the population level. During the call for submission period Public Health England released a report citing that e-cigarettes are “around 95% safer than smoking”⁸⁵. Many submitters referred to this article. On closer inspection of the source, this figure originates from a study conducted in 2013. The study and Public Health England report have received considerable criticism, as the 95% figure was deduced from a validated method, multi-criteria decision analysis, conducted by twelve people, two of whom had links to the tobacco industry and e-cigarette industry, therefore with perceived conflicts of interest. That the study was conducted in 2013 is a relevant factor, as the industry of e-cigarette devices, components, liquids, and products is still rapidly evolving and showing considerable diversity^{86,87}. Devices on the market in 2015-2016 are conceivably quite different from those analysed and tested for study in 2013⁸⁸.

Three submitters discussed the reduced risk posed to bystanders by e-cigarette aerosol vapour as opposed to that of tobacco smoke.

Seven submitters explicitly stated the unknown potential for e-cigarettes to reduce smoking related harms. This was largely discussed in terms of the lack of evidence and need for more research.

⁸⁵ McNeill, A., Brose, L. S., Calder, R., Hitchman, S. C., Hajek, P., & McRobbie, H. (2015). E-cigarettes: an evidence update. A report commissioned by Public Health England. *Public Health England*.

⁸⁶ Cheng, T. (2014). Chemical evaluation of electronic cigarettes. *Tobacco Control*, 23(suppl 2), ii11-ii17.

⁸⁷ Eadie, D., Stead, M., MacKintosh, A. M., MacDonald, L., Purves, R., Pearce, J. & Haw, S. (2015). E-cigarette marketing in UK stores: an observational audit and retailers' views. *BMJ open*, 5(9), e008547.

⁸⁸ Grana, R., Benowitz, N., & Glantz, S. A. (2014). E-cigarettes a scientific review. *Circulation*, 129(19), 1972-1986.

6.3. (b) Potential risks of these products to individual and population health from vapour emissions, poisonings and the reduced impact of tobacco control measures

Risks to individual and population level health from vapour	11
Long term	7
Short term	4
Reduce impact of tobacco control	5
Gateway Effect	2
Glamorisation/ normalisation of smoking	2
Undermine current tobacco control strategies	1
Risks to individual and population level health from poisonings	3
Unclear scientific data	3

Term of reference (b) Potential risks of these products to individual and population health from vapour emissions, poisonings and the reduced impact of tobacco control measures; received fewer overall responses than *term of reference (a)* referred to previously. This is in large part because most submitters were individuals who used e-cigarettes as a cessation device or supplement to smoking and therefore had a view in regards to the potential benefits but not potential risks. However, in response to this term of reference eleven submitters explicitly referred to the potential risk of short or long term harms. Submissions from public health agencies and not-for-profit organisations showed particular concern for this aspect of e-cigarettes. These submissions urged a precautionary approach based on previous evidence of the tobacco industry and public health issues, and recommended waiting until sufficient evidence demonstrated the safety of the product. There was suggestion that this was pertinent to protect public health. Three submissions stated that the scientific literature is currently unclear or inconclusive.

Five submitters discussed the potential reduced impact of tobacco control, particularly through the normalisation or glamorisation of smoking-like behaviours and the *gateway effect*, whereby young people initiate smoking after trying e-cigarettes.

Three submitters referred to the potential increased risk of poisonings from nicotine.

6.4. (c) Make recommendations on approaches to the regulation of personal vaporisers under the Tobacco Products Regulation Act 1997	
Availability and Supply	7
Call for a total ban on sales	4
Keep stores available	2
Make access to nicotine easier	1
Sales to Minors	21
Total Ban of sales to minors	19
Minors use permitted if prescribed	2
Advertising and Promotion	23
Ban advertising and promotion in accordance with TPRA	10
Promote to adult smokers	4
Advertising to adults only	4
No broadcast media	2
Permit store signage	1
Avoid confusion with tobacco	1
Disallow use of term 'cigarette'	1
Use in Smoke-free Areas	23
Ban in all smoke-free areas	12
Permit use in smoke-free areas	7
Permit use in 'Vape' stores	2
Allow flexibility, discretion of venue owner	1
Do not confine 'vapers' to smoking areas	1
Product Safety and Quality Control	24
Child-proof caps on e-liquids	5
Ingredients should be listed	5
Use TGA to promote consistency and high quality standards	4
Products should carry labelling, directions for use and warning labels	3
Standards need to be improved/ create minimum product standard	3
Device and liquid standards are inconsistent	2
Should meet electronic device standards	2

In response to *term of reference (c) Make recommendations on approaches to the regulation of personal vaporisers under the Tobacco Products Regulation Act 1997*; a range of responses were voiced regarding whether e-cigarettes should be included under the *Tobacco Products Regulation Act 1997*. Submitters who were e-cigarette users generally did not support regulation under the Act, although a few users did state their support for elements of regulation under the Act such as bans on sales to minors, limits on advertising and promotion and banning use in smoke free areas. Public health organisations and not-for-profit organisations were most likely to support regulation under the *Tobacco Products Regulation Act 1997* as an alternative to the outright ban of sales of electronic cigarettes and their components, which they would prefer. In these cases complete regulation under

the Act was generally sought with prohibition of sales to minors, bans on advertising and promotion, licensing for vendors and prohibition of use of the products in smoke-free areas.

Twenty-four submitters called for product safety and quality control standards to be improved. Of these submissions, five identified the need for child-proof caps on e-liquids, three requested improved and consistent products standards and two cited electronic safety.

Five submitters referred to the need for clear itemisation of ingredients in listings on e-liquid, and three referred to labelling, directions for use and warnings. Country of origin was also raised.

Four submissions discussed the Therapeutic Goods Administration as the most appropriate body to assess product safety standards.

6.5. (d) Any other relevant matters	
Ban sweet, confectionery flavourings in e-liquid	4
Avoid influence of the tobacco industry	3
Allow flavourings	2
Permit premixed e-liquid nicotine solutions	1

In response to *term of reference (d) any other relevant matters*; submitters raised issues including the flavours of e-liquids. Four submitters called for their ban, citing their potential appeal to children and non-tobacco smokers. Two submitters discussed how these flavours attract tobacco smokers to use e-cigarettes instead of tobacco and thus called for flavours to be maintained.

There was concern particularly from public health organisations that major tobacco companies are increasingly directly involved in the e-cigarette industry and that this is a potentially dangerous step toward a new nicotine market where public health is compromised. Three submissions explicitly called for the committee to avoid the influence of big tobacco companies.

One submitter stated that the major risk of e-cigarette use in Australia (and therefore South Australia) is the rules regarding nicotine. This submitter stated that by permitting premixed nicotine e-liquid solutions poisonings and accidents could be avoided.

7. SELECT COMMITTEE FINDINGS

7.1. Introduction

Electronic cigarettes are also interchangeably known as e-cigarettes, personalised vaporisers, vaporisers, hookah pens, electronic nicotine delivery systems (ENDS) or electronic non-nicotine delivery systems (ENNDS) amongst other names. E-cigarettes were first introduced to the Chinese market in 2004 by a medical Doctor, Dr Hon Lik, possibly in reaction to the death of his father from smoking related lung cancer⁸⁹. Since the inception of e-cigarettes, markets across the United States and United Kingdom, Europe and more recently Asia, have expanded rapidly moving through different generations of devices^{90,91}. Elements common to all e-cigarettes are;

- a battery⁹²
- an electronic circuit board
- an atomizing chamber and coil heating element
- a cartridge or tank to hold a liquid solution of propylene glycol and vegetal glycerine (which may contain nicotine and/or flavourings)
- a mouth piece to inhale through
- emission of aerosol, otherwise known as vapour

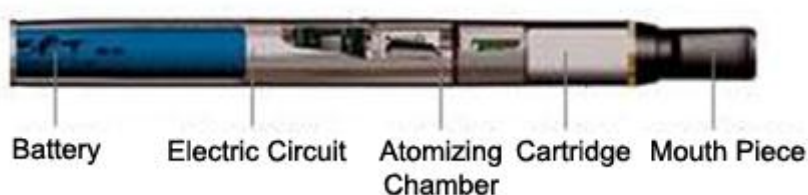


Figure 7.1.1

Initially, most e-cigarettes on the market were disposable devices similar in appearance to cigarettes. However, more recently, e-cigarettes have become customisable and refillable. There is now a wide range of options available to users and a developing enthusiast or hobbyist group who build their own e-cigarettes and customise the componentry to create effects with vapour and/or modify the aesthetics of the device. Users can choose from a wide range of food flavourings commonly mixed with propylene glycol and vegetal glycerine (e-liquid). The combination of propylene glycol and vegetal glycerine is what produces the vapour effect; altering proportions of

⁸⁹ Grana, R., Benowitz, N., & Glantz, S. A. (2013). Background paper on E-cigarettes (electronic nicotine delivery systems). Center for Tobacco Control Research and Education, University of California, San Francisco, a WHO Collaborating Center on Tobacco Control. Prepared for World Health Organization Tobacco Free Initiative. December 2013. <http://pvw.escholarship.org/uc/item/13p2b72n>. accessed 17/11/2015

⁹⁰ Zhu, S. H., Sun, J. Y., Bonnevie, E., Cummins, S. E., Gamst, A., Yin, L., & Lee, M. (2014). Four hundred and sixty brands of e-cigarettes and counting: implications for product regulation. *Tobacco Control*, 23(suppl 3), iii3-iii9.

⁹¹ Grana, R., Benowitz, N., & Glantz, S. A. (2014). E-cigarettes a scientific review. *Circulation*, 129(19), 1972-1986.

⁹² Cheng, T. (2014). Chemical evaluation of electronic cigarettes. *Tobacco Control*, 23(suppl 2), ii11-ii17.

these liquids can influence the user experience by changing the volume or density of vapour produced. The addition of nicotine is discussed in relation to the use of e-cigarettes as smoking cessation devices although many users may choose not to add nicotine⁹³. Nicotine cannot be legally purchased within South Australia for use in e-cigarettes.

In 2014 the global electronic cigarette industry was estimated to be worth US\$2 billion, it was projected to increase to US\$10 billion by 2017⁹⁴. Perhaps motivated by this growth, tobacco companies have begun to infiltrate the industry. At least five of the largest e-cigarette companies now have electronic cigarette subsidiaries to their business, these include: Philip Morris International, British American Tobacco, Lorillard, Japan Tobacco International and Imperial Tobacco Group. In 2013, The Wall Street Journal published an article on e-cigarettes in which Philip Morris International Chief Executive, Andre Calantzopoulos stated:

*“The single greatest growth opportunity for us lies in the commercialization of reduced-risk products”*⁹⁵

Nicoventures, a subsidiary of British American Tobacco, has developed a product called Vype, this product was presented for consideration to the Therapeutic Goods Administration in Australia (TGA) in 2013⁹⁶; as yet it is the only e-cigarette product to be presented to the TGA. To the best of the committee’s knowledge the application was not approved.

No e-cigarette product has been proven to be safe through therapeutic good testing and there is a significant lack of scientific agreement as to their safety for users and bystanders⁹⁷. Electronic cigarettes have generated considerable debate among public health and medical experts internationally. Some advocate for their promotion to smokers as highly effective cessation devices with minimal side effects and considerable health benefits^{98,99}. Others claim e-cigarettes are harmless, or minimally harmful recreational or lifestyle devices¹⁰⁰. Many argue that e-cigarettes have the potential to be harmful, renormalise or glamorise smoking-like behaviour and undermine

⁹³ Caponnetto, P., Cibella, F., Mancuso, S., Campagna, D., Arcidiacono, G., & Polosa, R. (2011). Effect of a nicotine-free inhalator as part of a smoking-cessation programme. *European Respiratory Journal*, 38(5), 1005-1011.

⁹⁴ Electronic cigarettes in Asia: a review of promotions and availability, (May 2014), Commissioned by the WHO Tobacco Free Initiative, available from: http://seatca.org/dmdocuments/SEATCA_Ecig%20Report_Final.pdf accessed 18/11/2015

⁹⁵ Esterl, M., (November 20, 2013), Philip Morris to Tap E-Cigarette Market Next Year: tobacco giant trims profit expectations, expects lower international volumes. Available from: <http://www.wsj.com/articles/SB10001424052702304337404579210180309728764> accessed 18/11/2015

⁹⁶ Nicoventures: pre-submission meeting on a novel Nicotine Therapeutic Good: Public correspondence, Therapeutic Goods Administration and Nicoventures, available from: www.tga.gov.au/sites/default/files/foi-302-1314-8.pdf accessed 25/11/2015

⁹⁷ Callahan-Lyon, P. (2014). Electronic cigarettes: human health effects. *Tobacco Control*, 23(suppl 2), ii36-ii40.

⁹⁸ Cahn, Z., & Siegel, M. (2011). Electronic cigarettes as a harm reduction strategy for tobacco control: A step forward or a repeat of past mistakes. *Journal of Public Health Policy*, 32(1), 16-31.

⁹⁹ Farsalinos, K. E., Romagna, G., Tsiapras, D., Kyrzopoulos, S., & Voudris, V. (2014). Characteristics, perceived side effects and benefits of electronic cigarette use: a worldwide survey of more than 19,000 consumers. *International Journal of Environmental Research and Public Health*, 11(4), 4356-4373.

¹⁰⁰ Dockrell, M., Morison, R., Bauld, L., & McNeill, A. (2013). E-cigarettes: prevalence and attitudes in Great Britain. *Nicotine & Tobacco Research*

tobacco control with potentially damaging effects at public and individual health levels^{101,102,103,104}, and others are undecided due to insufficient scientific evidence.

Across the debate many agree that sales to minors and non-smokers should be discouraged. However, whether e-cigarettes are a gateway to smoking tobacco or other drug use is deeply contested. There appears to be evidence to support both a gateway effect¹⁰⁵ and disruptive effect¹⁰⁶ (away from future tobacco use). However, nicotine is a primer for other drugs and as such there is potential for e-cigarettes that contain nicotine to influence addiction to other drugs^{107,108,109}.

E-cigarettes may have effects on bystanders through second-hand exposure to vapour and particulates. However, studies into this are extremely limited and studies into third hand effects (whereby vapour effects chemicals in other products and then affects a person) are even rarer^{110,111}. Due to the limited and unclear evidence available the World Health Organisation recommends restrictions on e-cigarette use in existing smoke-free areas¹¹².

A recurring theme for the committee in the development of this report was the lack of available evidence and scientific consensus regarding the safety and efficacy of e-cigarettes.

¹⁰¹ Chapman, S., & Wakefield, M. A. (2013). Large-scale unassisted smoking cessation over 50 years: lessons from history for endgame planning in tobacco control. *Tobacco Control*, 22 (suppl 1), i33-i35.

¹⁰² Foulds, J., Veldheer, S., & Berg, A. (2011). Electronic cigarettes (e-cigs): views of aficionados and clinical/public health perspectives. *International Journal of Clinical Practice*, 65(10), 1037-1042.

¹⁰³ Sutfin, E. L., McCoy, T. P., Morrell, H. E., Hoepfner, B. B., & Wolfson, M. (2013). Electronic cigarette use by college students. *Drug and Alcohol Dependence*, 131(3), 214-221

¹⁰⁴ Yamin, C. K., Bitton, A., & Bates, D. W. (2010). E-cigarettes: a rapidly growing Internet phenomenon. *Annals of Internal Medicine*, 153(9), 607-609.

¹⁰⁵ Kmietowicz, Z. (2014). E-cigarettes are "gateway devices" for smoking among young people, say researchers. *British Medical Journal*, 348.

¹⁰⁶ Caponnetto, P., Polosa, R., Russo, C., Leotta, C., & Campagna, D. (2011). Successful smoking cessation with electronic cigarettes in smokers with a documented history of recurring relapses: a case series. *Journal of Medical Case Reports*, 5(1), 585.

¹⁰⁷ Kandel, E. R., & Kandel, D. B. (2014). A molecular basis for nicotine as a gateway drug. *New England Journal of Medicine*, 371(10), 932-943.

¹⁰⁸ McQuown, S. C., Belluzzi, J. D., & Leslie, F. M. (2007). Low dose nicotine treatment during early adolescence increases subsequent cocaine reward. *Neurotoxicology and Teratology*, 29(1), 66-73.

¹⁰⁹ McQuown, S. C., Dao, J. M., Belluzzi, J. D., & Leslie, F. M. (2009). Age-dependent effects of low-dose nicotine treatment on cocaine-induced behavioral plasticity in rats. *Psychopharmacology*, 207(1), 143-152.

¹¹⁰ Schober, W., Szendrei, K., Matzen, W., Osiander-Fuchs, H., Heitmann, D., Schettgen, T., & Fromme, H. (2014). Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers. *International Journal of Hygiene and Environmental Health*, 217(6), 628-637.

¹¹¹ Schripp, T., Markewitz, D., Uhde, E., & Salthammer, T. (2013). Does e-cigarette consumption cause passive vaping? *Indoor Air*, 23(1), 25-31.

¹¹² World Health Organization. WHO Study Group on Tobacco Product Regulation, Report on the Scientific Basis of Tobacco Product Regulation, *World Health Organization Technical Report Series*, no. 955. Geneva: World Health Organization, 2010.

7.2. International regulatory status and approaches

European Union

Currently, countries across the European Union have significantly different positions regarding the legal status of electronic cigarettes¹¹³. E-cigarettes are generally only captured under consumer product regulations. In Denmark e-cigarettes are more strongly restricted, across Scandinavia electronic cigarettes containing nicotine are restricted and across much of the rest of Europe there are no restrictions on the sale of e-cigarettes, although some countries prohibit sales to minors or limit advertising and promotion. In the United Kingdom, which has one of the most advanced e-cigarette markets globally, e-cigarettes are classified as consumer products and use is now as common as, or more common than, the use of Nicotine Replacement Therapies (NRT)^{114,115}.

As of May 2016 regulations across Europe will change as revisions to the EU Tobacco Products Directive are implemented to cover e-cigarettes that contain up to 20mg of nicotine (non-nicotine e-cigarettes are not included)¹¹⁶. E-cigarettes or e-liquid refills that contain more than 20mg of nicotine or make therapeutic claims will be required to undergo testing and approvals as a therapeutic product prior to market entry. Other elements covered by the revised Directive include prohibiting advertising and promotion, requiring child and tamper-proof caps on e-liquid, requiring listing of ingredients and providing product information, and restricting the size of refills and cartridges available for sale¹¹⁷.

Asia

Across Asia there are significant differences in how countries regulate electronic cigarettes and their peripheral products. Japan and Hong Kong have banned the sale and use of nicotine-containing e-cigarettes. Thailand and Singapore have banned all electronic cigarettes. Malaysia has banned products that resemble tobacco cigarettes, but not explicitly e-cigarettes. Philippines currently has no bans on e-cigarette products¹¹⁸.

¹¹³ Official Journal of the European Union, 1 Legislative acts, Directives, Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014: L 127/2, http://ec.europa.eu/health/tobacco/docs/dir_201440_en.pdf

¹¹⁴ Beard, E., & West, R. (2012). Use of nicotine replacement therapy for smoking reduction and temporary abstinence: An update of Beard et al., (2011). *Addiction*, 107(6), 1186-1187.

¹¹⁵ Kotz, D., Brown, J., & West, R. (2014). 'Real-world' effectiveness of smoking cessation treatments: a population study. *Addiction*, 109(3), 491-499.

¹¹⁶ European Union Commission, Questions & Answers: New rules for tobacco products, (26 February 2014), available from: http://europa.eu/rapid/press-release_MEMO-14-134_en.htm accessed 17/11/2015

¹¹⁷ Official Journal of the European Union, 1 Legislative acts, Directives, Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014: L 127/6-8, available from: http://ec.europa.eu/health/tobacco/docs/dir_201440_en.pdf accessed 17/11/2015

¹¹⁸ Electronic cigarettes in Asia: a review of promotions and availability, (May 2014), Commissioned by the WHO Tobacco Free Initiative, available from: http://seatca.org/dmdocuments/SEATCA_Ecig%20Report_Final.pdf accessed 18/11/2015

Canada

Similar to the current legislative situation in South Australia, electronic cigarettes and e-liquids that contain nicotine have not been approved for sale in Canada¹¹⁹. E-cigarettes that contain nicotine are regulated as drug or drug delivery devices under the *Food and Drugs Act 1985*¹²⁰. As such an e-cigarette that contains nicotine requires testing and approval from Health Canada as a new drug before it can enter the market. No e-cigarette has received Health Canada approval. E-cigarettes that do not contain nicotine and that do not make health claims are currently legal for sale¹²¹. E-cigarettes are widely available in Canada, both with and without nicotine¹²² – despite nicotine restrictions.

The Canadian House of Commons released a report in March 2015 containing fourteen recommendations for the regulation of e-cigarettes as tobacco products, these covered product standards, marketing and promotion, the need for more research and supply and use¹²³.

United States

From 2013 to 2014 According to the Centers for Disease Control and Prevention, e-cigarette use among middle and high school students tripled¹²⁴. E-cigarette use is now more prevalent among American youth than use of traditional tobacco.

Only electronic cigarettes that are marketed as therapeutic goods are regulated by the Food and Drug Agency (FDA) under the Center for Drug Evaluation and Research. The FDA has proposed changes to the regulations to extend the powers of the Center for Tobacco Products to cover the sale and use of e-cigarettes. Currently, legislation is not consistent between states: 10 states permit the sale of e-cigarettes to minors, 3 states prohibit use in indoor spaces (such as workspaces, restaurants and bars). Proposed changes to the FDA Center for Tobacco Products would enable uniformity across states.

¹¹⁹ Czoli CD, Reid JL, Rynard VL, Hammond D. E-cigarettes in Canada - Tobacco Use in Canada: Patterns and Trends, 2015 Edition, Special Supplement. Waterloo, ON: Propel Centre for Population Health Impact, University of Waterloo.

¹²⁰ Health Canada. Notice – To all persons interested in importing, advertising or selling electronic smoking products in Canada; 2009. Available online: http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applicdemande/pol/notice_avis_e-cig-eng.php. Accessed 15/11/2015

¹²¹ Czoli CD, Reid JL, Rynard VL, Hammond D. E-cigarettes in Canada - Tobacco Use in Canada: Patterns and Trends, 2015 Edition, Special Supplement. Waterloo, ON: Propel Centre for Population Health Impact, University of Waterloo.

¹²² Hammond D, White C, Czoli C, Martin C, Magennis P, Shiplo S. Promotional activities for electronic cigarettes in Canada: A review and preliminary environmental scan; 2014.

¹²³ Standing Committee on Health. March 2015. Vaping: Towards a Regulatory Framework for E-Cigarettes. Report of the Standing Committee on Health. 41st Parliament, 2nd Session. Available online: http://www.parl.gc.ca/Content/HOC/Committee/412/HESA/Reports/RP7862816/412_HESA_Rpt09_PDF/412_HESA_Rpt09-e.pdf. accessed 15/11/2015

¹²⁴ Centers for Disease Control and Prevention, E-cigarette use triple among middle and high school students in just one year, April 2015, available from: <http://www.cdc.gov/media/releases/2015/p0416-e-cigarette-use.html> accessed 17/11/2015

7.3. Smoking prevalence in South Australia

Smoking prevalence has been declining across Australia, with South Australia no exception. Since 2010 smoking rates have fallen considerably, apart from a rise in 2013, attributed to the removal of social marketing funding. With social marketing reinstated, South Australia has reached its lowest ever smoking rate.

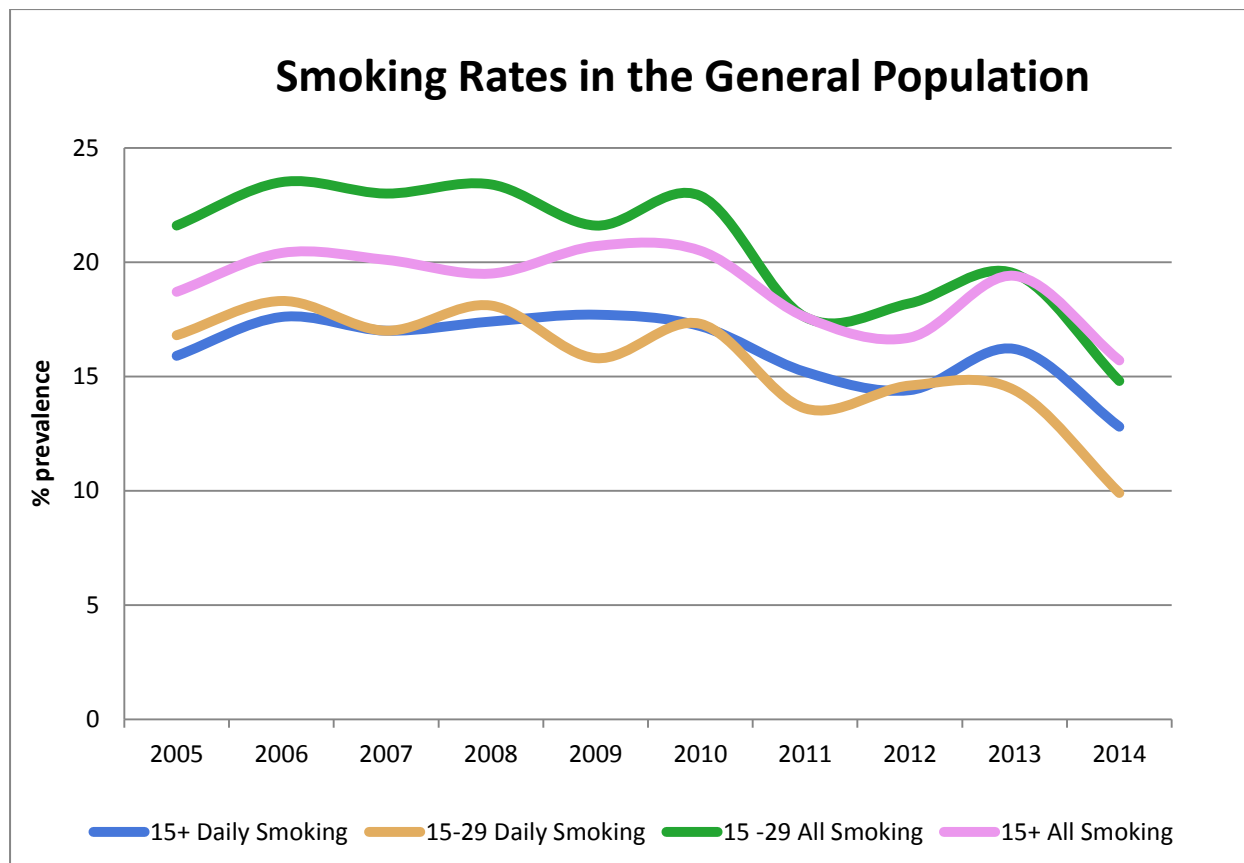


Figure 7.3.1¹²⁵

Some populations still have dramatically higher smoking rates than the population average. People with mental illness, indigenous people, country South Australia residents and people living in the two most disadvantaged quintiles of our society are still much more likely to smoke.

¹²⁵South Australian Health and Medical Research Institute, Key Smoking Statistics for SA – 2014, available from: https://www.sahmri.com/user_assets/1785280bbe4eb537684265591d82ab6f7e0a05b9/key_smoking_stats_for_sa_2014_final_300415.pdf accessed 10/11/2015

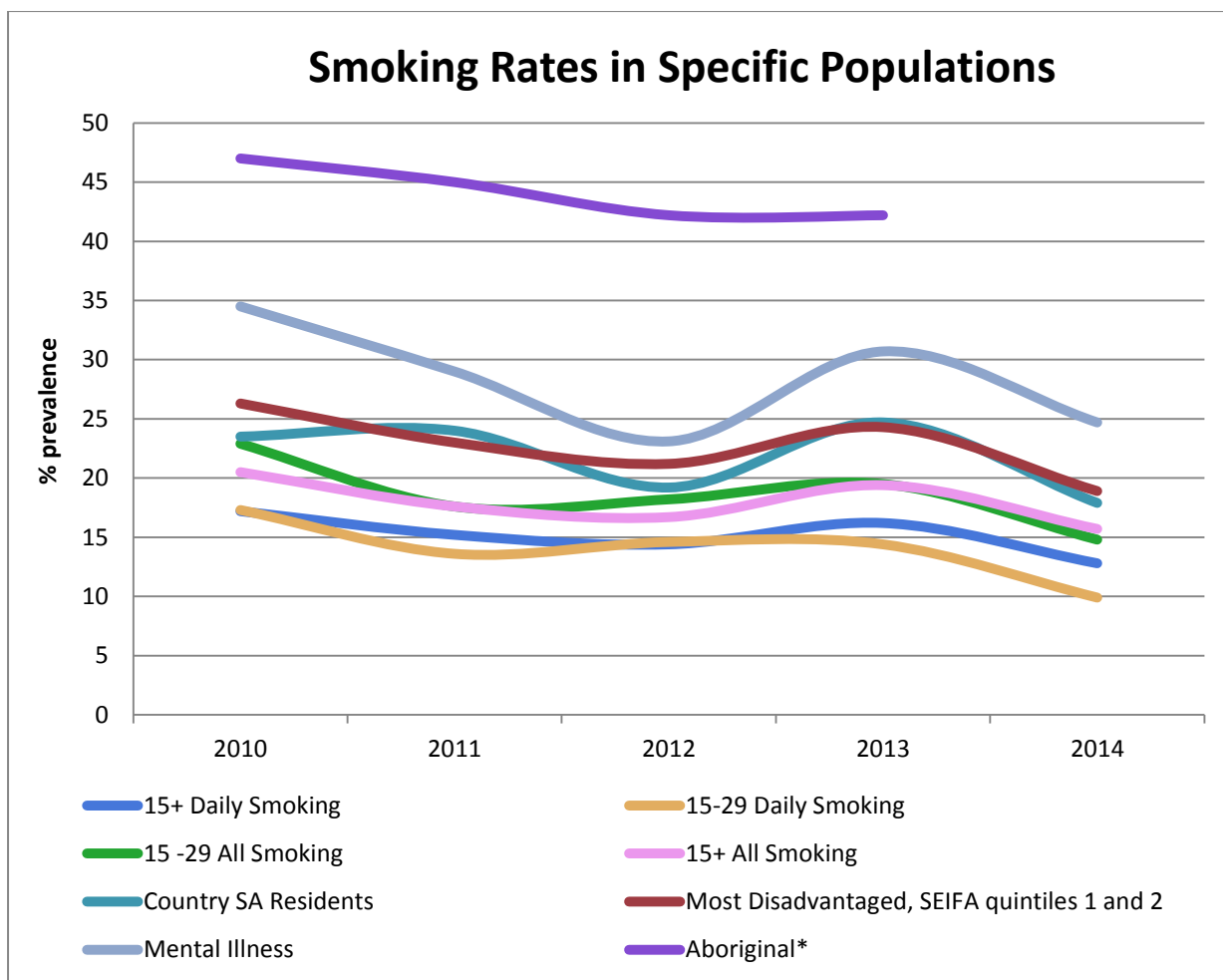


Figure 7.3.2¹²⁶

Smoking tobacco kills 50% of long term users and remains one of the leading causes of preventable death according to the Cancer Council and other health experts^{127,128}. One person dies about every 28 minutes in Australia, due to illness caused by tobacco use¹²⁹. Tobacco is the only legal consumer product on the market that *used as intended* results in death¹³⁰. Current tobacco control measures

*Aboriginal Data comes from ABS derived data first data point in range 2008 (47%), 2012-2013 (42.2%)

http://www.federalfinancialrelations.gov.au/content/national_minimum_data_sets.aspx#Indigenous

¹²⁶ South Australian Health and Medical Research Institute, Key Smoking Statistics for SA – 2014, available from:

https://www.sahmri.com/user_assets/1785280bbe4eb537684265591d82ab6f7e0a05b9/key_smoking_stats_for_sa_2014_-_final_-_300415.pdf accessed 10/11/2015

¹²⁷ Cancer Council Australia, Smoking and Tobacco Control, available from: <http://www.cancer.org.au/policy-and-advocacy/position-statements/smoking-and-tobacco-control/> accessed 10/11/2015

¹²⁸ Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., & Davis, A. (2013). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*, 380(9859), 2224-2260.

¹²⁹ Australian Government, Smoking – a leading cause of death, available from:

<http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/content/warnings-graph> accessed 10/11/2015

¹³⁰ Walton, J. N., Barondess, J. A., & Lock, S. (Eds.). (1994). *The Oxford medical companion*. Oxford University Press, USA.

including social marketing, tax and excise rises, plain packaging¹³¹, smoke-free areas, telephone counselling and support services and smoke-free policies at work places and in public spaces, are having a very positive effect in bringing down smoking rates, encouraging quitting and preventing uptake^{132,133}. Australia has among the lowest smoking rates in the world¹³⁴. Despite this some demographic populations are still burdened with much higher prevalence rates and associated morbidities¹³⁵. The Government is committed to furthering the effort to reduce tobacco use and supports tobacco control measures to eventually eradicate smoking and related harms. In South Australia e-cigarette use is still low with only 1.2% using these devices in 2014¹³⁶. By applying appropriate regulation to e-cigarettes it is hoped that the minority of people who may benefit from their use will be able to do so, while minimising risk to the majority of South Australians who would not benefit from exposure to these products.

7.4. Legislative and consultative comparison with other Australian States

7.4.1. Australian Capital Territory

In October 2015, Australian Capital Territory Minister for Health, Simon Corbell MLA announced that the Australian Capital Territory Government plans to introduce legislation to ban the use of e-cigarettes in smoke-free areas and regulate their sale and marketing. Restrictions will prohibit the sale of e-cigarettes to minors under 18 years of age, use in smoke-free areas and restrict advertising, promotion and display of e-cigarette products and peripherals. This comes in response to a discussion paper released for public comment in November 2014 in which the public was invited to explore options to address potential harms to the community from the use of e-cigarettes. The timeline for implementation is not yet released.

7.4.2. New South Wales

On 30 June 2015, the *Public Health (Tobacco) Amendment (E-cigarettes) Act 2015* was assented. This amendment to the *Public Health (Tobacco) Act 2008* bans the sale of e-cigarettes and peripherals to

¹³¹ Quit, Cancer Council Victoria (April 2011), Plain Packaging of Cigarettes: a review of the evidence, available from: <http://www.cancervic.org.au/plainfacts/plainfacts-evidence> accessed 10/11/2015

¹³² Nagelhout, G. E., Levy, D. T., Blackman, K., Currie, L., Clancy, L., & Willemsen, M. C. (2012). The effect of tobacco control policies on smoking prevalence and smoking-attributable deaths. Findings from the Netherlands SimSmoke Tobacco Control Policy Simulation Model. *Addiction*, 107(2), 407-416.

¹³³ Wilson, L. M., Avila Tang, E., Chander, G., Hutton, H. E., Odelola, O. A., Elf, J. L., & Apelberg, B. J. (2012). Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: a systematic review. *Journal of Environmental and Public Health*.

¹³⁴ Chapman, S. (2007). Falling prevalence of smoking: how low can we go? *Tobacco Control*, 16(3), 145-147.

¹³⁵ Australian Government, Department of Health, Tobacco key facts and figures, (26 August 2015), available from: <http://www.health.gov.au/internet/main/publishing.nsf/content/tobacco-kff> accessed 10/11/2015

¹³⁶ South Australian Health and Medical Research Institute, Key Smoking Statistics for SA – 2014, available from: https://www.sahmri.com/user_assets/1785280bbe4eb537684265591d82ab6f7e0a05b9/key_smoking_stats_for_sa_2014_final_300415.pdf accessed 10/11/2015

minors, under the age of 18. It is also an offence for an adult to buy an e-cigarette or peripheral products for minors.

As of 1 December 2015, regulation also applies to the display and marketing of e-cigarette products. E-cigarettes are required to be out of sight at retail outlets and cannot be sold from temporary 'pop up' stores. E-cigarettes or accessories may not be included in shopper loyalty programmes, as free samples or promoted through sponsorship. It is also illegal to use e-cigarettes in cars where children under 16 years are present.

7.4.3. Queensland

Since 1 January 2015, e-cigarettes have been regulated in Queensland under the *Tobacco and Other Smoking Products Act 1998* (TOSPA). Under the Act, e-cigarettes may not be used in existing smoke-free areas, indoors or outdoors. E-cigarettes and their peripherals may not be supplied to minors, under 18 years, nor may adults purchase them on their behalf. E-cigarettes and e-cigarette accessories must be hidden from view at retail outlets and may not be promoted or advertised.

7.4.4. Tasmania

E-cigarettes and their components and peripherals may be sold in Tasmania provided they do not contain nicotine. Supplying products that contain nicotine is in breach of the *Poisons Act 1997* for which the maximum penalty is \$1300. As e-cigarettes do not contain tobacco leaf they are not currently captured under Tasmanian tobacco control legislation. The Tasmanian Government released a discussion paper in June 2015 for public comment until 24 July 2015. Results of this consultation are not yet released.

7.4.5. Victoria

The Victorian *Tobacco Act 1987* does not restrict the sale, supply or use of e-cigarettes unless the product resembles a tobacco product. This is because the Act specifically refers to tobacco as a main ingredient of the product. The Victorian Government is monitoring the emerging evidence regarding potential risks posed by e-cigarettes and their peripheral products to inform possible direction for regulation.

7.4.6. Western Australia

Western Australian regulates e-cigarettes through the *Tobacco Products Control Act 2006* as a product (toy, food or other product) that resembles a tobacco product or package and has been upheld in Western Australian courts. On 10 April 2014 the Supreme Court of Western Australia concluded that e-cigarettes "are designed to resemble a tobacco product because they were intended to be used to inhale vapour in a manner very similar to the inhalation of tobacco smoke

when using a cigarette.” The operator of Heavenly Vapours was charged with contravening section 106(a) of the *Tobacco Products Control Act 2006*. Heavenly Vapours has lodged leave to appeal; awaiting decision from the Full Bench of the Supreme Court. The judgement of this appeal was due by the end of 2015, but at the time of writing was not released.

7.4.7. Northern Territory

E-cigarettes (that do not contain nicotine) are currently available for sale in the Northern Territory without regulation. Provided the products do not contain nicotine, children and adults may buy these products from any outlet and their use is unrestricted. The Northern Territory Government is considering regulating the sale, supply, display, promotion and use of e-cigarettes and their peripheral products.

7.5. Nicotine

Nicotine is a Schedule 7 poison under Australian Federal law due the potential risk of death posed by (accidental) exposure. However, the pharmacokinetics associated with nicotine metabolism are complex¹³⁷ and this has generated debate as to what can be considered a safe intake of nicotine and what level of intake may cause harm or even death^{138,139}.

Nicotine is regulated by the Australian Government as a Schedule 7 poison. Each State interprets this schedule through their poisons legislature to produce restrictions and penalties for possession, use and supply. The South Australian Government cannot alter the Schedule that applies to nicotine but may alter the penalties that apply to Schedule 7 poisons in this State. Across all states it is illegal to supply or sell nicotine for general consumer purposes. In South Australia it is illegal to sell nicotine for consumer purposes, without licence. No licences have been issued for sale of nicotine to be used in e-cigarettes.

E-cigarette users who choose to use nicotine may source it internationally, online. Nicotine can be purchased online in a variety of strengths and/or premixed in an e-liquid solution. Under the Federal Therapeutic Goods Administration Personal Importation Scheme, if a person in South Australia holds a valid prescription from an Australian medical practitioner they may import nicotine for personal

¹³⁷ Hukkanen, J., Jacob, P., & Benowitz, N. L. (2005). Metabolism and disposition kinetics of nicotine. *Pharmacological Reviews*, 57(1), 79-115.

¹³⁸ Mayer, B. (2014). How much nicotine kills a human? Tracing back the generally accepted lethal dose to dubious self-experiments in the nineteenth century. *Archives of Toxicology*, 88(1), 5–7. <http://doi.org/10.1007/s00204-013-1127-0>

¹³⁹ Matsushima, D., Prevo, M. E., & Gorsline, J. (1995). Absorption and adverse effects following topical and oral administration of three transdermal nicotine products to dogs. *Journal of Pharmaceutical Sciences*, 84(3), 365-369.

smoking cessation purposes for up to a maximum three month supply at any one time and up to a fifteen month supply within twelve months¹⁴⁰.

Nicotine has been found to be present in e-liquids labelled as nicotine-free¹⁴¹. This is of concern as Australian consumers may be adding nicotine to their e-liquid solution unaware that the existing product contains an unspecified and potentially high level of nicotine which could be damaging to health especially in children, adolescents and unborn babies¹⁴². Moreover, retailers who do not test their products for nicotine, in order to ensure they are free of nicotine, may find they are illegally and unwittingly selling a nicotine containing product. There may be particular risk associated with products sourced internationally due to significantly different laws that exist concerning nicotine in other countries.

In 2013, testing by New South Wales Health found that 70% of sampled e-liquids contained high levels of nicotine (despite being unlawful)¹⁴³. In response the New South Wales Government is increasing regulatory action concerning the sale of nicotine.

7.6. Site visits

The committee was invited by the business owners to attend two “vape stores” (Vape4Life and The Vape Store), in the metropolitan area. These visits enabled the committee to engage with the process of decision making to purchase an e-cigarette and the point of sales experience for the customer. Both stores provide a welcoming environment and modern aesthetic. One store trades within another industry as well. There were a wide variety of products on display including a diverse array of e-cigarette devices, peripherals and e-liquids. Both stores had menu boards advertising e-liquid flavours available for purchase. Many of these flavours were sweet and fruity and also available to try. Both retail outlets had all products on display. Both retail outlets made claims that they did not sell nicotine but instead pointed purchasers to online outlets.

Store owners, Craig Jackman and Jacqueline Munn, discussed their experiences educating customers and the process of recommendation of products to the customer on an individualised basis through the scope of choosing a product, to using the product. Both owners described their customers as mostly heavy smokers trying to quit or reduce their use of tobacco. Both discussed rejecting sales to minors, although this is not illegal. In both cases the owners were supportive of light regulation to provide more certainty for their business and the industry, but were strongly opposed to regulation

¹⁴⁰ Therapeutic Goods Administration. Liquid nicotine and personal importation for use in electronic cigarettes. Canberra: TGA, 2014. Available from: www.tga.gov.au/newsroom/btn-liquid-nicotine.htm#.U7o-O8hiuDQ Accessed 15/11/2015

¹⁴¹ Goniewicz, M. L., Gupta, R., Lee, Y. H., Reinhardt, S., Kim, S., Kim, B., & Sobczak, A., (2015). Nicotine levels in electronic cigarette refill solutions: A comparative analysis of products from the US, Korea, and Poland. *International Journal of Drug Policy*.

¹⁴² Ginzel, K. H., Maritz, G. S., Marks, D. F., Neuberger, M., Pauly, J. R., Polito, J. R., & Slotkin, T. A., (2007). Critical Review Nicotine for the Fetus, the Infant and the Adolescent? *Journal of Health Psychology*, 12(2), 215-224.

¹⁴³ New South Wales Department of Health. *NSW Health Alert - Warning on e-liquids*. Sydney: NSW Government; 2013

of e-cigarettes under the same legislation as tobacco products. There was fear that tobacco regulations would be directly translated into restrictions on e-cigarettes and that this would lead to the “effective banning” of e-cigarettes and peripheral products.

Both retailers discussed access to nicotine, variation of delivery via the wide variety of devices and different devices on the market from those that resembled cigarettes, to pipes and those furnished with fashion accessories. They also discussed country of origin of products.

7.7. Witness statement summaries¹⁴⁴

7.7.1. Ms Marina Bowshall and Mr Matthew Craig, Drug and Alcohol Services, South Australia (DASSA)

Ms Bowshall and Mr Craig presented to the committee regarding a wide range of topics linked to electronic cigarette use, supply and promotion. Their presentation demonstrated the use of e-cigarettes and displayed generations of the devices. They highlighted the significant unknowns of e-cigarettes and therefore the potential for harm in an environment of lack of regulation. Mr Craig discussed how the *Tobacco Products Regulation Act 1997* currently only captures e-cigarettes that resemble a cigarette but that many devices now coming to the market do not. In describing the current state of regulation of e-cigarettes he said:

“South Australia does not currently have legislation that comprehensively regulates the sale, supply, promotion and use of these devices. That means that in South Australia e-cigarettes can be legally sold or supplied to children, advertised and displayed, and used anywhere, including enclosed public spaces.”

When asked by the committee about regulation under the *Tobacco Products Regulation Act 1997* Ms Bowshall stated:

“We think that if a regulation is what is sought as a result of this committee's hearings, [regulation under the Tobacco Products Regulation Act 1997] would be the simplest mechanism to make that achievable and provide some very clear direction for business, and it's not increasing regulation by having a supplementary or separate section of regulation. It would simply be placing these products within the existing regulatory regime, making it easier for businesses to comply.”

Mr Craig expanded upon this:

“[including] e-cigarettes under the Tobacco Products Regulation Act... would make e-cigarettes illegal to sell or supply to children; available for sale only by a licensed retailer; not advertised or promoted; required to be out of sight in retail displays; not used in areas where smoking is banned; not sold online or via other indirect means; and subject to all regulation that currently applies to all tobacco products.”

¹⁴⁴ Transcripts of each of the proceedings can be found at:
<https://www.parliament.sa.gov.au/Committees/Pages/Committees.aspx?CTId=3&CId=323>

Ms Bowshall and Mr Craig discussed in depth the “*insufficient evidence*” regarding the health effects of e-cigarettes to individuals and at population level, potentials for harm, the diversity and inconsistency between e-cigarette devices and peripherals, and unknown efficacy of e-cigarettes as cessation aids. They also expressed concern about the potential for e-cigarettes to undermine existing tobacco control efforts. They advised the committee to take a precautionary approach regarding e-cigarettes.

7.7.2. Dr Miranda Ween and Professor Sandra Hodge, Hanson Institute, Royal Adelaide Hospital and Department of Medicine, University of Adelaide

Dr Ween and Professor Hodge presented emerging research regarding the safety and risks profiles of e-cigarettes as well as evidence about the marketing of e-cigarettes.

Dr Ween presented evidence of promotions occurring in other countries that points to the glamorisation of the e-cigarette market and the attractiveness of the product as a consumer item. She went on to discuss the current lack of evidence available demonstrating the safety of these products. Dr Ween stated:

“...there are over 40,000 articles on cigarette smoke effect on health. When you look at e-cigarettes there are about 400 and only a fraction of those are actually looking at the effects on health. Most of them are looking at psychological effects or why people are using them rather than looking at the actual safety of e-cigarette use.”

Dr Ween presented evidence from peer reviewed research demonstrating the toxic effects, on a range of cells, of both nicotine and non-nicotine e-liquids. She also presented data demonstrating differences between the toxicity of tobacco smoke and e-cigarette aerosol. While stating that cigarette smoke may contain significantly more harmful components than e-cigarette vapour she also regarded that this was missing the point, stating:

“...the question is: is it enough to do harm? In a report released just last week... from the US, the Center for Environmental Health actually tested 97 different e-liquids and found that 90 per cent of them had higher levels of the carcinogenic compounds, formaldehyde or acetaldehyde. In fact, some of them had over 100 times the safety regulation in that state.”

With regards to flavours the researchers presented evidence about the differences between toxicity on cells of different flavours. Regardless of whether sweet and confectionery flavours could arguably attract children to vaping, these and any other flavours, could be damaging to health. More research is needed to assess the influence of heated, vaporised and inhaled flavours and other e-cigarette substances on human airways and other organs. When a substance is ingested the body breaks it down through the long processes of digestion. Part of this process is the elimination of toxins and removal of harmful substances from the body. When a substance is inhaled the processes are significantly shorter and less complex – there are fewer stages before a substance is absorbed into the bloodstream. Far more toxins may be absorbed by this method than through ingestion making the use of flavourings designed for ingestion potentially unsuitable for inhalation and damaging to health.

Dr Ween stressed to the committee the issue of massive variation between different e-cigarette devices and liquids that influence the emissions and compounds being released ultimately creating varying potential for health effects.

In summing up her presentation Dr Ween stated:

“...essentially we just don't have enough information to declare whether these are safe, their quality and their efficacy.”

7.7.3. Mr Savvas Dimitriou, Smoke-Free Traders Association

Mr Dimitriou presented on the personal and business aspects of the e-cigarette industry. As a ‘vaper’ and Chairman of the Smoke-free Traders Association, Mr Dimitriou provided the perspective of a user and business-person in the field. In his view, the e-cigarette industry is a consumer-driven grassroots industry which allows smokers to reduce their potential burden of ill health by reducing smoking while maintaining the enjoyable or unbreakable aspects of their smoking habit. Mr Dimitriou stated his disdain for the tobacco industry and desire to distance himself and his industry from tobacco. He stated:

“It's very much a consumer driven industry which exists—and I mean this quite sincerely—to destroy the tobacco industry. Certainly, it's my goal and certainly it's the goal of the SFTA [Smoke-Free Traders Association] and of every member we have and all the consumers we deal with. We are no great fans of tobacco. Of the hundreds of products that are sold in South Australia and, indeed, in Australia, in the industry, not one of them in any of the SFTA member stores is made by a tobacco company—not one.”

This wish to maintain distance from the tobacco industry was repeated throughout his presentation. It is for this reason however, that Mr Dimitriou rejects the regulation of e-cigarettes under the *Tobacco Products Regulations Act 1997*. Instead he appealed to the committee for:

“...intelligent, reasonable and sensible regulation of the industry to help the industry grow and to help tens of thousands of smokers abandon toxic, combustible cigarettes.”

Mr Dimitriou was concerned that over-regulation or inappropriate regulation would stifle growth of the industry and prevent smokers from accessing e-cigarettes which he stated are *“the most effective cessation device ever invented”*.

Mr Dimitriou discussed rules that govern a store’s membership in the Smoke-Free Traders Association, that include not selling e-cigarettes or peripheral products to minors, and not selling nicotine (as this is illegal). He felt that regulation restricting sales to minors was appropriate. However, he also discussed the importance of being able to demonstrate products to customers in order to ensure safe use and was concerned that without the ability to show products in stores, users could be put at risk. In response to the committee’s question regarding e-cigarette use in existing smoke-free areas Mr Dimitriou stated:

“it should always be the businesses' decision whether or not to allow electronic cigarette usage... at the bare minimum there should be a carve-out for dedicated electronic cigarette retail stores because those retail stores are not visited by the general public. They are

explicitly visited only by people who are either interested in using electronic cigarettes or who are already electronic cigarette users. There is no risk of a child wandering into that shop and hanging around with the vapour that might be in there...”

Fundamentally Mr Dimitriou called for more clarity for the industry and protection of business.

7.7.4. Mr Charlie McCracken, Versatile Vapes

Mr McCracken presented to the committee as a store owner and personal user of e-cigarettes. He talked about his personal smoking cessation journey through the use of e-cigarettes and how this motivated him to become involved in the industry. Mr McCracken holds a licence to sell tobacco products (although he chooses not to) as this requires him to ask for proof of age when selling products and sets a standard for staff at his store, in this sense he welcomed some regulation and clarity for the industry. Mr McCracken discussed the importance of demonstrating and teaching customers about e-cigarette devices and products due to their complexity and the potential for ‘mishaps’ if used incorrectly, similarly to all electronic products.

“When a customer has decided to buy a device, they are educated as to the setup of the device and generally will be vaping before they leave the store. They have the opportunity to see, to touch and discuss the items before buying, a service that is not available online. They will also receive responsible advice on nicotine usage.”

The ability to engage with customers is a unique aspect of the store environment that Mr McCracken believes needs to be preserved through regulation. In discussion of the potential for regulation of e-cigarettes Mr McCracken went on to state:

“E-cigarettes do not fit well under the definition of tobacco product in the Act. There is no smoke, no combustion, no tar and often times no nicotine. If electronic cigarettes were regulated under this act, it would amount to a de facto prohibition and mean disaster for my business and negatively impact the health of those current vapers and smokers who no longer have access to them or restricted access to them. It would result in net public health harm because people would be getting the message that electronic cigarettes are as harmful as tobacco cigarettes and remain smoking, and also because the less harmful option would not be available to be advertised in a way that makes them attractive to smokers who need them most.”

Further, Mr McCracken suggested that e-cigarettes should be promoted towards current adult smokers to maximise awareness and encourage people to quit (through use of e-cigarettes).

7.7.5. Ms Alana Sparrow, Cancer Council South Australia

Ms Sparrow was concerned that evidence in the e-cigarette debate lacked rigour and pressed upon the committee to draw differences between opinion, debate and fact. Ms Sparrow, representing the views of Cancer Council, South Australia stated:

“...we call for regulation which bans the sale of electronic cigarettes and applies existing tobacco laws to their use and advertising.”

Cancer Council proposes this regulation due to the lack of evidence regarding the efficacy of e-cigarettes as cessation devices and unproven safety of the products. Ms Sparrow cited the lack of Therapeutic Goods Administration approval of any e-cigarette product as potentially indicative of risk or lack of effectiveness. Although Ms Sparrow acknowledged that an outright ban of e-cigarettes may be unworkable due to the international market and internet sales, she went on to state:

“I think [a ban on e-cigarette sales] sends an important message. There is a general public perception that if a product is available for sale it is safe and that it does what it says it is going to do. Taking a stand that says that these products will not be sold in our State sends an important message to people about their potentially harmful effects.”

Ms Sparrow went on to clarify that the Cancer Council would seek a ban on e-cigarette devices due to the range of liquids that could potentially be used in such devices. Cancer Council would also support a ban on advertising, in the same way that advertising is prohibited for tobacco products, and prohibition of use in existing smoke-free areas.

E-cigarette use is significantly more prevalent in the United States; Ms Sparrow discussed the “very unique” position of South Australia in the opportunity to regulate the e-cigarette market before it develops more fully. She discussed how currently the United States is in the process of trying to “wind back use”, and that inaction in South Australia, now, could lead to high costs to the taxpayer in the future.

Ms Sparrow discussed the role of flavours in e-cigarette use and cessation. She stated:

“...the idea is to get people to eventually quit their e-cigarette as well, so providing them with a flavour that is particularly attractive may actually keep them on the electronic cigarette longer, whereas if they're not enjoying the flavour of the electronic cigarette, then they'll be more likely to give that up as well.”

In line with the World Health Organisation, Framework on the Convention on Tobacco Control, of which Australia is a signatory, there is an obligation to reduce use and dependence on nicotine. As such Ms Sparrow discussed the potential relevance of tobacco flavours but that energy drink or confectionery flavours would be unlikely to fit with this restriction. Similarly, decorative devices with the potential to attract children through cartoon characters or diamantes would be deemed unlikely to aid cessation and therefore be prohibited.

Ms Sparrow discussed the entry to the e-cigarette market of big tobacco companies as of great concern:

“Every major tobacco company now has an e-cigarette arm. We detailed in the submission what some of those were in terms of what their e-cigarette brands are compared to their traditional brands. We also see the emergence of lobbyists on behalf of those tobacco companies that are now coming forward as e-cigarette companies, but we know that they are e-cigarette companies that are owned by tobacco companies, which is extremely concerning to us because, forgive our cynicism but having been down that path, when a

tobacco company says, 'We think these things are healthy for you,' we have flashbacks to them doing things like putting asbestos filters in cigarettes. So, I guess we have a long history of distrust with that industry and it's extremely concerning to us that they are now coming into this market."

Historically tobacco companies have tried to promote 'risk reduced' products and withheld important information regarding the safety of their products. Many of these companies have the resources to fund products through the Therapeutic Goods Administration processes to achieve therapeutic approval, and yet no product has currently received approval. Ms Sparrow indicated strong mistrust of these companies and their products due to the Cancer Council's interactions with this industry and awareness of the extent of the history. She cited international examples of the similarities between current e-cigarette advertising and historical traditional cigarette advertising.

7.7.6. Ms Wendy Bevan, Australian Hotels Association, South Australia

The Australian Hotels Association, as represented by Wendy Bevan, raised the implications for the hotel industry of the currently unregulated e-cigarette market. The lack of clarity around the responsibility of hoteliers and hotel management has potential to cause conflict between customers, management and staff. For this reason Ms Bevan called for pragmatism stating:

"...if there is seen to be a need to regulate our view would be to err on the side of caution and treat it in the same way as cigarettes solely because it minimises conflict and is a pragmatic and simple way to deal with it..."

E-cigarette use in hotels is gradual increasing and with this there is increasing confusion regarding their status. Ms Bevan discussed how different premises and managers implement their own policies regarding e-cigarette use and that this, although not currently a major concern, could become more so if the e-cigarette market was to develop as anticipated.

Ms Bevan discussed the difference between cigarette smoking and e-cigarettes in terms of uncertainty:

"Generally, smokers know what they are allowed to do, but even when smokers are in areas where they can smoke, they are generally, they tell us, very sensitive to the needs of the other patrons and will remove themselves voluntarily and be quite considerate. That is what we are hearing, that smokers tend to be very considerate and there is very little conflict. It is just that question of ambiguity at the moment which is coming up. Whether people with e-cigarettes are allowed to go indoors, for example, is the question we are being asked."

Ambiguity over where e-cigarettes can be used may be the result of promotion suggesting that e-cigarettes can be used anywhere – a statement that may be explicit on e-cigarette packaging.

In summation Ms Bevan discussed the role of the hospitality industry in pleasing and satisfying customers. Conflict represents a concern for this industry and therefore simple and clear regulation through the *Tobacco Products Regulation Act 1997* is the preferred route as this is regulation that the industry is familiar with and has influenced the development of.

7.7.7. Mr Maurice Swanson, Heart Foundation

Mr Swanson presented to the committee on behalf of the joint written submission by the South Australian division of Heart Foundation, the Asthma Foundation of South Australia and the South Australian division of the Australian Medical Association. These organisations' positions are reflective of the Heart Foundation and Cancer Council's statements regarding e-cigarettes. Mr Swanson clarified this:

"We're calling for a ban on the sale of electronic cigarettes and all vaporising devices and associated products, such as liquids, cartridges and mouth pieces, as smoking products, including those devices that deliver nicotine and those that claim to be nicotine free... in the absence of any approvals by the Therapeutic Goods Administration; a ban on the use of electronic cigarettes in smoke-free areas; and a ban on the advertising and promotion of electronic cigarettes consistent with the existing tobacco advertising prohibitions."

By banning the sale of e-cigarettes Mr Swanson believed that a "very clear message" would be sent to the community: that e-cigarettes are not known to be safe. Mr Swanson was concerned that there is little consistency between products and that with lack of labelling and product testing consumers do not know what they are buying and inhaling. He cited a New South Wales survey in which e-liquids were tested and a large proportion contained nicotine¹⁴⁵ despite this being unlawful, and therefore consumers may assume such products to be nicotine-free.

E-cigarettes are generally promoted and discussed as an aid to smoking cessation and as such the Therapeutic Goods Administration is the appropriate body to assess the validity of this assertion and then apply safety standards to the products to ensure consistent product quality. Mr Swanson discussed the limited evidence demonstrating e-cigarettes as effective cessation aids and cited this as a potential explanation for the lack of products undergoing Therapeutic Goods Administration testing and approval. He pointed to British American Tobacco's subsidiary company, Nicoventures as evidence that tobacco companies are becoming involved in the e-cigarette industry but despite their backing, no product has achieved Therapeutic Goods Administration approval. Mr Swanson demonstrated concern over the involvement of major tobacco companies in the e-cigarette industry due to the history of lack of honesty and conflict of interest with their need to maintain smokers' addiction to their core product which remains cigarettes.

Mr Swanson indicated that while e-cigarettes may be considered less harmful than tobacco smoking he emphasized that it would be many years before the long term influences of e-cigarettes on health are known. Evidence regarding short term effects on health is not conclusive and no e-cigarette is known to be safe to use.

Citing the precautionary principle, Mr Swanson stated that a ban across all flavours would be the strongest way to protect public health given the unknown effects of inhaling heated, vaporised food flavourings; he also expressed concern regarding potential for leeching of heavy metals into e-liquids from device parts.

¹⁴⁵ New South Wales Department of Health. *NSW Health Alert - Warning on e-liquids*. Sydney: NSW Government; 2013

Mr Swanson discussed the potential for e-cigarettes to renormalise smoking behaviours and undermine existing tobacco control efforts. He talked about the considerably higher levels of e-cigarette smoking prevalence in the United States and United Kingdom and referred to this as a “*natural experiment*”. He went on to state:

“...it is really crucial that we have regulation to prevent the use of them, however they are obtained, in smoke-free areas...”

Prohibiting use in smoke-free areas would limit visibility of e-cigarettes, perhaps limiting their appeal and protect the health of bystanders from potentially harmful second hand vapour.

In summation, Mr Swanson presented a precautionary approach to the committee based on, in his view, the insufficient scientific evidence available and the unknown consequences of e-cigarette use upon health, in both the short and longer term, on users and bystanders. He was particularly concerned about the influence of major tobacco companies in the e-cigarette industry and the potential for renormalisation of smoking in Australia society.

7.7.8. Dr Stephen Jenkins, Nicoventures

Dr Stephen Jenkins presented to the committee in his role as Director of Regulatory and Medical Affairs of Nicoventures. Nicoventures is a subsidiary of the British American Tobacco Group, but is managed separately from the tobacco business. Dr Jenkins called for appropriate regulation of e-cigarettes through the development of:

“...a specific regulatory framework for electronic cigarettes in conjunction with the federal Department of Health. Such a framework would provide a robust regulatory environment for the manufacture, marketing and sale of these products across Australia.”

Dr Jenkins pointed to the very small percentage of e-cigarette users who are not, or have not been, regular cigarette smokers as evidence that e-cigarettes do not appeal to non-smokers. He also mentioned that there is no evidence of a gateway effect. However, he stated that it is not known whether the small percentage of non-tobacco smokers who do initiate e-cigarette use are adults or children.

Dr Jenkins drew on the recent Public Health England Report¹⁴⁶ that stated that e-cigarettes are 95% safer than tobacco cigarettes. He believes that e-cigarettes provide an opportunity to improve public health. Dr Jenkins recommended regulation that aims to improve the quality and safety of e-cigarette products, does not ban their use in smoke-free areas, supports their sale to adult smokers and maintains a choice of flavours to appeal to smokers.

¹⁴⁶ McNeill, A., Brose, L. S., Calder, R., Hitchman, S. C., Hajek, P., & McRobbie, H. (2015). E-cigarettes: an evidence update. A report commissioned by Public Health England. *Public Health England*.

7.7.9. Dr Attila Danko, New Nicotine Alliance, Australia

Dr Attila Danko presented evidence to the committee regarding the efficacy of e-cigarettes as cessation devices for smoking and appropriate regulation of these products. As a General Practitioner in Ballarat, New South Wales, e-cigarette user and President of the New Nicotine Alliance, Australia, Dr Danko presented a combined view of that of a medical practitioner and user.

Dr Danko showed the committee research that he considered, demonstrated, the better effectiveness of e-cigarettes in smoking cessation than other nicotine replacement therapy (NRT) products. Furthering this, in reference to 'vape shops' Dr Danko said:

"...vape shops act as de facto quit-smoking centres, at no cost to the government; in fact, they are revenue-positive because they increase jobs and give extra taxation money as well."

The stand-alone efficacy of e-cigarettes to support smoking cessation, and guidance and advice offered by stores, as well as the broader e-cigarette *community*, were cited as important ways in which this form of smoking cessation treatment works for e-cigarette users. Dr Danko stated that it could not be presumed that all e-cigarette users are aiming to quit smoking. Evidence suggests that more users are dual-users of tobacco and e-cigarettes, rather than only using e-cigarettes. However, Dr Danko stated there is very little evidence of a gateway into smoking from initial e-cigarette use.

With regard to flavourings Dr Danko cited research into the appeal of e-liquid flavourings to adults and non-smoker children. This research indicated that adult smokers were more interested in the flavours of e-liquids than children regardless of the flavour names. Further, in regards to the types of flavours that may appeal to children, he stated:

"...when children are experimenting with a smoking type of behaviour, they're often trying to mimic adult behaviour. They're not wanting to have a childish flavour. They're wanting to be all grown up and mature. That's where our assumptions about what flavours are about need to be questioned, need to be considered, because in terms of adult smokers using e-cigarettes, they're used to provide a separation from smoking, and also to help you to avoid relapse."

As such Dr Danko supports a range of flavours being available to smokers as part of the attraction into vaping and motivation to quit smoking tobacco. In discussion of what appropriate regulation may look like Dr Danko stated:

"My honest opinion is that they do not work if you are going to treat them as a medicine, that they are a recreational product that smokers switch to. It addresses a group of people who do not want to go to stop-smoking services.... Neither should it be regulated as a tobacco product; there is no burning, the levels of harm are a magnitude lower than smoking..."

Dr Danko expressed concerns about the potential for expansion of the tobacco industry into the e-cigarette industry if overregulation was to occur. He believed that competition in a strongly regulated environment would require a large resource input which smaller, independent businesses could not afford in comparison to the large budgets and resources of big tobacco companies.

8. CONCLUDING COMMENT

The Select Committee inquiry into the electronic cigarettes has amassed, analysed and considered extensive data to produce what the Committee believes are the best possible recommendations. These recommendations are formulated to respond responsibly to e-cigarettes, support improved public health outcomes, support and strengthen tobacco control efforts and provide clarity for associated businesses.

E-cigarettes are still a relatively new product and the scientific data on their ability to harm users and bystanders is inconclusive. Where there is inconclusive or insufficient evidence of safety of a product it is pertinent to maintain a precautionary approach. These recommendations allow adult smokers to make more informed choices about e-cigarettes while minimising exposure to e-cigarettes vapour and marketing by non-smokers and children, for whom there is likely to be no benefit from use. By providing a comprehensive suite of recommendations the Committee invites a range of issues to be considered and addressed in South Australia before the e-cigarette market develops too fully to regulate as effectively.

The Committee would once again like to thank those who contributed to this Select Committee inquiry and report.

APPENDIX 1 - Abbreviations and Acronyms

DASSA – Drug and Alcohol Services, South Australia

E-Cigarette – Electronic Cigarette

EC – Electronic Cigarette

ENDS – Electronic Nicotine Delivery System

ENNDS – Electronic Non-Nicotine Delivery System

FCTC – Framework Convention on Tobacco Control

FDA – Food and Drug Administration

NRT – Nicotine Replacement Therapy

PG – Propylene Glycol

PV – Personal Vaporiser

SEIFA – Socio-Economic Indexes for Areas

TGA – Therapeutic Goods Administration

VG – Vegetal/ Vegetable Glycerine

WHO – World Health Organisation

APPENDIX 2 - Glossary

E-liquid/ E-juice – (*noun*) the liquid used within a personal vaporiser/ electronic cigarette to produce vapour

Vape – (*verb*) to use a personal vaporiser/ electronic cigarette

Vaper – (*noun*) someone who uses a personal vaporiser/ electronic cigarette device

Vapour – (*noun*) the emitted aerosols produced by personal vaporiser/ electronic cigarette devices

APPENDIX 3 – Written Submissions

The following is a list of written submissions received by the Select Committee.

Submission No.1	Naomi Clarke
Submission No.2	Craig Martin
Submission No.3	Lily Tran
Submission No.4	Wayne Hall
Submission No.5	Joel Nitzkin
Submission No.6	Margaret Boyd
Submission No.7	Dan Jackson
Submission No.8	Christine May
Submission No.9	Samuel Uzzell
Submission No.10	New Nicotine Alliance
Submission No.11	Paul Todd
Submission No.12	Jacqueline Munn
Submission No.13	Phillip Huntley
Submission No.14	Valerie Huntley
Submission No.15	Gareth Shaw
Submission No.16	Pharmacy Guild of Australia
Submission No.17	Wayne Guthberlet
Submission No.18	Deborah Downes
Submission No.19	Smoke-Free Traders Association
Submission No.20	South Australian Health and Medical Research Institute (SAHMRI)
Submission No.21	Professor Riccardo Polosa
Submission No.22	Deborah Downes (2)
Submission No.23	Dr Coral Gartner
Submission No.24	David Lacey
Submission No.25	Brendan Wall
Submission No.26	Reece Branchflower
Submission No.27	Phil Gibson
Submission No.28	Graham Cross
Submission No.29	John Chetwynd
Submission No.30	Jan Murphy
Submission No.31	Scott Cain
Submission No.32	Shaun Howard
Submission No.33	Jamie Miller
Submission No.34	Domonic Sexton
Submission No.35	Brett Trowbridge
Submission No.36	Kristal McInerney
Submission No.37	Adam Sleep

Submission No.38	Taylah Weston
Submission No.39	Scott Weston
Submission No.40	Christian Laurence
Submission No.41	Adam Gordon
Submission No.42	Tom Leonard
Submission No.43	Tim Dwyer
Submission No.44	Matthew Fischer
Submission No.45	David Aitken
Submission No.46	Shaun Bott
Submission No.47	Daniel Knight
Submission No.48	Robyn Thorn
Submission No.49	Naomi Clarke (2)
Submission No.50	Eleesha Carolan
Submission No.51	Matthew Hamilton
Submission No.52	Aaron Henderson
Submission No.53	Daniel Duggan
Submission No.54	Rodney Webb
Submission No.55	Lynne England
Submission No.56	Simon Davd
Submission No.57	Chris Dunsford
Submission No.58	Tony Tuttle
Submission No.59	Brenton Mclvor
Submission No.60	Jordan Dikih
Submission No.61	Damian Sonntag
Submission No.62	Brenton Dunk
Submission No.63	Mark Gray
Submission No.64	Zoe Luz
Submission No.65	Helen Hesselschwerdt
Submission No.66	Cara Schroder
Submission No.67	Josh Gregg
Submission No.68	Kym Bonner
Submission No.69	Tony Pisanelli
Submission No.70	Jay Woolford
Submission No.71	Australian Hotels Association (SA)
Submission No.72	Margaret Boyd (2)
Submission No.73	Australian Drug Law Reform Foundation
Submission No.74	Freya Camgis
Submission No.75	Theophile Brice
Submission No.76	Tom Cser
Submission No.77	Jeremy O'Dea
Submission No.78	Patrick Seman
Submission No.79	K. Schulz
Submission No.80	Alex Westmacott

Submission No.81	Christopher Delin
Submission No.82	Keith Belding
Submission No.83	Lucke Rogers
Submission No.84	Mikael Lornie
Submission No.85	Jonathan Seman
Submission No.86	Anthony King
Submission No.87	Tammika Wakefield
Submission No.88	Mateusz Nowak
Submission No.89	Harry Evins
Submission No.90	Ben McCall
Submission No.91	Shane Bannister
Submission No.92	Damon Burgess
Submission No.93	Andrew Harrison
Submission No.94	Jade Bicanin
Submission No.95	Len Lishmund
Submission No.96	Ashley Greenwood
Submission No.97	Tim Gillies
Submission No.98	Josh Nicholson
Submission No.99	Ellie Allam
Submission No.100	Rohit Patel
Submission No.101	Emily Drover
Submission No.102	Phill Shipard
Submission No.103	Siobhan Robson
Submission No.104	Tenille Page
Submission No.105	Jordan Marston
Submission No.106	Edward Korhonen-Bannister
Submission No.107	Bohdan Melnicki
Submission No.108	Jodie Colby
Submission No.109	Fred Gregg
Submission No.110	Madison Helm
Submission No.111	Samantha Mordecai
Submission No.112	Nathan Page
Submission No.113	Pauline Drabsch
Submission No.114	James Tickner
Submission No.115	Darren Isbester
Submission No.116	Peter Zervas
Submission No.117	G. Underwood
Submission No.118	Shaun Mitchell
Submission No.119	Matthew Stamoulis
Submission No.120	Charlie McCracken
Submission No.121	Cancer Council SA
Submission No.122	Philip Morris Limited
Submission No.123	Kip Bell

Submission No.124	Ryan Hartley
Submission No.125	Mark Siggs
Submission No.126	Cancer Council Australia and Quit Victoria
Submission No.127	Peregrine Corporation
Submission No.128	Judith Wolters
Submission No.129	Joint Submission, Heart Foundation, AMA SA and Asthma Foundation SA
Submission No.130	Chronic Disease Prevention, Public Health Division, Department of Health WA
Submission No.131	Professor Ann McNeill
Submission No.132	Clive Bates
Submission No.133 (1 &2)	Public Health Association of Australia
Submission No.134	Angela Gordon
Submission No.135	Trent Kent
Submission No.136	David Eddy
Submission No.137	Heath Dawson
Submission No.138	Darell Golding
Submission No.139	Jason Moles
Submission No.140	Nicoventures
Submission No.141	Australian Council on Smoking and Health
Submission No.142	SA Government

APPENDIX 4 – Witnesses

The following witnesses were called by the Select Committee to hearings between July 21, 2015 and November 2, 2015.

Witness No.1	Ms Marina Bowshall Acting State Director Drug and Alcohol Services South Australia
Witness No.2	Mr Matthew Craig Acting Director, Drug Policy and Population Health Drug and Alcohol Services South Australia
Witness No.3	Dr Miranda Ween Hanson Institute and Thoracic Medicine Royal Adelaide Hospital
Witness No.4	Professor Sandra Hodge Hanson Institute and Thoracic Medicine Royal Adelaide Hospital
Witness No.5	Mr Savvas Dimitriou Chairman Smoke Free Traders Association
Witness No.6	Mr Charlie McCracken Owner/Manager Versatile Vapes
Witness No.7	Ms Alana Sparrow General Manager, Prevention, Advocacy and Policy Cancer Council SA
Witness No.8	Ms Wendy Bevan Manager, Government Relations and Policy Australian Hotels Association (SA)
Witness No.9	Mr Maurice Swanson National Spokesperson on Tobacco Control Heart Foundation
Witness No.10	Dr Stephen Jenkins Director of Regulatory & Medical Affairs – Asia/Pacific Nicoventures
Witness No.11	Dr Attila Danko President New Nicotine Alliance

The full Hansard transcripts of the hearings can be found at the Committee's web page on the Parliament of South Australia website: <https://www.parliament.sa.gov.au/Pages/Welcome.aspx>

APPENDIX 5 – Papers Received

The following is a list of papers received by the Select Committee, either as part of formal presentations to the committee or in response to questions put by the committee.

1. Drug and Alcohol Services South Australia Presentation
2. Drug and Alcohol Services, Health SA Questions on Notice answered from 21 July 2015
3. Dr Miranda Ween, Presentation
4. Professor Hodge and Dr Ween publications list
5. Smoke Free Traders Association, Code of Conduct – Official
6. Testimony of Charlie McCracken
7. Email with You tube link from Charlie McCracken, Vaping Advocacy Video: South Australia – The Case for Electronic Cigarettes
8. Action on Smoking and Health Briefing (ASH briefing)
9. Email from Mark Egelstaff, requesting Nicoventures appear before the Select Committee
10. Evidence about electronic cigarettes: a foundation built on rock or sand? By Martin McKee and Simon Capewell
11. E-cigarettes: An evidence update. A report commissioned by Public Health England
12. E-cigarette uptake and marketing. A report commissioned by Public Health England
13. E-cigarettes: a new foundation for evidence-based policy and practice, Public Health England
14. E-cigarettes: an emerging public health consensus, Press Release from Government of UK.
15. Vaping products, including electronic cigarettes, e-liquids, e-shisha and directly-related products – Manufacture, importation, testing and labelling – Guide, British Standards Institution, July 2015
16. Letter from Stephen Fitzgerald
17. Email from Thomas Windram
18. Nicoventures, Presentation
19. New Nicotine Alliance Australia, Presentation